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Smithsonian Institution

Office of General Counsel

VIA ELECTRONIC MAIL

March 14, 2022

Re: Your Request for Smithsonian Records (request number 106246365)

This responds to your request, dated and received in this Office on April 6, 2021, for “a copy of the meeting minutes of the National Air and Space Museum Advisory Board covering the time period June 1, 2016 to the present.” The Smithsonian responds to requests for records in accordance with Smithsonian Directive 807 – Requests for Smithsonian Institution Information (SD 807) and applies a presumption of disclosure when processing such requests. The policy is posted on our website at <http://www.si.edu/OGC/Records-Requests>.

Enclosed are 169 pages of material. Please be advised that certain information has been redacted from the enclosed documents consistent with SD 807. Information related to certain fundraising and donor-related activities has been redacted consistent with SD 807 under Exemption 4, where release of the information would likely impair the Smithsonian’s ability to raise private funds. Certain predecisional and deliberative information has been redacted consistent with SD 807 under Exemption 5. Finally, personal information, such as donor-identifying information, has been redacted consistent with SD 807 under Exemption 6, where disclosure of such information would constitute a clearly unwarranted invasion of the personal privacy of a third party with no overriding public interest.

Minutes from the June 2016 meeting of the National Air and Space Museum Advisory Board were previously released to you on April 6, 2021 in response to your request dated April 20, 2016, request number 46094. As such, those minutes are not included in this response.

This concludes the Smithsonian’s response to your request. Thank you for your interest in the Smithsonian.

Best Wishes,

A handwritten signature in blue ink, appearing to read "David Larson".

David Larson
Assistant General Counsel

You have the right to appeal a partial or full denial of your request. Your appeal must be in writing, addressed to the Smithsonian Institution Office of General Counsel at the address below, SIRecordsReq@si.edu, or (202) 357-4310 (fax number), and made within sixty days from the date of this response letter. Your letter must explain your reason(s) for the appeal. The Smithsonian Deputy Secretary and Chief Operating Officer will decide your appeal and will respond to you in writing. You also have the right to request mediation services from the Office of Government Information Services (OGIS), within the National Archives and Records Administration, to resolve disputes about the withholding of information. Your request for mediation should include language authorizing OGIS to make inquiries on your behalf, including the right to review all documentation that OGIS deems necessary regarding your request. You should note that you understand that any documents you provide to OGIS, except those provided in confidence, may be copied and forwarded to Smithsonian Institution officials as a part of the dispute resolution process.

**Smithsonian National Air and Space Museum Board Meeting
Wednesday, October 5, 2016
NASM Executive Board Room
Steven F. Udvar-Hazy Center**

Meeting Called to Order - David Joyce, Chair

The meeting was called to order at 8:15 AM. David Joyce welcomed new Board member Marion Blakey, and presented her with a crystal paperweight and Board pin crafted by John Safer. He shared that, [REDACTED] **Exemption 6** David Bronzcek resigned from the Board. Joyce congratulated Randy Greene on receiving a Distinguished Statesman of Aviation award by National Aeronautic Association. He also congratulated Allan McArtor on receiving the 2016 Williams Trophy from the Washington Airports Task Force. Joyce stated that the Future State Task Force will be formalized as the Future State Committee, and thanked Greg McAdoo for serving as Chair. Joyce announced that the Board of Regents adopted an Advisory Board Ethics Statement applicable to all individuals serving on a Smithsonian Regent-approved advisory board. The Statement outlines situations that could constitute conflicts of interest and provides a framework for managing conflicts. He asked all members to sign the statement and submit to the Office of Advancement.

Joyce introduced Dr. Richard Kurin to provide the “State of the Smithsonian” update.

“State of the Smithsonian” - Dr. Richard Kurin, Acting Provost/Under Secretary for Museums and Research

Dr. Richard Kurin announced the opening of the National Museum for African American History and Culture (NMAAHC.) The star-studded opening celebration attracted a great amount of media attention both nationally and internationally. The Museum tells key American stories and shares the message of life and liberty for all.

The Museum serves as an example of a successful bi-partisan effort as well as a private/public partnership. When developing NMAAHC, there was a 50-50 split of the \$500M price with private support donating \$250M and the federal government allocating \$250M. Final costs reached \$550M. Kurin shared that the guarantee of federal support helped garner private support. NMAAHC’s Advisory Board played a tremendous role in identifying and pursuing private support.

Exemption 5

[REDACTED]

Exemption 5

[REDACTED]

Kurin provided other updates from across the Smithsonian including the Institution’s efforts in Panama to research the Zika Virus. The National Zoo is with working with China to save the panda species and remove them from the endangered species list.

Kurin shared that the Smithsonian is working closely with the State Department to save and preserve cultural property that is under threat of destruction by ISIS.

The Smithsonian Astronomical Observatory is continuing its efforts to build the Giant Magellan Telescope. After going operational in 2022, the telescope will enable researchers to look into the Big Bang and detect evidence of life in the universe. The Smithsonian is also pursuing a partnership with the Victoria and Albert Museum in East London. This initiative serves as an example of the Smithsonian expanding its international footprint in a fiscally responsible and thought-out way.

Smithsonian leadership is continuing to evaluate the best way forward with the Arts and Industries building. Exemption 5

Secretary Skorton is moving forward with launching the Secretary's Scholars program. The goal is to create 45 privately funded 5 year positions throughout the Smithsonian. This effort will enable the Institution to rejuvenate curatorial hiring and launch a pipeline of scholars. Funds have been raised to support 15 of the scholars, and a new curator at NASM is the first to start from the program.

The Smithsonian continues to make progress in the Institution-wide Ex. 4 campaign. Exemption 4

"State of the Museum" - General Jack Dailey, John and Adrienne Mars Director

General Jack Dailey stated that he is eager to share the Museum's progress on implementing structures so that the organization is prepared to meet the challenges ahead. He shared that NASM visitation is up, and the Museum expects to welcome 9 million visitors this year. He specifically noted that visitation at the National Mall building is up 6% and, with only nine months recorded, Udvar-Hazy Center attendance is higher than full-year attendance for the previous 7 years. He stated that the October Board meeting will include a presentation on the 3D scanning of *Columbia*, and how this activity is a part of the Museum's effort to reach audiences who may never visit the Museum. The second half of the meeting will be dedicated to discussion of the Museum's future.

Dailey stated that the Museum welcomed Michael Collins and Jeffrey Bezos for a discussion on the past, present, and future of human spaceflight during the annual John H. Glenn Lecture in Space History. David Rubenstein, co-founder and co-CEO of The Carlyle Group, moderated the conversation. This lecture attracted a sold-out audience of more than 700, and the presentation is now archived online along with the rest of the Museum's lectures. Dailey thanked Boeing for their generous sponsorship of the lecture, and noted that Dennis Muilenburg flew in to introduce the speakers. Dailey shared that Museum leadership and curators were able to meet with the presenters prior to the lecture to share the latest information on Museum activities such as the 3D scanning of *Columbia*.

Dailey stated that over 2,300 people participated in three nights of programming celebrating the 50th anniversary of *Star Trek*. The Museum hosted a conversation with Rod Roddenberry, son of creator Gene Roddenberry, and a screening of the first *Star Trek* episode at both the National Mall building and Udvar-Hazy Center IMAX theaters through point to point connection. Other programs included *Star Trek* related screenings with activities and presentations on the Museum floor as well as the Third Annual *Museum Moonshine* with a *Star Trek* focus. These activities were sponsored by the Roddenberry Foundation with additional funding by Exemption 6.

Dailey stated that Suzanna Darcy-Hennemann, Boeing's first female test pilot, served as the speaker at the recent GE lecture. Now retired, Darcy-Hennemann became chief pilot, Flight Services for Boeing Commercial Airplanes, and was involved in the 777 program from its inception. Dailey thanked David Joyce and GE Aviation for sponsoring the series. Other Museum activities included the July 1 celebration of 40 great years on the National Mall. The Museum kicked off its next chapter with the opening of the *Boeing Milestones of Flight Hall*. Dailey announced that more than 54,000 people attended the overnight celebration. The evening began with an opening ceremony featuring guests speaking about the transformative power of the Museum. Through the night and well into Saturday morning, activities and programs exceeded all expectations. Dailey shared that public engagement efforts led to 6 million people being reached on Twitter, almost 4,000 views of the all-night webcast, a total of 427 media hits reaching over 20 million potential readers, and all four network affiliates reported live at the museum. Dailey showed a [video clip from the evening originally broadcast by FOX5 DC](#). Dailey stated that the event represented everything the Museum can and should be: friendly, creative, and engaging while delivering our mission on a global scale.

Dailey stated that the new digital platform GO FLIGHT goes far beyond the interactive wall in the *Boeing Milestones of Flight Hall*. GO FLIGHT's new app and website will help visitors connect with the Museum before and during their visit, and keep them engaged with NASM through exciting new content long after they return home. Dailey shared that the GO FLIGHT app has been downloaded 11,000 times so far. The Public Engagement team is developing and testing new marketing avenues including a DC Metro ad campaign. Dailey shared that the Museum started collecting email addresses from the National Mall building WiFi log-ons on August 22, and logged 2,091 subscribers. The total number of What's Up subscribers is roughly 40,000. NASM's ability to do this is a direct result of the work of the Future State Task Force. Dailey shared that visitors enjoy more than one million education experiences onsite and online every year. With the new digital platforms and onsite experiences, the Museum is poised to take that number higher than ever.

Following a directive from Smithsonian leadership, the Museum is considering [REDACTED] Ex. 5
[REDACTED] Dailey shared that the Museum is still evaluating [REDACTED] Ex. 5
[REDACTED].

Dailey stated that Innovations in Flight Day was held at UHC and sponsored by Booz Allen Hamilton. The program featured aircraft, helicopters/gyrocopters, and hot air balloons. Heritage Family Days continue to be a success and sponsored by Northrop Grumman. The We Share STEM Family Day celebrated global feats across cultures in the fields of science, math, technology, and engineering. This day-long program was presented in collaboration with Smithsonian Latino Center. The Museum also hosted Women in Aviation and Space Day. The 6th annual Student Spaceflight Experiments Program National Conference and Family Science Night took place at the National Mall building. 24 student scientist teams presented research from student-designed experiments that were flown by NASA on the International Space Station. At another annual program, Mars Day!, Museum-visitor interactions increased by 23% (from 6000 to 7,435.) This program included digital outreach as the Center for Earth and Planetary Studies distributed over 1000 pairs of 3-D glasses featuring a link to more images on the NASM website.

The Museum is currently gearing up for another academic year of programs and outreach to take the history of flight beyond the walls of the Museum and into classrooms around the world. STEM in 30 returns for a new season. The program is carried live on NASA TV and beamed into classrooms via the Museum's website. This year, thanks to a Communications intern who worked to introduce STEM in 30 to more outlets across the country, the Museum's reach will be even greater with over 70 state networks accessing the program. The Udvar-Hazy Center will host the third edition of the live-action alternate reality game, TechQuest. *Flying Circus* teaches the principles of flight by taking visitors back to 1927 to design an aerobatic airplane that can complete the never-before-flown outside loop maneuver ahead of famed aviator Jimmy Doolittle. New this year is Making STEM Magic, a program that introduces visitors to STEM principles by challenging them to design, build, and test their own prototype project. Every month the program will explore new themes to encourage families to engage repeatedly. September's theme was the NASA mission, OSIRIS-REx.

Dailey announced that 61 interns arrived at NASM on June 1. The Museum launched their intern experience with a welcome breakfast and informative panel featuring Linda Mills and Landon Taylor, chairman of Base 11. Mills also presented at the Museum's Senior Leadership Team Forum.

In artifact news, Dailey stated that first phase of 3D scanning of Space Shuttle *Discovery* is complete. He thanked Exemption 6 for funding this effort. *Discovery* is the largest artifact yet attempted for this process.

Dailey stated that producing scholarly work and top-notch research continues to be a priority for the Museum. Dr. Skorton's new initiative, the Smithsonian Secretary's Scholars, will enable the Institution to continue these efforts. Dailey directed the member's attention to a printout listing staff honors, publications, and appearances located in their packet.

Dailey announced that NASM hit Ex. 4 in the Campaign for the National Air and Space Museum, which exceeded the Museum's goal and led the way for the Smithsonian. The Museum is now working to build on this success, and Exemption 4

To provide an update on the federally funded Revitalization project, Dailey stated Exemption 4

For the first 9 west-end galleries, 10% designs are now complete and 35% designs are under review.

Nominations Committee Report and Discussion - John Plueger, Chair, Nominations Committee

John Plueger welcomed Marion Blakey to the Board. He stated that a list of member terms is available in the packets. Plueger shared that the Nominations Committee met via conference call on September 13, and recommended a number of actions. Current members Tom Haas, Shep Hill, Linda Mills, David Storch and Steve VanRoekel were recommended for reappointment for 2nd terms. Ralph Heath and Bruce McCaw were recommended for Emeritus status. Plueger stated that he and the Committee hope they will continue to remain involved. Plueger stated that Joe Allen and Charlie Robertson concluded their terms.

Plueger shared that the Committee has a strong list of potential board candidates, which are reviewed 3 times per year. With room for growth on the board, the Committee proposed Ex. 6 for board nomination. Ex. 6 bio was included in the packet. Ex. 6 is the retired chairman of Ex. 6 and the former chairman of the Ex. 6. He is enthusiastic about joining and the Committee feels he would be an excellent addition. Plueger invited Bruce McCaw to share additional thoughts, and McCaw commented that Ex. 6 served two terms as Ex. 6. Following Plueger's call for a motion and vote, the Board unanimously voted to approve the Committee's recommendations.

Plueger stated that the recommendations will be put forward to the Smithsonian Board of Regents for confirmation on January 30. Plueger stated that, following the transitions, the board count will be 26 current members. Ex. 6 and Ex. 6 attended the board dinner as guests. Plueger invited members to provide feedback regarding their board candidacy to Allan Holt.

Plueger presented the slate of officers for the next two years. He thanked Joyce for his leadership as chair, Ralph Heath for chairing and Tom Haas serving as vice-chair of the Advancement Committee. With the conclusion of their terms, the new slate of officers for 2017-2019 are:

- John Plueger as chair
- Allan Holt as vice-chair and chair of Nominations
- Dawne Hickton as chair of Advancement

- Greg McAdoo as chair of the Future State Committee

Following Plueger's call for a motion and vote, the Board unanimously voted to approve the Committee's recommendations.

Plueger stated that, with the change of leadership, the Board will also be changing the members of the working committees (Advancement, Nominations and Future State). A document with committee descriptions was available in the packets. He encouraged members to see the respective incoming committee chairs if they are interested in serving in this capacity. Members can serve on more than one committee. Plueger thanked Stuart Fred, Randy Greene, Jim Guyette, David Joyce, Steve Loranger, and Jamie McJunkin for their service to the Nominations Committee.

3D Scanning of *Columbia* - Allan Needell, Curator, Space History

Allan Needell stated that the Museum's ability to conduct 3D scanning enables curators to share their research with the public in new, educational, and engaging ways. The current 3D scan of *Columbia* only scratches the surface of what scanning and virtual reality capabilities hold. Needell shared that 3D modeling can be used to further document artifacts, link previous research to physical objects via the web, and provide unprecedented access to artifacts without the threat of damage or deterioration.

Needell shared that the renovations of the *Boeing Milestones of Flight Hall* provided an opportunity to take *Columbia* off of public display. During that time, NASM partnered with Autodesk and the Smithsonian's Digitization Programs Office to conduct a 3D scan. The process of scanning the artifact was noninvasive, and now the Museum has a well-established baseline for future preservation and conservation studies.

Needell explained that the teams used laser data in order to establish the location of specific objects within a 3D matrix. Six different types of photometry were used in order to create high resolution imagery. The team then worked to integrate all of the individual photographs to create the 3D model. The team collected 7 terabytes of data when scanning *Columbia* to create multiple products. The products are available online at <https://3d.si.edu/apollo11cm>. He shared that the product can be viewed on the Smithsonian website or through virtual reality devices such as Google Cardboard or VEER.

Needell stated that public reception of the products have been tremendous. A 360 view of the interior of *Columbia* posted on DPO's Facebook page sparked 110,000 engagements, the largest interest ever generated on their page. The public now has the ability to download the capsule, a seat, or knobs and print using a 3D printer.

Needell demonstrated one of the products available online. He shared that, since the scanning took place, NASM curators discovered new elements of the capsule that they never knew existed. For example, the curators learned that Michael Collins created a calendar to help him track the days while he was in the capsule. Needell shared that they are working to build on this product and offer access to new features. Needell stated that this technology is motivating curators to think beyond the traditional study and conservation of the artifacts. They are now also considering how to best utilize and share digital assets.

Break

Members participated in the annual Board photo.

Transformation Update

Revitalization - Rick Flansburg, Deputy Associate Director, Management and Public Programs

Rick Flansburg stated that he serves as the staff architect and project executive responsible for coordinating the Revitalization project within the Museum and with external partners. He clarified that "Revitalization" is the federal project to renovate the Museum in Washington, DC. "Transformation" is the term being used for the reimaging of the gallery space and is being supported through private funding.

Flansburg provided a brief history of the National Mall building. He shared that the building was originally designed to serve 2 million visitors a year while the Museum currently welcomes over 8 million annually. Installed 40 years ago, the mechanical systems of the building have now outlived their useful life. Due to the thin-cut of the exterior marble panels, the panels are warping and cracking and must be replaced. An inefficient mechanical system and moisture being let in by the failing exterior panels renders it impossible to control the interior climate of the building. Revitalization will also serve as an opportunity to bring NASM up to current building code standards. Flansburg summarized that the core of the project is mechanical systems and exterior envelope replacement.

Other elements of the project include improving the terraces and garage, expanding building accessibility options, and storm management systems. Additionally, the Museum is working to extend the security vestibules at both the north and south entrances. This expansion will improve security screenings, the visitor experience when entering, and create an airlock to maintain the interior climate environment of the building. Since Revitalization required that 3rd floor staff be moved out of the building, the team is now working to reconfigure office space.

Flansburg shared that the construction of the federally funded Dulles Storage Unit will also take place as part of Revitalization. Originally included in the Museum's Master Plan, the unit will provide 90,000 square feet of collections storage space, and serve as a swing space as artifacts are removed, treated, and stored during construction. The Regents approved Exemption 4 in FY17 for the construction of the storage building. Construction will take place from March of 2017 - November 2018. Once the Revitalization of the National Mall building is complete, artifacts from Garber will move into the Dulles Collection Storage Unit.

Flansburg shared that the Smithsonian and NASM are coordinating the project through a "team of teams" concept. A tiered team structure guarantees that teams are communicating within and amongst each other. It also provides oversight at the appropriate level. The Museum is currently in the process of bringing on a construction contracting firm. This firm will be involved with creating the rest of the design. The contracting firm will review the Museum's 65% design, and comment on estimate, design, and sequencing. They also anticipate that, in FY17, the Dulles Storage Unit construction contract will be awarded. In FY18, the construction phase contract for the National Mall building will be awarded. With the Storage Unit complete, the Museum will begin moving artifacts from the Mall building out to the unit. Flansburg stated that the National Mall building has been divided into zones to assist with the sequencing of Revitalization construction. The Museum is currently working off of the assumption that construction will begin on the west-end and move to the east-end. The plan will be solidified when the construction contracting firm comes onboard. The Museum has already begun the process of designing the west-end galleries.

Flansburg referenced a graphic showing cash inflow and outflow during the span of Revitalization and Transformation. He stated the Revitalization timeline will drive and impact the Transformation timeline. The current galleries must be closed so that staff can remove artifacts, the construction firm can perform their work, and Transformation efforts can take place. They are working to align both the Transformation and Revitalization timelines in order to be successful. Flansburg shared that Smithsonian Enterprises closures during Revitalization, such as the Museum Store, IMAX, and simulators, will impact the Museum's revenue flow. The Museum anticipates Ex. 4 in lost revenue over 7 years due to closures. The Museum is working to mitigate loss by hosting temporary popup stores. While the restaurant will remain open throughout Revitalization, it will be impacted by reduced visitorship.

Over the next few months, the Museum will continue to develop the 65% design, the construction manager will be integrated into the process, planning to mitigate revenue impacts will continue, and swing space for staff will be finalized. Efforts towards Transformation will include enhancing the artifact transportation and treatment plan, completing west-end exhibit design, and developing a Public Engagement Plan.

Shephard Hill asked if federal funding limits will force the Museum to pick an exterior treatment that is aesthetically unappealing. Flansburg stated that, while the Museum is still waiting for confirmation on federal funding, we have great support from the Castle. Hill asked if Ex. 4 is allocated for oversight, and Flansburg responded that the amount includes oversight but will also provide funding for design costs as well as staff and artifact moves. Dailey added that it also includes funding for OFEO. Stuart Fred asked, in reference to selecting a contractor and letting the contract, who will decide what is cut from the project if the budget cap is insufficient. Flansburg answered that those decisions will not be made at the project level, instead they will be decided by an oversight committee that includes Dailey and Smithsonian leadership. Flansburg explained that the Museum is working to bring in the contractor early in order to assist with organizing logistics and cost-saving mechanisms. Fred questioned if construction manager as constructor is a wise approach. Flansburg explained that the involvement of a construction contractor during the design phase will permit resolution of stone selection/procurement far earlier in the process than other contracting methods, and will reduce risk to the Smithsonian Institution. Although the Museum is involved, most of the responsibility lies with OFEO. This is the best approach given the timing and funding constraints. Fred noted that there continue to be significant risks and exposure. Dailey stated that the Museum gained considerable experience when designing and building the Udvar-Hazy Center. The contractor will be included in the design phase so that the Museum does not make decisions that cannot be executed. A 3rd party engineering firm is cross checking everything. Dailey acknowledges that the biggest risk is that Congress will not appropriate the needed funds at the required rate. Dailey stated that it is key for the Smithsonian to secure federal funds in order to gain private support. Dailey stated that the Museum is proceeding with the best calculated approach. Kurin stated that, through projects such as the Cooper Hewitt renovation and the construction of NMAAHC, the Smithsonian gained experience with using various contracting mechanisms to minimize risk.

David Tolley asked if, given the budget limitations, there are projects that are not being addressed through Revitalization and Transformation. Flansburg responded that, in the long term, the Museum will transform the current restaurant space into an education center. Dailey stated that this is already included in the Master Plan and will be considered in 10 years. Dailey stated that the project should be federally funded. Steve VanRoekel asked if the Museum is incorporating green energy strategies into Revitalization plans. Flansburg responded that the Museum is targeting for LEED Gold.

Exhibit Highlights - Roger Launius, Associate Director for Collections and Curatorial Affairs

Roger Launius stated that he will provide an update on efforts to rebuild exhibitions following Revitalization. After the Revitalization portion is complete, the Museum will receive “boxes” of infrastructure into which they can install the new galleries. Plans for designing the new galleries are underway.

Referencing a diagram of the future Museum floor plan, Launius explained that the Museum is creating or extensively renovating twenty one exhibitions over a multi-year period. The first phase of Transformation will consist of nine exhibitions located on the west-end of the Museum, the first seven of which should be completed in 2020. These nine exhibitions will be grouped in three theme-based groups: *Space Exploration*, *Revolutions in the Sky*, and *Specialty Exhibitions*. Teams of curators, designers, and educators are at work on all of these exhibitions and several more, working to create experiences that are dynamic, engrossing, future-focused, and relevant. Launius stated that this is an extremely aggressive schedule as the Museum traditionally opened a new major exhibition every three years. The Museum is seeking to design multiple exhibitions not just with the in-museum visitor in mind, but also with the mission of reaching through digital media to millions who may never be able to come to Washington and engage with these artifacts, stories, heroes, and experiences.

Launius provided an over view of the *Space Exploration* suite which includes an Earth gallery, Moon gallery, and planetary gallery. Building on a review of centuries of imagination and scientific discovery, and on the Smithsonian’s unequalled collections of space artifacts, *Destination Moon* will show those who remember the 1960s as well as generations born afterward, how an extraordinary combination of motivations, resources, and technologies made it at long last possible for people to walk on the Moon. The new gallery will show how Neil Armstrong’s “one small step...” became not only a triumph for the

United States, but an accomplishment that resonated around the world. From the Apollo 11 Command Module that carried Neil Armstrong, Buzz Aldrin, and Mike Collins to the Moon to rocks returned from the surface to the awe-inspiring imagery of viewing this planet from afar there is something for everyone in this new show. With funding from a Kickstarter campaign, the Museum raised the money necessary to conserve Neil Armstrong's spacesuit, which will be front and center in the exhibition and displayed in a state-of-the-art case. Launius thanked the Board members that contributed to the "Reboot the Suit" Kickstarter campaign. The gallery will also show, through 3D digital photography, calculations and notes made by the crew inside the Apollo 11 Command Module, which would otherwise remain hidden to the public, as they were for the first half-century the artifact was in the Museum's collection. Launius shared that, before the Module is displayed in the new gallery, it will travel the nation and be on display in host museums across the US.

Launius stated that the *Planet Earth* gallery will tell the story of how aviation and spaceflight fostered two intertwined momentous changes in everyday life: the ease in making connections across vast distances and a new perspective of Earth as humanity's home. Featuring an array of satellites and other important artifacts, the exhibit will ask visitors to consider how global interconnection touches their daily lives and to imagine how advances in technology might impact our near-future. There are two themes for this exhibition. First, how and what do we know about the physical nature of this planet and how it has changed over time. Aircraft changed the nature of scientific study about this planet, but spacecraft allowed mankind to view the Earth on a global perspective. Through a large interactive globe in the center of the gallery, visitors will have the opportunity to view Earth from afar, and explore the features of this planet. Second, the ability to fly in air and space has transformed our existence, making it possible to move virtually anything around the world in a matter of hours, and to communicate instantaneously throughout the globe. This globalization experience has altered the manner in which we live our lives and we intend to discuss how and why this has happened as well.

Launius shared that exploration reveals that our solar system is filled with amazingly diverse places that transform our understanding of Earth and worlds beyond. *Exploring the Planets* will tell the stories of how planetary exploration has shaped our understanding of the Earth. The exhibition will be a fundamentally science exhibition and will be arranged around dynamic, immersive audiovisual experiences to simulate different planetary landscapes and present visitors a view of standing on other planets. The exhibit serves as an opportunity to highlight the research being conducted by the Center for Earth and Planetary Studies in an unprecedented and exciting fashion. It includes visiting other planets, walking on other worlds, exploring exoplanets, and recording the history, current activities, and future of planetary exploration.

Launius introduced the *Revolutions in the Sky* suite and stated that it focuses on the technology of flight and highlights fundamental STEM topics. Between the first flights at Kitty Hawk and the opening guns of WWI, the design and construction of aircraft and engines became a global industrial enterprise. The *Early Birds* gallery will use artifacts such as the 1909 Wright Military Flyer and the Bleriot XI to explore the impact of the airplane on politics and international relations. Mechanical interactives will allow visitors to operate different types of control systems and interact with digital representations of early aviation pioneers.

The *Reinventing Flight* gallery explores how the airplane was developed and the revolutions in science, technology, engineering, and design that created the modern airplane. In addition to displaying important artifacts that tell this story, such as the North American F-86, the exhibit will also feature interactive stations and design challenges for visitors to compare the strength and weight of aircraft materials, explore wings and drag and propellers, and even design their own aircraft.

The *We All Fly* gallery celebrates how the availability of different types of aircraft made it possible for a wide range of people to fly. The exhibition will take visitors through the many different forms of general aviation from aerobatics and air racing to gliders and ultralights to business aviation to agriculture and firefighting. Interactive elements will put visitors in the cockpit, "boxing the wake" in a glider, or fighting fire as part of an aerial fire suppression team.

Launius stated that the *Specialty Exhibitions* galleries serve as a unique opportunity for the Museum to reimagine the display of some of our most iconic artifacts as well as explore new topics. The 1903 Wright Flyer serves as the centerpiece of the *Wright Brothers* exhibition which celebrates the centennial of the Wright brothers' historic flights. In a dramatic and inspiring manner, the exhibit tells the story of how Wilbur and Orville Wright invented the airplane—who they were, how they worked, and what they accomplished - and explores how their monumental achievement affected the world in the decade that followed, when people everywhere became fascinated with flight.

A *Nation of Speed* gallery will recount the country's desire to outwit nature to become the fastest on land, sea, air and space in the pursuit of commerce, power, and prestige. Using iconic vehicles – from the 1903 Winton Bullet No. 2 race car to the 2004 Nemesis NXT air racer – the exhibition will draw upon the expertise and collections at the National Air and Space Museum and the National Museum of American History to explore the intersections of technology, business, culture, people, and excellence. The gallery serves as an opportunity to reach out to new donors. This is already a cooperative effort between NASM and NMAH; and the Museum is working to tap into other untested advancement opportunities for this exhibition on going higher, farther, and faster on the land, sea, air, and space.

Finally, the *America By Air* gallery explores the history of air transportation in America and how improvements in technology have revolutionized air travel. The Museum is working to highlight the story of airlines by integrating new and refreshed interactives both within and beyond the walls of the Museum. Dailey added that the Museum is working to include a Digital Lab in this gallery in order to conduct visitor testing and product experimentation on the floor of the museum. Marion Blakey asked if the lab would allow for visitors to test design concepts, and Launius responded “yes.”

Engagement Strategy for Transformation - Vicki Portway, Chair, Digital Experiences

Vicki Portway presented information on the Museum's plan for engaging the public both during and beyond Transformation. The Museum is using Transformation as an opportunity to not only reimagine the physical space but to also reconsider ways to engage and educate the public. A plan for keeping the public informed on the “how, what, and why” of Transformation is currently being developed. The Museum is also seeking to involve the public in the process of Transformation by allowing them to provide content and feedback. The goal is to create an outstanding and relevant visitor experience that will motivate the public to have a dialogue with the Museum. The Public Engagement team is working to have visitors connect with NASM before, during, and continuously after their visit.

When developing a transformation engagement strategy, the team considered the following questions:

- How will the visitor experience change?
- How can we keep the public engaged throughout Transformation?
- How can we involve the public as collaborators?
- How can audience insights shape the future of the Museum?

The goal is to create excitement with current and future supporters around the changes happening at the National Mall building.

Portway shared that the Museum is taking a holistic approach when developing the new visitor experience. As exhibition teams create their individual galleries, the Public Engagement team is working to ensure that user interfaces and interactives are streamlined and consistent in order to remove barriers for participation. For example, the GO FLIGHT app is a Museum-wide platform that can be used to host experiences throughout the Museum. While the Museum is organizing multiple touchpoints to invite visitors to provide their email, each invitation will lead to the same experience in the form of a series of welcome emails.

Portway shared that storytelling is a key strategy for facilitating visitor engagement. The Museum implemented a “story first” initiative which is demonstrated on the new website and app. “Share Your Story” is a new web-based initiative that allows the Museum to collect visitor's stories. Another initiative is “Air and Space Live” which features real-time programming taking place in the Museum. Partnerships are being developed in order to rebroadcast and distribute content. This approach has allowed the Museum to align multiple efforts including web and new media, education, and public

programming. The goal is to learn and build off of the new platform in order to expand engagement. The Museum has already experienced positive results from developing a coordinated strategy for promotions and marketing. The team is using current events to leverage promotions.

Portway provided an update on the GO FLIGHT app. She shared that, as of September 30, 2016, the app has been downloaded 12,445 times. The app has a 42% reopen rate which tells the team that visitors are reengaging. 72% of those reopens take place off-site. Visitors are using the app to share their email address, search for stories, and “favorite” artifacts. The Museum is still working to develop baseline numbers for the rate of app downloads that are prompted by an interaction with the media wall. Portway shared that 5% of visitors who access the Museum’s WiFi provide their email address in order to receive additional content. The team is currently conducting visitor evaluations on the app user experience in order to update and improve the experience. The team is using this information to inform future efforts. Most visitors rank their experience at the digital media wall as “excellent” or “superior” and they do use it for wayfinding purposes. The team is still working to highlight the wall’s connection to the app. The team will make additional enhancements to the app in November. Although there was concern that the wall would be overwhelmed by visitors, the team observed that there is a correlation between a high level of visitors and decreased usage of the wall. The Museum was surprised to observe families using the wall together, and are working to see how they can leverage that opportunity.

Portway shared that the team is using current events and programs to boost app downloads. One example occurred during the *Star Trek* 50th Anniversary when the Museum made an effort to share stories across platforms and launched a Highlights Tour in Klingon. App downloads spiked during the three day celebration, and the Museum achieved their goal of reaching a 1% app download rate. The team is considering innovative approaches to marketing the app. Portway shared that a recent social media campaign did not significantly increase downloads. They are currently looking to other experiments, such as posting signage on the Metro, in an effort to test and iterate.

Portway shared that next steps for the team include launching the Transformation Engagement Plan. The team will continue meeting with the Exhibition Teams to develop a seamless in-gallery interactive experiences, generating new and engaging content by applying a storytelling strategy. They are also pursuing concepts and iterative design testing as well as audience research and evaluation in the Digital Lab.

Ralph Heath asked what percentage of visitors utilize the media wall. Portway answered that the Museum is still working to measure that data as the wall can track events but not the number of users. Ginny Clark asked what current visitor experiences are the teams working to maintain. Portway responded that the most transformational experiences occur when visitors can interact with Museum staff directly. Portway stated that the objects themselves have a draw, and the Museum can do more to capitalize on those opportunities both in the Museum and digitally. The Museum is evaluating the current model of visitor interaction to see how they can improve upon current methods, and expand those that are already a success. Agnes Brown commented that Docents and Visitor Services Volunteers can serve as assets and assist with these efforts. Referencing a past Museum program that used Docents to interview Tuskegee Airmen, Brown recommended using the Digital Lab to document visitor stories through interviews. Jamie McJunkin congratulated the Museum on establishing a baseline of metrics for the various digital efforts. He supports pursuing accelerated learning opportunities. Following testing, McJunkin recommended that Portway develop and present ideas for additional digital engagement experiments to the Board.

Advancement Committee Report and Discussion - Ralph Heath, Chair, Advancement Committee

Ralph Heath presented an update on fundraising efforts on behalf of the Advancement Committee. He stated that, following Mo Taylor’s departure, Laura Gleason is the Acting Director for Advancement.

Heath shared that the Smithsonian Campaign’s **Ex. 4** goal is the most ambitious fundraising effort ever pursued by a cultural organization. With one year still to go, the Smithsonian anticipates meeting and exceeding this goal. NASM led the way in the Campaign as the Museum already reached the **Ex. 4** goal

earlier in the year. Heath thanked the Board for their generous support, and stated that Exemption 4 [redacted] The Board is the reason for the Museum's success. Heath noted that the new *Boeing Milestones of Flight Hall* serves as an example of what private support can help achieve.

Heath stated that the Museum is now shifting focus from the Smithsonian Campaign to the Ex. 4 Transformation goal. Heath referenced a chart comparing anticipated cash flow requirements to fund the transformation of galleries vs the Museum's current fundraising capacity. He noted that, Exemption 4 [redacted]

He shared that the Museum secured about Ex. 4 in gifts thus far for Transformation. Notable gifts include:

- Ex. 6 gift from Ex. 6 for the new exhibition, *A Nation of Speed*
- Exemption 6 from SI National Board Member Exemption 6 in support of *Destination Moon*
- Heath acknowledged Exemption 6 for leading fundraising effort in Seattle for the *Destination Moon* traveling exhibition bringing the Apollo 11 Command Module to Museum of Flight during 50th anniversary in 2019. Ex. 6 provided personal support and has secured major support from Exemption 6. The project would not have gone forward without these commitments.
- Generous gifts from Board members in support of Transformation include: Exemption 6 [redacted]

Heath provided an overview of annual giving. National Air and Space Society and Wall of Honor revenue Exemption 4 [redacted]

Heath thanked Board members who made an annual gift in FY16. Exemption 4 [redacted]

Heath stated that the Advancement Committee and staff are now focused on pursuing FY17 priorities. Exemption 4 [redacted]

Heath stated that, following this meeting, Dawne Hickton will assume leadership as Chair of the Advancement Committee. He encouraged members to review the committee description in their packets, and to see himself or Hickton if a member is interested in serving.

Heath stated that the Executive Committee agreed to formalize the Future State Committee. This new committee will serve as an integral part of board and the future of Museum. He recognize Greg McAdoo for his leadership, and thanked him for agreeing to serve as Chair. The Future State Committee will meet immediately following the Board meeting.

Future State Task Force Update - Ralph Heath, Chair, Advancement Committee

Ralph Heath invited Greg McAdoo to make remarks on behalf of the new Future State Committee. McAdoo welcomed members to participate on the Committee and with their efforts. McAdoo stated that the work of the Future State Committee will have a profound impact on how future Museum-goers interact with the Museum.

Old Business - David Joyce

Joyce shared the following information:

2017 Board meeting dates: February 7-8; June 6-7; October 3-4
2018 Board meeting dates: February 27-28; June 5-6; October 16-17

Upcoming events:

October 6 - GE Lecture with Lt. Col. Christine Mau, Mall
October 22 - Air & Scare sponsored by Mars Chocolate North America, Udvar-Hazy
November 17 - NASS Flight Jacket Night, Mall

New Business - David Joyce

Joyce thanked Bruce McCaw and Ralph Heath for their service as members of the National Air and Space Museum Board, and presented each with a framed certificate of appreciation. He announced that both will transition to serve as emeritus members.

To mark the transition of Board leadership, Heath presented Hickton with a cloth moneybag, Plueger presented Holt with a "Vice-Chair" NASM ball cap, and Joyce presented the Chair's joystick to Plueger. In gratitude for his service as Chair, General Dailey presented Joyce with a satirical *Air & Space* magazine cover. Joyce was also presented with a replica of the *Ascent* sculpture created and provided by emeritus Board member, John Safer at the Board dinner the previous evening.

Wrap-up- General Dailey

General Dailey thanked the Board for their dedicated support.

Executive Session

Meeting Adjourned

At 12:00 PM, the Board meeting adjourned and boxed lunches were made available.

National Air and Space Museum Board

*Present at the October 5, 2016 meeting

Board Members:	Board Members Emeritus:	
Dr. Joseph P. Allen IV	Mr. James Albaugh	Dr. Jon A. Reynolds
Mr. Alain M. Bellemare*	Mr. Ronald W. Allen*	Dr. Donald B. Rice
Ms. Marion C. Blakey*	Mr. Javier F. Arango	Mr. John Safer
Mr. Orlando P. Carvalho	Mrs. Anne B. Baddour	Dr. Richard Sugden
Mr. Neil Cohen*	Mrs. Agnes M. Brown*	Dr. Frederick Telling
Mr. Frederico P.F. Curado	Capt. Eugene A. Cernan	Mr. Charles Thornton
Mr. Scott Donnelly*	Mr. Armando C. Chapelli, Jr.	Ms. Patty Wagstaff
Mr. Mark B. Dunkerley*	Mr. Max C. Chapman, Jr.	Mr. Bruce Whitman
Mr. Stuart L. Fred*	Mr. Joe Clark	
Mr. Morton FUNGER*	Mr. Frank A. Daniels, Jr.	SI/NASM Staff Members
Mr. Thomas W. Haas*	Mr. Edsel B. Ford, II	Dr. Richard Kurin*
Mr. Ralph D. Heath*	Mr. Kenneth E. Gazzola	General John R. Dailey*
Ms. Dawne S. Hickton*	Mr. S. Taylor Glover	Ms. Kelly Bloom*
Mr. Allan M. Holt*	Mr. James M. Guyette	Ms. Meg Caulk*
Mr. Shepard W. Hill*	Mr. Randall A. Greene	Ms. Virginia Clark*
Mr. David L. Joyce*	Mr. David R. Hinson	Ms. Michelle Delaney*
Mr. Gregory L. McAdoo*	Mr. David C. Hurley	Mr. Rick Flansburg*
Mr. Bruce R. McCaw*	Mr. Robert James	Mr. Michael Garceau*
Ms. Linda A. Mills	Mr. Clayton M. Jones	Ms. Laura Gleason*
Mr. Robert A. Milton	Mr. Herbert D. Kelleher	Ms. Lindsey Jackson*
Mr. H. Ross Perot, Jr.	Mr. Rodney R. Lewis	Dr. Peter L. Jakab
Mr. John L. Plueger*	Mr. Steven R. Loranger	Mr. Mark Kornmann*
Mr. Charles A. Robertson	Capt. James A. Lovell	Ms. Catharine A. Kualii*
Ms. Meredith Siegfried Madden	Mrs. Adrienne Bevis Mars	Dr. Roger D. Launius*
Mr. David Storch*	Mr. Robert J. Mittman	Ms. Anne McAllister*
Mr. David Tolley*	Mr. T. Allan McArtor	Mr. Alan Needell*
Mr. Steve VanRoekel*	Mr. Jameson J. McJunkin*	Ms. Jessica McNally*
Mr. Thomas Vice*	Mr. Thomas G. Morr	Ms. Victoria Portway*
Mr. Steuart L. Walton*	Mr. Lloyd "Fig" Newton	Ms. Elizabeth Wilson*
Mr. Paul Wood	Mr. Jack J. Pelton	
	Mr. Roger D. Percy*	
	Mr. Robert W. Pittman	
	Mr. Thomas F. Pumpelly	

**Smithsonian National Air and Space Museum Board Meeting
Wednesday, February 8, 2017
NASM Executive Board Room
Steven F. Udvar-Hazy Center**

Meeting Called to Order - John Plueger, Chair

The meeting was called to order at 8:15 AM. John Plueger welcomed new Board member Bill Ayer, and presented him with a crystal paperweight and Board pin crafted by John Safer. He introduced Chris Browne as the new NASM Deputy Director. Browne brings a wealth of aerospace related experience to this position having served in leadership roles for Metropolitan Washington Airport Authority and as Airport Manager for both Dulles and Reagan airports. His experience in operational management will serve the Museum well as the Transformation of the National Mall building gets underway. Plueger congratulated David Storch on receiving the Leroy Grumman Award from the Cradle of Aviation Museum. He also congratulated Randy Greene on being honored as a Distinguished Statesman of Aviation by the National Aeronautic Association. Plueger announced that Greg McAdoo was appointed to the Smithsonian Regent's Strategy, Innovation, and Technology Committee for a 6-year term.

Plueger introduced Dr. Richard Kurin to provide the "State of the Smithsonian" update.

"State of the Smithsonian" - Dr. Richard Kurin, Acting Provost/Under Secretary for Museums and Research

Dr. Kurin shared that FY2016 was a good year for the Smithsonian Institution as it welcomed over 30 million visitors. Between the National Mall building and the Udvar-Hazy Center, the National Air and Space Museum served 9.1 million of those visitors. One tremendous achievement was the opening of the National Museum of African American History and Culture (NMAAHC). Kurin stated that, from the first piece of legislation to opening ceremonies, the Museum stands as an example of a great bipartisan effort. The opening of the Museum brought the country together, and it continues to receive stellar, critical and popular reviews.

In other news, Kurin stated that the Cooper Hewitt, Smithsonian Design Museum raised **Exemption 4** to renovate the Museum. This effort included the design and launch of an interactive "Pen". Beyond working as a drawing tool, the Pen encourages visitors to engage with the works on view in the museum, rather than looking at them through the small screen of the more traditional approach of a museum app. Since reopening the building and introducing this interactive tool, the Cooper Hewitt's attendance doubled in the past year. The Renwick Gallery completed a **Exemption 4** renovation which was funded through a 50/50 public/private partnership. Since reopening, the Renwick Gallery welcomed 900,000 visitors, which is a fivefold increase compared to visitorship before the renovation. These museums exemplify the power of public/private partnerships, renovation, and the implementation of digital technology. The Institution is looking to these models as it prepares for the Revitalization and Transformation of the National Air and Space Museum.

Kurin stated that the Smithsonian has a budget of **Exemption 6** per year, which is the largest budget of any cultural institution in the world. The largest portion of the budget, \$850 million, is appropriated by the federal government to support facilities and 4,000 staff members. Private support through philanthropic dollars contributes \$ **Ex. 4** to the Institution, with **Ex. 4** raised through private gifts, **Ex. 4** generated through business ventures such as Smithsonian magazines or the

shops, educational grants, and a [Ex. 4] endowment. Kurin stated that the Smithsonian benefits from a mixed economy. Looking forward, the Smithsonian faces uncertainty as the Federal Government has been operating under a continuing resolution since October 1. Leadership is assuming that the Institution will receive the same appropriation as last year. For the 2018 budget, the Smithsonian will submit a budget request and the hearing process begins in February. While funds needed to support the Revitalization of the National Mall building will serve as a large portion of this request, Kurin reminded the Board that the Smithsonian is also working to complete American History's east and west wings as well as Natural History's Dinosaur Hall. The Institution's biggest challenge is to convince the Federal Government to recognize the costs and increase the budget. This will enable the Smithsonian to pursue a variety of pressing capital projects. Of the current federal funding appropriation of \$850 million, \$700 million supports staff salaries and operations while \$150 million is designated to capital projects. The Smithsonian cannot continue to defer maintenance as a means of shifting funds to support other projects. Kurin noted that the Smithsonian successfully made the case for the public support of the construction of NMAAHC. They are now advocating for NASM by emphasizing the necessity of revitalizing this popular and important museum. Kurin stated that an investment of funds on the federal side drives private philanthropy. The Institution is currently participating in talks on the Hill, and the Revitalization and Transformation of the National Mall building is a priority for the Secretary. Uncertainty continues as the Institution awaits the confirmation of the head of the Office of Management and Budget and tries to assess how the current administration will approach a reduction in spending. Kurin believes that, [Ex. 5].

Kurin stated that a change in administration brings change to the membership of the Board of Regents. Members of the House and Senate serve on the Regents and the Vice President serves ex officio. While Vice President Pence could serve as a good resource due to his experience on the Hill, it is still to be determined how he will participate on the Regents.

Kurin shared that other significant Smithsonian projects include the Smithsonian Astronomical Observatory's participation in the construction of the Giant Magellan Telescope. This [Ex. 4] project is being built in Chile and should be operational by 2022. The Smithsonian [Exemption 4]

The panda program continues as the Zoo prepares to return Bao Bao to China. Kurin shared that the Smithsonian is active in 145 counties. The One Health program in Panama facilitates the study of disease vectors, and how they move from animals to domestic animals and to people. This research sheds light on diseases such as Aids, Ebola, and Zika, and is part of a worldwide science effort. The Smithsonian continues to train Iraqis and Kurds in preservation and conservation methods in order to protect their cultural heritage. In addition to working with the State Department and Iraqis to save artifacts from destruction by ISIS, they published a *Guide to Mosul* for Special Forces and other allies which identify "no strike areas" to prevent destruction. These all serve as examples of the Smithsonian working beyond the walls of the museums.

Ken Gazzola asked if efforts are being made to preserve artifacts in Syria. Kurin responded that UNESCO is leading that effort, but various Smithsonian units are working in ISIS-free zones along the Turkish border. One example can be seen in the work of a National Museum of the American Indian employee who is now in Syria providing training on how to securely pack artifacts.

Plueger thanked Kurin for his report.

A Conversation with Franklin D. Raines - Jack Dailey, John and Adrienne Mars Director

General Dailey introduced Mr. Frank Raines former chairman and CEO of Fannie Mae. Raines is currently an investor, board member, and founder of small, start-up companies. He served on the Council of the Smithsonian's National Museum of African-American History and Culture, the Cabinet of the Martin Luther King Memorial, and as a campaign chair for the Arena Stage's Mead Center for the American Theater.

As part of the NMAAHC's Board, Raines understands the challenges that NASM faces with Revitalization and Transformation. He was instrumental in helping NMAAHC acknowledge their own challenges with fundraising and develop successful solutions.

Dailey asked Raines discuss his role on the NMAAHC Council, and what he saw as his primary duties. Raines shared that he was a member of the Council for 12 years, and humorously added that, yes, it takes 12 years to build a Smithsonian Museum. Raines stated that the 30 members of the Council considered their role to be supportive yet active. He described that the Museum Director was responsible for "carrying the ball" on presentations while members contributed by arranging meetings and introducing new prospects. Raines shared that only half of the Museum's formal requests for support received a "yes". He noted that the process of fundraising, from identifying prospects and understanding their interests to following up on conversations had by the Director and providing assurance, is challenging work. Exemption 5

Dailey asked if Raines actively identified prospects and followed up with needed action items, and he answered "yes".

Raines stated that NMAAHC was originally estimated to cost \$550 million, with Congress contributing half of the funding. The Museum faced multiple challenges as they pursued an unprecedented level of private funding. Never before had \$250 million been raised for an African American institution and, as a new institution, they did not have the benefit of long affiliated members, supporters, or alumni.

Exemption 4

The effort to raise private funds first began with initial commitments from the Council. Exemption 4

Unfortunately, NMAAHC was not close to this goal when they first announced the campaign. However, they began to build confidence when they received their first corporate contribution from Ex. 6. This Ex. 6 contribution made a significant difference, and served as a signal to other corporations as to what would constitute as a good level of support. He shared that Exemption 6 made an initial contribution of Ex. 6. Ex. 6 gift, along with Ex. 6 support, set the standard of what it meant to be a founding donor to NMAAHC. Raines also shared that Ex. 6 made a second Ex. 6 pivotal gift at a time when momentum was lagging. Ex. 6 contribution served as a signal to other leaders and council members that Ex. 6 was "all in" and Ex. 6 asked that they be "all in" as well. Raines stated that it is key to have campaign leaders who are willing to step up at crucial moments to spark momentum.

Raines joked that everyone knows you can't raise money in Hollywood or from professional athletes. He was pleased to share that, following Exemption 6 lead, others in Hollywood, including Exemption 6, contributed. Previously unidentified individuals, such as Exemption 6, not only made a significant gift but became involved.

Dailey asked if marketing served as a significant function during the campaign. Raines responded that the Museum pursued marketing efforts on multiple levels. One effort focused on publicizing that NMAAHC is not political. He shared that the Bush Administration, including Laura Bush's participation on the Council, helped ensure that the museum was built on the National Mall. Raines stated that Bush's signaling of inclusion went a long way to opening doors and led to other's acceptance and contributions. Director Lonnie Bunch repeatedly championed that the Smithsonian was not building a museum for African Americans, but rather an institution that would evaluate the American experience through the lens of the African American experience. By featuring three different segments over the course of a year, the TV program *60 Minutes* provided great visibility for a museum that didn't exist yet. Their publicity did not focus on controversies and therefore legitimized the effort. Raines stated that these marketing efforts led to a mass campaign that ultimately generated over 140,000 members

to the Museum. The donation level started at Exemption 4. More importantly, the founding member program fostered a sense of ownership and pride amongst those who joined.

Raines stated that the Museum's original goal for private support was Exemption 4, but the goal was increased by Exemption 4 when they discovered water in the construction location. The Federal Government also contributed an additional \$20 million. In the end, the Council assisted with raising Ex. 4 in private support, with Ex. 4 supporting capital needs.

Raines stated that getting the message out is integral to achieving the goal. He shared that people like to join winning projects, and were motivated to do more when they saw evidence of the project moving forward. Bipartisan support insulated NMAAHC from traditional divisions of gainmanship.

Dailey shared that the NASM Board has a strong track record with fundraising having already raised Exemption 4 for the Museum. The new goal is to raise Exemption 4 over the next ten years to support Transformation. He shared that NASM had a similar experience as NMAAHC when fundraising for the Udvar-Hazy Center as excitement and momentum attracted more supporters. Dailey stated that Revitalization must move forward otherwise the building will fall apart. NASM is continuing to look to NMAAHC to learn from the process they pioneered. Dailey shared that NASM is working to create an Innovation Lab that will test interactives and display methods. The Museum's goal is to "fail fast" so they can focus on the most viable solutions. Raines stated that NMAAHC worked to adopt the long view but it was still challenging to dismiss ideas when fundraising. The Council and Museum are now moving forward with launching an endowment campaign in order to support, refresh, and innovate within the Museum.

Raines shared that the Museum first existed digitally through online exhibits. The building is now a physical manifestation of the Museum. The physical building exists so that millions of visitors can have in-person experiences, but the Museum will still remain online for all. The Education Department serves as another manifestation of the Museum as it is a source of continued information and education on African American history and culture. Raines encouraged NASM Board members to tour NMAAHC. Exemption 5. Visitors desire in-person experiences that then extend to the web.

Raines shared that the Museum originally planned to welcome 20,000 visitors per day, but they have limited that number to 5,000 due to extended visitor dwell times. Dailey noted that NASM has the opposite problem as we are working to increase visitor dwell time.

Referencing the fundraising cycle experienced by NMAAHC, Dawne Hickton asked what led to periods of plateau and how were they overcome? Raines responded that the head of the campaign, Kenneth I. Chenault, was a tremendous cheerleader who pushed the Council along. Chenault effectively kept Council members engaged beyond their contribution by calling for prospects, introductions, asking them to arrange meetings, and pursue following up efforts. He also insisted that members step up to make a contribution. Chenault ensured that members had assistance in the form of help from staff, the expertise of a fundraising consultant, and a professionalized development process. He ensured that members were educated on how to identify prospects, rate them, create proposals, and where to send "the ask". Raines shared that the science of fundraising, such as understanding how to make a case and differentiating opportunities in physical museum vs virtual museum, is key. He shared that SI Central is supportive, but each unit has to have their own identity around the campaign. He encouraged that efforts must be owned by Council members not Museum staff. At NMAAHC, they worked to create a balance so that members would feel involved in the content side of the Museum but weren't junior curators. The Council responded well when a new acquisition was shared at a meeting. The Council was responsible for raising money and collecting artifacts, and it was the artifacts that drove excitement.

Steve VanRoekel asked if members helped foster relationships with Congress. Raines responded "yes" and added that a Congressional member served on the Council. Overall, Director Bunch kept the

conversation going with the Hill and sought assistance when needed. A positive relationship with Congress was key for NMAAHC due to the aspect of matching funding. He stated it is important to have your cause remain bipartisan, and encouraged that the Council let Congressional members worry about the mechanics. Kurin added that it is helpful to have bipartisan support by the Appropriations Committee. Dailey shared that, when Dr. Skorton provided his first testimony to Congress, he took a strong stance that the Museum will shut down if funding is not allocated for the Revitalization. Costs will only increase the longer the project is deferred.

Dailey thanked Raines for his insights.

“State of the Museum” - General Jack Dailey, John and Adrienne Mars Director

General Jack Dailey stated that the Museum is moving from the planning phase to the execution phase of Transformation. He stated that the Museum Exemption 4

Dailey shared that the Museum teams did a terrific job managing visitors for the Inauguration weekend. Visitor Services and Security rose to the occasion to accommodate crowds and special requests.

In January, David Skorton was the keynote speaker at a bipartisan event to help orient and inform new members of Congress. His remarks reflected the theme that museums and cultural organizations - particularly the Smithsonian - are trusted, and can help bring people together. The Smithsonian Institution has strong branding and an important role to play in fostering dialog and strengthening communities and the nation. As mentioned by Kurin, the Museum is operating under the FY2016 budget until April due to the continuing resolution. NASM received interim guidance on the Federal hiring freeze, and the Offices of Human Resources, Planning, Management and Budget, and General Counsel are assisting in determining the scope and impact on the Smithsonian. The Smithsonian paused all Federal hiring activities, and will continue to exercise sound financial judgment in Trust hiring activities. Despite the freeze, NASM implemented organizational staff changes which include the hiring of 22 staff that will be supported with Trust funds. Dailey stated that the continuing resolution greatly impacts the work of the Museum as we cannot make a new start and specifically build the Dulles Storage Module. The Museum is determined to move ahead and will argue that the Module is not a new start as it is designed and ready to build.

Dailey announced the retirement of Roger Launius, associate director for Collections and Research. With these changes, NASM is realigning the organizational structure and leadership support to bring focus on the important role of Archives and Collections to the Revitalization project. Curatorial and research areas will be led by Chief Curator Peter Jakob. A new NASM Directorate, “Collections, Archives and Logistics” led by an Associate Director will be established. This position will be comprised of NASM Archives and NASM Collections units; Facilities Liaison and Health & Safety. The “logistics” aspect refers to the planning, coordination, and execution of Revitalization-related artifact movement/treatment and support of exhibit installation timelines.

Shortly after the last Board meeting, the Museum held a GE Aviation Lecture with Lt. Col. Christine Mau, USAF. Lt. Mau discussed her journey accumulating more than 2,300 hours in the F-15E and F-35A. Dailey thanked GE Aviation for their support of this lecture series. In November, astronaut and Coast Guard Captain Daniel C. Burbank delivered the annual Vice Adm. Donald D. Engen Flight Jacket Night lecture. The Udvar-Hazy Center hosted our annual Air & Scare event. Dailey thanked Mars Chocolate North America for sponsoring this popular program. The Udvar-Hazy Center hosted “Morning at the Museum” a special opportunity for families with children on the Autism Spectrum. “Innovators in Air and Space” Hispanic Heritage Family Day took place at National Mall building. This series is an important part of addressing diversity in our audiences, and Dailey thanked Northrop Grumman for making the series possible.

The Museum continues to grow programs that go beyond the walls of the buildings and into classrooms around the world. STEM in 30 reaches an ever-growing audience as it is carried live on NASA TV and beamed into classrooms via our website. Stars lectures and stargazing at the Phoebe Waterman Hass Observatory continue with special programs like International Observe the Moon Night. As do visits from the Holt Scholars, activities like Making STEM Magic and Geography Awareness Week.

The new digital platform GO FLIGHT goes far beyond the interactive wall in the *Boeing Milestones of Flight Hall*. The Museum continues to brainstorm innovative engagement efforts to ensure that the wall is effective. Dailey shared that one idea is to station Explainers by the wall to encourage visitors to engage. The wall exemplifies the Museum's overall effort to measure and evaluate effective visitor engagement. GO FLIGHT's new app and website will help visitors find their connection before and during their visit, and keep them connected to NASM with new content after they return home. The GO FLIGHT app has been downloaded 26,094 times so far.

Dailey called the member's attention to the summary of staff honors, publications, and appearances in their packets. The summary highlights the scholarly work and top-notch research that is done at NASM. During the annual staff awards, we honored staff who had a combined 190 years of service. The Director's Award for Excellence, the highest honor bestowed on an employee by NASM's Director, went to Katie Moyer. The Peer Awards, the highest honor given to an employee or group by his or her peers, went to Tim Rhue and Tom Paone.

Dailey stated that a construction contract is being let for the Revitalization of the National Mall building, and the Museum will receive the 65% design submission in February 2017. The construction contract for preconstruction services was awarded to Clark, Smoot, Consigli. He shared that design for the relocation of the Library and Archives to the Udvar-Hazy Center is at 65%. Dailey stated that the 65% design for first nine "west-end" galleries is underway, and concept proposals for non-exhibit spaces are approved. Located in the concourse and terrace areas, the non-exhibit space includes an Innovation Lab, an exterior STEAM Park expanding the Observatory footprint, and a lower level programming space. "East-end" gallery design will start in early 2018 to better align with the Revitalization schedule.

Dailey stated that artifact logistics will be the Museum's biggest challenge and highest risk as we prepare for Transformation. Artifact movements are a critical aspect of the schedule and costs. NASM developed a stabilized artifact list that contains artifacts of all sizes and incorporates artifacts from all sources: the Garber facility, the Udvar-Hazy Center, returning loans, and new loans from other institutions. 3300 artifacts will be impacted by Transformation and require 15,000 hours worth of treatment work. NASM Archives will capture high-resolution images for all 3,300 artifacts being placed in the new exhibits so that they can be utilized for Public Engagement and deepen relationships outside the walls through content delivery. Dailey shared that, while the Museum typically opens a new exhibit every three years, they are now working to open nine simultaneously. The Museum hired the 22 necessary staff to be ready for Transformation. 16 of those new staff members will work in Collections. Dailey shared that the Lincoln-Standard biplane serves as the first Transformation artifact moved from the Garber facility to the Udvar-Hazy Center. Following conservation, the aircraft will be displayed in the *America by Air* exhibit.

In other artifact news, the second phase of 3-D scanning of Space Shuttle *Discovery* is complete. *Discovery* is the largest artifact yet attempted for this process. Dailey thanked Meredith Siegfried Madden for funding this effort. Dailey encouraged members to visit *The Evelyn Way Kendall Ballooning and Early Aviation Collection* exhibit funded by the Norfolk Charitable Trust, featuring art and objects from the early days of ballooning exhibition. Dailey shared that the Apollo 11 Command Module *Columbia* was moved to the Mary Banker Engen Restoration Hanger for conservation. On February 22, NASM and the Smithsonian Institution Traveling Exhibition Service will hold a press conference at the Udvar-Hazy Center to announce the national tour of the *Destination Moon* exhibition featuring *Columbia*. Space Center Houston, St. Louis Science Center, Heinz History Center, The Museum of Flight are the four Smithsonian Affiliate museums that will host the traveling exhibition. Dailey stated that

the traveling exhibition would not be possible without the generous support of Exemption 6

Dailey stated that the Museum is still working to raise Exemption 4 for the exhibition.

Dailey announced that the public launch of the Transformation effort is scheduled for May 15 (Subsequently delayed to July 2017). Dailey showed a [Sizzle Reel](#), one the first promotional materials for sharing Transformation.

David Tolley asked if Transformation will be launched if the Federal Government extends the continuing resolution. Dailey responded “probably”. David Joyce asked if the Museum will receive needed funds under a continuing resolution, and Dailey responded that the Museum only needs Ex. 4 to move forward on immediate projects. Kurin expressed optimism. Shep Hill asked if the Ex. 4 is still needed to construct the Dulles Storage Module, and whether the construction of the Module is considered to already be underway. Kurin responded that, internally, the project is viewed as being underway. Tolley asked what the Museum will require in FY2018, and Dailey responded Ex. 4.

Kurin shared that the Smithsonian is making the case that NASM should receive federal funding as soon as possible in order to motivate private support. Leadership is actively working to Exemption 4

Kurin assured the Board that the Smithsonian has experience with meeting cash flow needs and they are working to apply past lessons learned.

Break

Plueger invited members to walk down to the floor of the Restoration Hangar to see the Apollo 11 Command Module.

Nominations Committee Report and Discussion - Allan Holt, Chair, Nominations Committee

Allan Holt again welcomed Bill Ayer to his first Board meeting. The Smithsonian Board of Regents unanimously approved Ayer’s appointment at their January 30 meeting. With Ayer’s appointment, the Board count will be 27 current members (32 is the bylaw limit). Holt announced that there will be additional vacancies in October as David Joyce’s and Robert Milton’s 2nd terms will expire. Two Board candidates attended the February Board dinner: Exemption 6

. Holt welcomed feedback regarding their candidacy.

Holt stated that Board candidates Exemption 6

are confirmed to attend the June Board dinner.

Holt shared that the Nominations Committee met via conference call on January 18, and had a meaningful conversation about increasing diversity on the Board. He encouraged members to take this into consideration as they think about worthy candidates. The Committee recommends the consideration of the nomination of Ex. 6. He is well known by many of the Board members, and strongly endorsed. The Committee believes he will participate in the Board with energy and enthusiasm. Ex. 6 was nominated by Stuart Fred.

Following Holt’s call for a motion and vote, the Board unanimously voted to approve the Committee’s recommendation. Holt stated that Ex. 6 nomination will be put forward to the Smithsonian Board of Regents for confirmation on April 3.

Advancement Committee Report and Discussion - Dawne Hickton, Chair, Advancement Committee

Dawne Hickton thanked Tom Haas for continuing to serve as vice-chair. She also thanked members who agreed to join the Committee. Current members were noted in the packets, and she welcomed others to join.

Hickton stated that the Board and Museum face an ambitious goal of raising Exemption 4 for the Transformation of the National Mall building. Current projections based on the donor pipeline and current staffing in the Advancement Office indicate a goal of Exemption 4 per year, thus this campaign will go until 2029. The Museum's objective however would be to have reached the Exemption 4 by 2026. Cash flow requirements for Transformation far exceed what has been promised as a goal. Hickton highlighted that Exemption 4 is needed in FY2019. Unless specifically instructed otherwise by the donor, most unrestricted gifts will be applied toward Transformation. Advancement has already raised almost Exemption 4 towards Transformation, with another Exemption 4 in verbal commitments. This total includes a generous pledge of Exemption 6 from Exemption 6 in support of the future *We All Fly* exhibition. Ex. 6 recent pledge is on top of his already generous gift in support of the Phoebe Waterman Haas Observatory. The Board acknowledged Ex. 6 through a round of applause.

Hickton stated that the goal for the fiscal year (Oct 1 - Sept 30) is Exemption 4. Advancement already raised over Exemption 4 in the first quarter of FY2017, which exceeds the FY2016 total raised. As mentioned, the Museum has verbal commitments of Exemption 4. The Advancement team also has Ex. 4 in proposals being considered, so it could be a banner year. Notable gifts this year include a Exemption 6 bequest from NASM Exemption 6 and a Exemption 6 from Exemption 6 in support of field trips. Hickton shared that, through the generous support of Exemption 6, the Museum raised over Exemption 6 for the future *Destination Moon* exhibition.

Hickton reminded the Board that the National Air and Space Society (NASS) and Wall of Honor provide unrestricted support to the Museum. For this fiscal year, NASS and the Wall of Honor raised Exemption 4 in the first quarter, representing a 29% increase over last year at this time. They received a great response to the year-end appeal donation "match" from the NASM Board. Advancement is continuing a new relationship with Avalon Consulting on direct mail and digital fundraising efforts. Successes in online giving so far this year include the implementation of a new series of email solicitations at year-end. In December, NASS raised Exemption 4. Hickton thanked Board members who have made gifts thus far in FY2017. While the Board is currently at Ex. 4 participation from active Board members, it is the Board's goal to get to 100% participation for annual giving this fiscal year. Hickton encouraged that, even if members made a Campaign gift, they should consider an annual NASS gift.

Hickton provided an update on the long-running license plate program. Legislation was passed in 1998 to authorize the Udvar-Hazy Center (then known as the Dulles Collection Center) commemorative license plate in the state of Virginia. The Museum receives a share of the proceeds from the additional fee that applicants pay for this specialized plate. In FY2016, this represented almost Exemption 4 in additional, unrestricted revenue for NASM. Since its inception, this program has generated over Exemption 4. Non-Virginia residents can order the plates as souvenirs.

Hickton shared that FY2017 priorities for the Advancement Team and Committee include working with Marts & Lundy, a well-know consultant for non-profits, to assess the Advancement Team and pipeline for the Transformation campaign. Their final report and recommendations will be presented in March. The Advancement Team has been reviewing proposals from fundraising communications firms to develop messaging and collateral materials around Transformation. One of the deliverables will be an elevator speech that can be used by Board members. A regional event in Dallas is scheduled for March 6, 2017 to be hosted by Ross Perot, Jr.

Hickton announced that the Advancement Committee will meet immediately following the Board meeting in the Director's Conference Room. The committee will look at two major initiatives and discuss potential donors.

Future State Committee Report and Discussion - Greg McAdoo, Chair, Future State Committee

Greg McAdoo stated that the Committee has met regularly over the past few months, and are now working to develop a proof of concept trial for the use of Virtual Reality (VR) by the Museum. The Committee will review a proposed timeline and scope of work for the project following the Board meeting. McAdoo thanked Mark Kornmann and his team for their work on this effort. McAdoo stated that they aim to make significant progress in order to have a demonstration ready for presentation at the June Board meeting. In the meantime, the Museum and Committee are working to roll-out artifacts in a virtual hangar space by April. The budget and funding needs for this project look promising, and McAdoo shared they are starting to build momentum within this effort.

McAdoo shared that the Museum established the Innovation Lab which serves as a platform for testing new technology. The Virtual Hangar project will be the first trial. The Museum will use the Lab to test concepts within the Museum and then expand into the virtual space. The Hangar could host as many as three virtual artifacts online by June.

A Closer Look - Russ Lee, Chair, Aeronautics Nation of Speed

Plueger introduced Russ Lee, sharing that he will provide an overview of two of the new major exhibits planned as part of Transformation. Because the Museum will design 22 new exhibits for Transformation, the Board will learn about 1-2 at each Board meeting.

Lee introduced Jeremy Kinney, lead curator on the *Nation of Speed* exhibit, and Dorothy Cochrane, lead curator on the *We All Fly* exhibit.

Lee stated that the *Nation of Speed* gallery will be located on the second floor on the west-end of the National Mall building. This new exhibition will recount humankind's desire to become the fastest on land, sea, air, and space in the pursuit of commerce, power, and prestige. *Nation of Speed* will be a portrait of human ingenuity – the technology developed to propel people faster and faster— and will explore how the pursuit of speed has shaped American culture and our national identity. Featuring iconic vehicles such as Mario Andretti's Indy 500 winning racecar, the 2004 Nemesis NXT air racer, Curtiss V-8 Motorcycle, and Roscoe Turner's RT-14 Meteor, *Nation of Speed* will be among the first of the new galleries to open with an anticipated opening date of 2020.

We All Fly

Lee shared that the *We All Fly* exhibit will be located on the first floor of the west-end of the National Mall building. The exhibition will tell the story of the many aspects of general aviation in the United States and how it affects the average visitor's daily life. Covering diverse themes including sport, private, business, humanitarian, and utility flight, the exhibition will strive to inspire the next generation of pilots - a critical need given the current U.S. pilot shortage. The exhibition will also explore the diversity of career opportunities available in general aviation—from engineers to ground crew—beyond the jobs in the cockpit.

In addition to showcasing important airplanes and artifacts such as the Oracle Challenger III, Bell 47B Helicopter, Gates Lear Jet, and the Cessna 180, engaging and educational interactive elements for the gallery are being developed. As a part of the world's foremost aviation Museum, the *We All Fly* exhibit will be a global resource for educating and inspiring the next generation of leaders in the field of general aviation.

Gazzola asked if the exhibit will provide information on where and how to obtain a pilot's license. Lee responded "yes", and explained that one of the goals of the exhibit is to entice visitors to research the process themselves and look deeper into the various types of pilots.

McAdoo asked if drones will be featured in the exhibit. Lee responded “yes”, and shared that the Museum is currently collecting many firsts in the drone area. They are specifically trying to acquire the first delivery drone, and already have a drone that helped rescue a stranded individual in the Canadian wilderness by using infrared technology.

Lee shared that the Museum is working with a designer to implement color and wayfinding techniques in the exhibits as well as develop inspiring interactives and engaging visuals.

David Joyce asked about efforts to develop online interactives for the two galleries. Lee shared that the Museum is launching Ask an Expert Live on Facebook so that curators can share the galleries beyond the walls of the Museum. Digital assets allow the Museum to share more than what can be displayed within the exhibit. Mark Kornmann added that, through the work of Transformation, each exhibit will be wired so that the Museum can broadcast out from any space on multiple platforms. He shared that a specialized Interactives team is working with each Exhibit team to offer innovative ideas and ensure that interactives are coordinated across the Museum.

Marion Blakey asked if simulators will be used in the exhibits. Lee shared that Transformation will include an exhibit focused on simulators. *We All Fly* will feature a glass cockpit to show how to read instruments and demonstrate advances in technology.

Tolley noted that artifact acquisition was an important effort for NMAAHC, and asked whether NASM is actively collecting for the Transformation exhibits. Lee responded that, while the Museum continues to seek and accept one-of-a-kind artifacts, we are not faced with the same need as NMAAHC. Now that the exhibits have reached the 65% design phase, curators are working to acquire specific artifacts to help tell the stories and focusing on the conservation and transportation of existing artifacts. Lee shared that the Aeronautics Department receives over 100 artifact donation offers per year, and declines 99.9%. Plueger recalled that Elon Musk approached the Museum with the intent to donate his first rocket. Unfortunately, the rocket was too large to be placed in existing storage and Musk was not willing to donate the needed funds for conservation. Plueger stated that this serves as an example of the Museum being interested in an artifact but not poised to accept it.

Tolley recommended extending the gallery into the third floor space. Lee responded that the design team is implementing innovative layout and lighting techniques to maximize the space.

New Business - John Plueger

Plueger welcomed Chris Browne to make remarks. Browne stated that he is pleased to join a great organization with a good reputation. He hopes to bring insight to the Transformation process, and keep focused on the long-term goals at hand. Plueger welcomed staff to make remarks, and Laura Gleason again invited members to participate in the Advancement Committee meeting. Gleason welcomed members to submit private and corporate prospects suggestions at any time.

Old Business - John Plueger

Plueger shared the following information:

2017 Board meeting dates: June 6-7; October 3-4

2018 Board meeting dates: February 27-28; June 5-6; October 16-17

Upcoming events:

March 23: Exploring Space Lecture: “Cassini to Saturn: The Journey and the Legacy”, NMB

April 5: Artist Soldiers National Air and Space Society Member Preview, NMB

April 18: Exploring Space Lecture: “Juno mission to Jupiter”, NMB

May 2: Exploring Space Lecture: “Planet 9”, NMB

May 18: Lindbergh Lecture, NMB

Wrap-up- General Dailey

General Dailey thanked the Board for their dedicated support.

Executive Session**Meeting Adjourned**

At 11:25 AM, the Board meeting adjourned and boxed lunches were made available.

National Air and Space Museum Board

*Present at the February 8, 2017 meeting

Board Members:	Board Members Emeritus:	
Mr. William S. Ayer*	Mr. James Albaugh	Dr. Jon A. Reynolds
Mr. Alain M. Bellemare	Mr. Ronald W. Allen	Dr. Donald B. Rice
Ms. Marion C. Blakey*	Mr. Javier F. Arango	Mr. John Safer
Mr. Orlando P. Carvalho*	Mrs. Anne B. Baddour	Dr. Richard Sugden
Mr. Neil Cohen*	Mrs. Agnes M. Brown*	Dr. Frederick Telling
Mr. Frederico P.F. Curado	Mr. Armando C. Chapelli, Jr.	Mr. Charles Thornton
Mr. Scott Donnelly*	Mr. Max C. Chapman, Jr.	Ms. Patty Wagstaff
Mr. Mark B. Dunkerley	Mr. Joe Clark	Mr. Bruce Whitman
Mr. Stuart L. Fred*	Mr. Frank A. Daniels, Jr.	
Mr. Morton Fungler	Mr. Edsel B. Ford, II	SI/NASM Staff Members
Mr. Thomas W. Haas	Mr. Kenneth E. Gazzola*	Dr. Richard Kurin*
Ms. Dawne S. Hickton*	Mr. S. Taylor Glover	General John R. Dailey*
Mr. Shepard W. Hill*	Mr. James M. Guyette	Ms. Kelly Bloom*
Mr. Allan M. Holt*	Mr. Randall A. Greene	Ms. Meg Caulk*
Mr. David L. Joyce*	Mr. Ralph D. Heath	Ms. Virginia Clark
Mr. Gregory L. McAdoo*	Mr. David R. Hinson	Ms. Michelle Delaney*
Ms. Linda A. Mills*	Mr. David C. Hurley	Mr. Michael Garceau*
Mr. Robert A. Milton*	Mr. Robert James	Ms. Laura Gleason*
Mr. H. Ross Perot, Jr.	Mr. Clayton M. Jones	Ms. Lindsey Jackson*
Mr. John L. Plueger*	Mr. Herbert D. Kelleher	Dr. Peter L. Jakab*
Ms. Meredith Siegfried Madden	Mr. Rodney R. Lewis	Mr. Mark Kornmann*
Mr. David Storch	Mr. Steven R. Loranger	Ms. Catharine A. Kualii*
Mr. David Tolley*	Capt. James A. Lovell	Mr. Russell Lee*
Mr. Steve VanRoekel*	Mrs. Adrienne Bevis Mars	Ms. Anne McAllister*
Mr. Thomas Vice*	Mr. Bruce R. McCaw*	Ms. Jessica McNally*
Mr. Steuart L. Walton*	Mr. Robert J. Mittman	Ms. Elizabeth Wilson*
Mr. Paul Wood*	Mr. T. Allan McArtor*	
	Mr. Jameson J. McJunkin	
	Mr. Thomas G. Morr	
	Mr. Lloyd "Fig" Newton	
	Mr. Jack J. Pelton	
	Mr. Roger D. Percy*	
	Mr. Robert W. Pittman	
	Mr. Thomas F. Pumpelly	

**Smithsonian National Air and Space Museum Board Meeting
Wednesday, June 7, 2017
NASM Executive Board Room
Steven F. Udvar-Hazy Center**

Meeting Called to Order - John Plueger, Chair

John Plueger welcomed members to the June Board meeting, and reviewed the agenda. Plueger acknowledged the death of Javier Arango, sharing that he was an emeritus member and good friend to the Museum and many of the Board members. Arango was killed in an accident in one of his WWI airplanes. Many members had the opportunity to visit his collection of WWI aircraft in Paso Robles. He was a skilled pilot and a passionate supporter of the Museum and will be missed. Exemption 6

[REDACTED]

Plueger welcomed new Board member Daniel Baker and present him with a Wright Flyer crystal paper weight and Safer pin. He thanked Tom Haas for his gift in support of the future *Thomas W. Haas We All Fly* gallery. This is on top of his already generous gift in support of the Phoebe Waterman Haas Observatory. Plueger congratulated Bruce McCaw on receiving the Red Barn Heritage Award from the Museum of Flight.

Plueger introduced Dr. Richard Kurin to provide the “State of the Smithsonian” update. He announced that Kurin was recently named the Smithsonian’s first Distinguished Scholar and Ambassador-at-Large.

“State of the Smithsonian” - Dr. Richard Kurin, Acting Provost/Under Secretary for Museums and Research

Richard Kurin announced that John Davis was appointed Provost and Under Secretary for Museums and Research. Davis was previously with the Terra Foundation and Smith College.

Kurin provided an update on the Smithsonian budget, stating that the FY17 budget received a \$23M increase, bringing the total annual Federal funding to \$840M. The Smithsonian’s overall annual budget is \$1.5B. Federal funds reflect Ex. 4% of the budget. This increase was key for opening the National Museum of African American History and Culture. The Smithsonian also requested Ex. 4 for the Dulles Storage Module, and received \$40M. This will enable the start of construction and allow for Revitalization to move forward. For FY18, Exemption 4

[REDACTED]

The Smithsonian’s budget is also supported by the leadership of the the Smithsonian Regents. Following recent changes, David M. Rubenstein is chair, Steve Case is vice chair, and Dr. Risa J. Lavizzo-Mourey is serving as a member of the Executive Committee. Vice President Pence appointed a liaison to assist with his duties as a Regent, and Smithsonian Leadership looks forward to his support. Kurin shared that President Trump visited the National Museum of African American History and Culture. His daughter,

Ivanka Trump, visited many of the Smithsonian museums with her children. These visits highlight the non-partisan nature of the Smithsonian.

Kurin announced that the Smithsonian Campaign [REDACTED] Ex. 4 [REDACTED]. Leadership is currently considering both how to continue fundraising as well as how to fund those efforts. For the duration of the Campaign, [REDACTED] Ex. 4 [REDACTED].

The Smithsonian released a new strategic plan and formed an implementation team. Kurin provided a high-level overview, stating that the Smithsonian will focus on being a united organization rather than separate units. A unified approach will enable the Smithsonian to be more effective in sharing the depth and breadth of the Institution with the public. Establishing pan institutional services and unified messaging will lead to greater efficiency. One specifically stated metric within the plan is the goal to impact and educate 1B people per year through digital outreach. The Smithsonian currently reaches 100M and is active in 145 different countries. Kurin acknowledged NASM as being a leader in reaching beyond the walls of the museum.

The Smithsonian also desires to play a stronger role in convening discussion. As a trusted institution, the Smithsonian will spark bipartisan dialogue and understanding while exploring topics such as science and history. The Smithsonian will highlight expertise to increase and diffuse knowledge.

The National Museum of African American History and Culture continues to be a great success. Over 38,000 groups remain on a waiting list to visit the museum, and that represents 1.5M future visitors. While NMAAHC expected to welcome over 17,000 visitors a day, they are limited to serving 7,000 due to increased dwell time. They are experimenting with the ticketing system in order to increase numbers. Ken Gazzola asked about projected year-end visitorship, and Kurin responded that they expect to welcome over 3M visitors. In other Smithsonian news, the National Museum of American History will open their American Democracy wing and the work of Wei Wei will be featured at the Hirshhorn. Kurin commented on the popularity of the Hirshhorn's most recent exhibit, *Yayoi Kusama: Infinity Mirrors*. Progress on the Giant Magellan Telescope continues. Kurin also shared that the Smithsonian is carefully addressing all security concerns to ensure safety.

Plueger thanked Kurin for his service.

“State of the Museum” - General Jack Dailey, John and Adrienne Mars Director

General Dailey provided an update on the state of the National Air and Space Museum. On June 6, the Global Attractions attendance report was released on museum visitation. With 7.5M visitors, the National Mall building ranked 2nd in the world - only 50,000 visitors behind Beijing's National Museum of China. Other museums on the worldwide list include the Louvre in Paris with 7.4M visitors and the Metropolitan Museum of Art in New York with 6.7M.

Dailey announced recent staff changes. Associate Director Cathy Kualii retired; Laura Gleason accepted the position of Director of Advancement; Michelle Lambertson now serves as Associate Director for Business Operations and Exhibits; Rick Flansburg now serves as Associate Director for Collections, Archives and Logistics; and Mark Kornmann now serves as Associate Director for Education and Public Engagement.

Dailey stated that the FY17 budget funds the museum through the end of the fiscal year, September 30, 2017. As shared by Kurin, in FY17 the Smithsonian received increased funding over FY16 for the Smithsonian's operating budget as well as for the construction of the Dulles Collection Center Storage Module. Construction of the module will take 18 months and should commence in mid-June.

David Tolley asked if the storage module can be used as exhibition space in the future. Dailey responded that additional exhibition space at Hazy can be developed contingent upon private philanthropy. Additional plans will be considered after Transformation is completed in 2025.

Exemption 4

Dailey provided an update on the Revitalization and Transformation of the National Mall building. Exemption 6 submitted their 65% design for review in February 2017. Based on this, Exemption 6 submitted their independent construction estimate and schedule. Current estimates are not within budget so the Museum is conducting value-engineering studies to reduce costs. The Museum will review one last submission this summer (referred to as the 100% submittal) and then the design will be finalized in December 2017. A parallel design effort for the relocation of the NASM Library, Archives Technical Files, and Regional Planetary Image Facility (RPIF) will be complete in June, followed by a construction contract award in late 2017. NASM staff relocation planning is also progressing. Advancement staff are scheduled to move to leased office space in Capital Gallery East before the end of FY17. The curatorial and research departments are scheduled to relocate to leased office space nearby in March 2018. Dailey shared that Exemption 6's approach to project sequencing differs somewhat from Exemption 6's 35% design schedule. The Ex. 6 65% schedule separates the project into two phases, with the second phase starting only after the first phase of construction has been completed. The west end galleries will be closed from 2018 to 2021 and the east end galleries will close from 2022 to 2025. The Museum should be able to provide a more definite schedule by the October meeting.

In April, the Museum opened *Artist Soldiers: Artistic Expression in the First World War*. This is the last exhibit to open before the revitalization project. *Artist Soldiers* examines the emergence of war art that captured the moment realistically by firsthand participants. The Museum has a program of activities observing the centenary of WWI including a monthly film series. Dailey shared that Javier Arango anonymously donated funds to support the gallery and the programming, and was scheduled to be a speaker in the Spring.

Since the last Board meeting, the Museum hosted the annual Charles A. Lindbergh Memorial Lecture, three Exploring Space Lectures, and the John N. Bachall Lecture. The Exploring Space Lectures are made possible by the generous support of Aerojet Rocketdyne and United Launch Alliance. The Lindbergh Lecture is made possible by Pratt & Whitney. The Museum also hosted the annual Trophy Awards. The Trophy Award for Current Achievement was presented to the South Pole Rescue Team from Kenn Borek Air and the Trophy Award for Lifetime Achievement was presented to Peter Theisinger. The Trophy Award is a sculpture "Web of Space" created by emeritus member John Safer. Dailey thanked Allan Holt for supporting the evening as well as BAE Systems Inc., Atlas Air Worldwide, the Claude Moore Charitable Foundation, L3 Technologies and Pratt & Whitney. He also thanked the Board for their participation in submitting nominees.

Dailey stated that the Education and Public Engagement Department facilitated four Northrop Grumman Heritage Family Days as well as a full schedule of programs like Google Field Trips, What's New in Aerospace, and STEM in 30. They continued to expand their reach to young adults with programming like a Yuri's Night reception and a Star Wars 40th anniversary screening. As a part of outreach testing, the Museum has taken our Ask An Expert series to Facebook Live. The program now averages 2,000 live viewers for each program, which is more than an entire year's worth of viewers for the previous onsite format. The most watched program reached 4.1 thousand people, and featured curator Cathleen Lewis talking about Yuri Gagarin. NASM hosted the opening night of IPW, U.S. Travel's annual meeting for 6,500 delegates from 70 countries including 500 international journalists. It was a valuable opportunity to position the Museum before an international audience at a critical time pre-revitalization. The Museum hosted attendees of the annual Smithsonian Weekend for a panel presentation on the transformation project. The attendees were Exemption 6 donors who have given Exemption 6 to the Smithsonian. It was the most popular of the optional activities. Dailey showed a video clip from the event.

Dailey thanked Board members for their commitment to the Museum.

Ralph Heath highlighted security concerns, and asked how security measures will be incorporated into Transformation and beyond. Dailey responded that a group has been formed to address current and anticipated security concerns across the Smithsonian. The Museum developed a rapid messaging system to alert employees of threat and practices drills regularly at all locations. The Museum hired additional screeners and gallery watchers to ensure safety.

Future State Committee Report and Discussion - Greg McAdoo, Chair, Future State Committee

Greg McAdoo stated that, in parallel to Revitalization, NASM is undertaking an entire transformation of the Museum. One of the main goals of Transformation is to revolutionize how NASM engages and interacts with guests both within and outside the walls of the museum. Over the past four months, the Future State Committee developed a working partnership with the Museum's Innovation Lab to develop a project that explores the core tenets of outside-in, experience first, and agile content through rapid prototyping.

The Committee and Lab are now working to build a Virtual Hangar app. The Hangar will feature digital versions of the *Columbia* Command Module, Bell X-1, and Wright Flyer. The Hangar will allow for an immersive experience as users will be able to go inside of artifacts such as *Columbia* and walk around the Bell X-1. The Lab selected a contractor to build the Hangar, and they are now working on an aggressive schedule with only five weeks to develop the first prototype. The goal is to test the prototype in the museum and release online. The second phase of the project will move away from the visual environment of the Hangar and instead place the artifacts in their contemporary environment. The Lab is developing metrics to measure the user experience of the Hangar.

McAdoo introduced Matthew Horton, Sarah Banks, Katie Moyer, and Nick Partridge of the Innovation Lab. Horton stated that the Lab is working with exhibit and design teams to develop prototypes for media and interactive installations across the museum. There are over 100 interactives in the first nine galleries being reimaged through Transformation. Thirteen of the interactive prototypes will be tested with the public in June. They represent a wide range of content and formats. Horton invited members to participate in the testing during the break and provide feedback on their experiences. He noted that members of the IBM Watson team were on-hand to demonstrate facial recognition technology.

Members participated in Lab prototype testing.

Break

Nominations Committee Report and Discussion - Allan Holt, Chair, Nominations Committee

Allan Holt welcome Daniel Baker to his first meeting. The Smithsonian Board of Regents unanimously approved his appointment at their May 3 meeting. With Baker's appointment, the Board count will be 28 current members (32 is the bylaw limit). This year, David Joyce's and Robert Milton's 2nd terms will be expiring in October, thus bringing membership down to 26. The Nominations Committee discussed size of Board, and concluded that 27/28 members is a good size.

Holt reminded the Board that dinner guests, besides spouses, are traditionally only those under consideration for Board membership. Two Board candidates attended the June Board dinner: Ex. 6 [REDACTED]. Holt opened the floor for feedback regarding their candidacy. He also welcomed members to share any names of potential candidates for the Board with himself or Laura Gleason. While the Committee currently has a good list of candidates with limited space, they are always eager to add quality individuals who can make meaningful contributions the Board.

Advancement Committee Report and Discussion - Tom Haas, Vice Chair, Advancement Committee

Tom Haas provided an update on the Museum's fundraising progress, and specifically progress towards Exemption 4

[REDACTED]

and will provide an update at the next Board meeting.

The goal for the current fiscal year (Oct 1 - Sept 30) is Exemption 4

[REDACTED] It is important to note that success is often measured simply by the numbers, but the impact of these gifts should also be celebrated. Transformation gifts have supported the upcoming *Destination Moon* traveling show which will bring the Command Module *Columbia* on a national tour, conservation of some of the Museum's most prized artifacts, and have allowed for the Museum to begin the design for the first 9 galleries for the National Mall building. Non-Transformation gifts have supported fieldwork and research for Museum scientists, the Museum's interns, numerous education initiatives and public programs, all of which are critical to the Museum's ability to fulfill its mission. Haas thanked Exemption 6 for facilitating a commitment of Exemption 6

Haas provided an overview of the annual giving program. He reminded the Board that the National Air and Space Society (NASS) and Wall of Honor provide unrestricted support to the Museum. So far this year Exemption 4

[REDACTED]

Exemption 4

[REDACTED]

Haas provided an update on Advancement Communications efforts. The Advancement staff has been working to bring on a communications firm to develop materials for the Transformation campaign. They have selected Ologie based in Columbus, Ohio. Ologie has extensive experience running fundraising communications campaigns for major universities and non-profits. As they start their work, they may be coming to Board members to gain your perspectives so they can fully understand how the Museum perceives the brand. The Board will also be asked for their opinions as the Museum tests the collateral materials they develop.

Ross and Sarah Perot, Jr. hosted a regional event in Dallas on March 6, 2017. Haas thanked Perot for hosting and Orlando Carvalho for his help in identifying guests. Both Ross Perot, Sr. and emeritus member Herb Kelleher attended.

Plueger shared that he and Robert Milton have been leading conversations with some of their industry partners for a significant gift to support the *America by Air* gallery on the National Mall. He hopes to have good news to share by the next meeting.

Future of the NASM Education Program - Mark Kornmann, Associate Director, Education and Public Engagement

Mark Kornmann provided an overview of the reengineering of the Education and Public Engagement Department. Over the past year, the Museum worked with Censeo to evaluate and implement the reorganization. Based on external interviews and internal input, Education rolled out an updated mission statement, goals, and target audiences in September 2016. From October 2016 - March 2017, Education build target audience profiles and worked to define big ideas to support each audience. Since April 2017, Education and Public Programs built out business cases for each strategic priority to use with funders as well as identify the skills, activities, organizational structure, and funding needed to support each strategic priority.

Kornmann shared that interviews with external stakeholders revealed that the Museum’s ability to inspire visitors is key, and should be one of Education’s most important missions. Education therefore developed the following mission statement for their department: “Inspire all individuals to reach their full potential by sharing stories and experiences about aviation, spaceflight, and the universe”. Education developed three main goals based on the mission statement. They will seek to cultivate the next generation of STEAM and history learners by creating and sharing high-quality education content aligned with national educational priorities. They will transport the nation’s aeronautical and space treasures and stories beyond the walls of the museum through digital technology. Finally, Education will bring artifacts to life to expand interest in history and excitement in STEAM by reimagining how we share our collections and expertise. Education will fulfill these goals by focusing on the four target audiences of middle school students, middle school educators, families, and young adults.

Kornmann expanded upon the approaches developed for each target audience. The new priority statement for middle school students is to target all middle school students nationally to increase STEAM skills and bring attention to career and educational opportunities through digital programming and educational content. This will be fulfilled by developing an agile program to serve large middle school groups visiting the museum. The priority statement for middle school educators is to target all middle school math and science teachers nationally to improve confidence and capabilities in teaching STEAM topics through digital programming and educational content. This will be accomplished by creating a web portal that teachers can go to for content. The priority statement for families is to target local and tourist families to create fun and excitement for youth, and build lifelong relationships with adults via programs and exhibits at the Mall and the Udvar-Hazy Center. This will be fulfilled by creating special programs in the evening so that families can visit during extended hours. The priority statement for young adults is to target local and visiting young adults to cultivate champions of Air and Space by leveraging interactive, social media, and private events. We will do this by launching engaging programs with various topics and venues.

Shep Hill is aware of other organizations using tools, such as tablets, to facilitate their programs, and asked if Education is working with Google to acquire similar hardware. Kornmann responded that they are currently looking for the right partners who can advise on and assist with distributing content to users. They are also assessing how to best share content so that it can be used on multiple platforms. Steve VanRoekel commented that pop culture influences excitement around learning certain topics. He encouraged Education to link pop culture with content in order to hook the middle school students.

Kornmann welcomed Caroline Watkins to lead the Board in an exercise to solicit feedback on the Museum’s refreshed strategy for Education and Public Programs.

Ex. 5

Exemption 5



A Closer Look

***One World Connected*, Martin Collins, Curator, Space History Department**

Martin Collins provided an overview of the *One World Connected* gallery. Aviation and spaceflight transformed how Earth came to be viewed and understood as an interconnected world. *One World Connected* will tell the story of how flight fostered two momentous changes in everyday life: the ease in making connections across vast distances and a new perspective of Earth as humanity's home. Featuring an array of satellites, the exhibit will ask visitors to consider how global interconnection touches their lives and to imagine how advances in technology might impact our future. Collins and the designers are being mindful to incorporate aspects that can be updated as technology and concepts of connectivity continue to develop at a rapid pace.

Collins stated that, through this gallery, the Museum seeks to demonstrate how transportation, communication, and observation technologies created a connected world, and highlight ways in which satellite technologies have become part of everyday life. The gallery will discuss how human activity came to play a critical role in Earth's physical environment as well as explore how people in different places perceive and respond to living in a connected world.

The main focal point of the gallery is a 12-foot interactive globe that will project the ways that humans connected across the planet. The globe will visually demonstrate elements of communications, transportation, navigation, human population, earth science, and animal migration with the goal of fostering connection amongst visitors and sparking discussion. Another experience in the gallery is the walk-in replica of the International Space Station's Cupola. The Cupola will reveal earth as a whole, and discuss astronauts' work on the ISS. The gallery will feature an international art installation based on *The Family of Man* exhibition. A group of photographers will capture people around the world to compliment and put a human face on the concept of connectedness. The photographs will also serve as a preview to the gallery as they will travel as a temporary exhibit before installation. The final section of the gallery will give visitors both within and outside the museum an opportunity to participate in a facilitated discussion and provide feedback on proposed topics.

Collins noted that the development of the gallery resulted from a variety of collaborations across the Smithsonian Institution.

Tom Haas asked if the interactive globe will include information on weather systems, and Collins responded that it will.

Exploring the Planets, Jim Zimbelman, Geologist, Center for Earth and Planetary Studies

Jim Zimbelman provided an overview of the *Exploring the Planets* gallery. Exploration reveals that our solar system is filled with diverse places that transform our understanding of Earth and worlds beyond. *Exploring the Planets* will tell the stories of how planetary exploration shaped our understanding of the Earth. The exhibition will be arranged around dynamic, immersive audiovisual experiences to simulate different planetary landscapes and present visitors a view of standing on other planets. Zimbelman emphasized that the gallery will display real time science.

Goals for the gallery include encouraging visitors to consider the solar system in a new way. Rather than taking a traditional approach and beginning with the Sun, the gallery will begin outside of our planetary system and bring the visitor in toward the Sun. Two different narrative arcs will explore both the science content as well as the history behind the discoveries and development of the field. An “Exploration Continues” section will be regularly update with the most recent research and findings as well as host interactive educational components.

Zimbelman believes that the “Walking on Other Worlds” section of the gallery will be a popular interactive for visitors. A large circular screen located in the center of the gallery will provide a 270-degree immersive view of terrains of seven other worlds. Each video will provide orienting information such as where the terrain is located and data on how the image was collected. The gallery will also contain a number of other interactives. Zimbelman believes that the gallery should serve as an introduction to the content and motivator for visitors to leave the museum inspired to learn more.

Greg McAdoo asked if the “Walking on Other Worlds” interactive will provide a prime opportunity for visitors to take and share selfies. Zimbelman responded that, while it might be difficult for visitors to capture the movie, they do anticipate that the suspended globes will be a popular picture spot just as it is in the current gallery. He shared that the team considered placing a sticker on the floor to call attention to a desirable “selfie spot”. McAdoo recommended creating picture opportunities.

Old Business - John Plueger

Plueger recognized Agnes Brown for her service to the Board as well as 23 years of serving as a Docent.

Plueger shared the following information:

2017 Board meeting dates: October 3-4

2018 Board meeting dates: February 27-28; June 5-6; October 16-17

Upcoming events:

June 16: Hollywood Goes to War: World War I on the Big Screen The Eagle and the Hawk, UHC/NMB

June 17: Innovations in Flight Family Day and Aviation Display, UHC

June 22: Exploring Space Lecture: The Grand Tour by Caltech astronomer Heather Knutson, NMB

July 18: John H. Glenn Lecture in Space History Remembering John Glenn: The Man and the Legend, NMB

David Tolley noted that a number of presentations highlighted the Museum’s effort to facilitate synergy with the other Smithsonian units, and asked if these relationships are causing NASM’s mission to grow or creep. General Dailey responded that a major section of the newly released strategic plan

encourages collaboration across the units. In reference to NASM's collaboration with the National Museum of American History to create the *Nation of Speed* gallery, Dailey noted that much of the technology featured in the gallery was generated through the development of aerospace efforts. Peter Jakab stated that *Nation of Speed* speaks directly and indirectly to the manifestation of technology and reflects the breadth of the topic. Kurin noted that NASM's airplanes are on display in NMAAHC. Dailey shared that 10% of the Museum's collection is on display in other institutions.

Wrap-up- General Dailey

General Dailey thanked the Board for their dedicated support.

Executive Session

Meeting Adjourned

The Board meeting adjourned at 11:45 am.

National Air and Space Museum Board

*Present at the June 7, 2017 meeting

Board Members:	Board Members Emeritus:	
Mr. William S. Ayer	Mr. James Albaugh	Dr. Jon A. Reynolds
Mr. Daniel Baker*	Mr. Ronald W. Allen	Dr. Donald B. Rice
Mr. Alain M. Bellemare	Mr. Javier F. Arango	Mr. John Safer
Ms. Marion C. Blakey	Mrs. Anne B. Baddour	Dr. Richard Sugden
Mr. Orlando P. Carvalho	Mrs. Agnes M. Brown*	Dr. Frederick Telling
Mr. Neil Cohen*	Mr. Armando C. Chapelli, Jr.	Mr. Charles Thornton
Mr. Frederico P.F. Curado*	Mr. Max C. Chapman, Jr.	Ms. Patty Wagstaff
Mr. Scott Donnelly*	Mr. Joe Clark	Mr. Bruce Whitman
Mr. Mark B. Dunkerley*	Mr. Frank A. Daniels, Jr.	
Mr. Stuart L. Fred*	Mr. Edsel B. Ford, II	SI/NASM Staff Members
Mr. Morton Fungler	Mr. Kenneth E. Gazzola*	Dr. Richard Kurin*
Mr. Thomas W. Haas*	Mr. S. Taylor Glover	General John R. Dailey*
Ms. Dawne S. Hickton	Mr. James M. Guyette	Ms. Kelly Bloom*
Mr. Shepard W. Hill*	Mr. Randall A. Greene	Ms. Meg Caulk*
Mr. Allan M. Holt*	Mr. Ralph D. Heath*	Ms. Michelle Delaney*
Mr. David L. Joyce	Mr. David R. Hinson	Mr. Rick Flansburg*
Ms. Meredith Siegfried Madden*	Mr. David C. Hurley	Mr. Michael Garceau*
Mr. Gregory L. McAdoo*	Mr. Robert James	Ms. Laura Gleason*
Ms. Linda A. Mills*	Mr. Clayton M. Jones	Ms. Lindsey Jackson*
Mr. Robert A. Milton*	Mr. Herbert D. Kelleher	Dr. Peter L. Jakab*
Mr. H. Ross Perot, Jr.*	Mr. Rodney R. Lewis	Mr. Mark Kornmann*
Mr. John L. Plueger*	Mr. Steven R. Loranger	Ms. Michelle Lambertson*
Ms. Meredith Siegfried Madden*	Capt. James A. Lovell	Ms. Anne McAllister*
Mr. David Storch	Mrs. Adrienne Bevis Mars	Ms. Jessica McNally*
Mr. David Tolley*	Mr. Bruce R. McCaw	Ms. Elizabeth Wilson*
Mr. Steve VanRoekel*	Mr. Robert J. Mittman	
Mr. Thomas Vice	Mr. T. Allan McArtor	
Mr. Steuart L. Walton*	Mr. Jameson J. McJunkin*	
Mr. Paul Wood*	Mr. Thomas G. Morr*	
	Mr. Lloyd "Fig" Newton	
	Mr. Jack J. Pelton	
	Mr. Roger D. Percy*	
	Mr. Robert W. Pittman	
	Mr. Thomas F. Pumpelly*	

**Smithsonian National Air and Space Museum Board Meeting
Wednesday, October 4, 2017
NASM Executive Board Room
Steven F. Udvar-Hazy Center**

Meeting Called to Order - John Plueger, Chair

John Plueger welcomed members to the October Board meeting, and reviewed the agenda. He acknowledged that this is General Jack Dailey’s last meeting as director. He also acknowledged the tribute to Javier Arango at the Board dinner, and the accession and display of the Sopwith Camel and Vandersarl Bleriot. Plueger welcomed guests Christine Udvar-Hazy and John Davis, who assumed his role on July 31 as provost/under secretary for Museums and Research and joined the Smithsonian from Smith College and the Terra Foundation. Plueger stated that the Board looks forward to working with Davis, and he thanked Richard Kurin for his past support as provost. Plueger acknowledged Bran Ferren, co-founder and co-chairman of Applied Minds. Ferren has been working with NASM to help rethink the guest experience. He congratulated Joe Clark on the news that Steve Hinton broke the speed record for an internal combustion engine-powered airplane, Class C-1e, on a 3 km closed course on September 6. Plueger congratulated Bruce McCaw on winning best-in-show at the Pebble Beach Concours d’Elegance with his 1929 Mercedes-Benz S Barker Tourer. He also congratulated Rich Sugden on being inducted into the Wyoming Aviation Hall of Fame. Plueger acknowledged Exemption 6 commitment to support the Design Hangar in the future *How Things Fly* gallery.

Plueger introduced Dr. David Skorton to provide the “State of the Smithsonian” update.

“State of the Smithsonian” - David Skorton, Secretary

Skorton recognized Dailey’s leadership of the museum and thanked him for his service. He also recognized Kurin for his service to the Smithsonian and congratulated him on his new position as distinguished scholar. Skorton welcomed Davis as provost.

Skorton announced a new strategic plan for the Smithsonian. One of the main components of the plan is to refocus the units to work pan institutionally as one Smithsonian. He highlighted the development of the Smithsonian Science Education Center and their creation of K-12 STEM curriculum that now reaches students in every state learning in 1,500 different school districts as an example of what can be achieved when units work together. The 216 Smithsonian Affiliate museums as well as the Museum on Main Street program are also part of the effort to work pan institutionally to reach a broader audience. The overarching goal is to increase the Smithsonian’s impact and reach more than 1B people over the next five years. The Smithsonian currently reaches 100M people per year. Skorton stated that this goal will be achieved by embracing a digital first strategy. He acknowledged that NASM is currently leading the way with these efforts. Not only does the new Strategic Plan outline expanding the Institution’s reach, but it specifically sets the goal of touching every K-12 student learning in the District of Columbia. Skorton shared that there will be a public rollout of the plan in the next few months.

Skorton highlighted the role of education at the Smithsonian. He stated that the Smithsonian has a history of leading the way with research. The Institution is now shifting focus to highlight the offerings of education as it will bring the greatest impact to the world. This impact will occur both within the museums as well as beyond the walls in the classrooms. Skorton credited NASM’s recent efforts to promote the Solar Eclipse as an example.

Plueger noted that the Udvar-Hazy Center is the most visited facility for fieldtrips by classrooms in Virginia. Fieldtrips must be booked a year in advance due to the popularity.

“State of the Museum” - General Jack Dailey, John and Adrienne Mars Director

General Dailey recognized and thanked Kurin for his work as provost.

Dailey provided an update on the state of the Smithsonian’s National Air and Space Museum. He announced that, as of September 1, the Hazy Debt is paid in full which is fourteen years ahead of schedule. The Museum avoided \$44M in payments through a combination of early payment and lower interest rates than expected. This will free up \$3M of annual revenue to be applied to other initiatives, like Transformation. Dailey shared that the federal government is functioning under a continuing resolution through December 8. While the Smithsonian does not have an approved budget for FY18,

Ex. 5
The Smithsonian requested Ex. 5 in its 2018 federal budget request for NASM, \$Ex. 5 Revitalization, and Ex. 5 to complete the storage module.

Dailey shared that the annual John H. Glenn Lecture sponsored by Boeing was a remembrance of Senator Glenn. The program featured astronaut Dr. Kathryn Sullivan, former Senator David Pryor, and journalist Bob Schieffer. Heather Knutson from the California Institute of Technology spoke at the final Exploring Space lecture hosted by Aerojet Rocketdyne and ULA. During the GE Aviation lecture, former Air Force Lieutenant Heather Penney and her father, United Airlines Captain John Penney, discussed their unique experiences on 9/11. The big event since the last Board meeting was the Solar Eclipse. The Museum welcomed over 40,000 guests at the downtown museum and 27,000 at the Udvar-Hazy Center and engaged visitors across the country. Visitor Services distributed 145,000 viewers. Outreach included a live *STEM in 30* broadcast from Liberty, Missouri which was in the Path of Totality. NASM received significant national and local media exposure. In FY17, the Museum hosted eight Family Days with over 107,000 guests, the Mars Rover Prototype with over 100,000 guests, a live downlink from Randy Bresnik at the International Space Station with over 700 students from the DC, Virginia, and students from around the nation, and completed a 14-month re-engineering of Education.

Dailey stated that, in artifact news, of the 4099 Artifact movements/treatments associated with Revitalization and Transformation, 22 artifacts have been moved to the Restoration Hangar for treatment. The work on five artifacts has already been completed. The extremely rare and significant early aircraft—a 1917 Sopwith Camel and a 1911 Blériot—were bequeathed to NASM by Javier Arango. These aircraft are among the most significant acquisitions for NASM in recent years. They are an extraordinary gift from the Arango family. Scanning of the space shuttle *Discovery* is complete. Dailey thanked Exemption 6 for funding this effort.

The *Destination Moon* traveling exhibit will open soon at Space Center Houston. The team is currently on site for the install of the exhibit.

Traveling exhibition locations include:

Space Center Houston, October 14, 2017 - March 18, 2018

Saint Louis Science Center, April 14, 2018 - September 3, 2018

Senator John Heinz History Center, Pittsburgh, September 29, 2018 - February 18, 2019

The Museum of Flight, Seattle, March 16, 2019 - September 2, 2019

Dailey thanked Exemption 6 for helping to make this exhibit possible.

Dailey called attention to the list of scholarly work and top-notch research conducted by the Museum since the last Board meeting. Dailey recognized Space History curator Michael Neufield for being awarded the 2017 Distinguished Scholars Award.

Plueger congratulated Dailey for being selected as the recipient of this year's NAA Wright Memorial Award which is awarded annually to a living American for "significant public service of enduring value to aviation in the United States." As one of the most important, historic, and visible aerospace awards, he said there is no one better deserving of this recognition.

Christine Hazy announced that Dailey is the recipient of the first-ever Steven F. Udvar-Hazy Lifetime Award. The award will be presented to Dailey at the "Living Legends of Aviation" event on January 19 in Los Angeles.

Plueger introduced John Davis, new provost and undersecretary for museums and research, to provide a brief update on the search for a new NASM director.

Update on NASM Leadership - John Davis, Provost and Under Secretary for Museums/Research

Davis provided an update on efforts to select the new director of NASM. He shared a list of the eleven Selection Committee members and a description of the directorship. He stated that the Committee made progress during the quiet phase, including offering feedback on the job description to search firm **Ex. 6**, and is now transitioning into an open phase. Davis welcomed NASM Board members to submit recommendations.

Davis shared that the Committee participated in a calibration exercise during which they considered a variety of unapproached candidates that represented a wide range of potential nominees. The goal was to identify qualifications of interest. **Ex. 6** also interviewed Smithsonian staff to identify their preferred characteristics. **Ex. 6** is now reaching out to candidates to gauge interest. Davis noted that the field of candidates is limited by the specialty of the position. On October 11, the Committee will meet to discuss a small group of candidates (5-8) that are interested in the position. 4-5 of these candidates will be offered first round interviews. A smaller set will be invited for a second interview on Dec 18. Finally, a few will be invited to spend a day at the Castle for additional vetting by senior leadership. While the Selection Committee will make recommendations on the final candidate, Skorton will make the selection.

Plueger shared that, of the eleven committee members, four are from the Board **Ex. 6**.

Plueger introduced Chris Browne to provide an update on the Revitalization and Transformation of National Mall building.

Update on Revitalization and Transformation - Chris Browne, Deputy Director

Browne stated that construction of the first Dulles Collections Center storage module has begun. This swing space is critical to the Museum's path forward. While the Udvar-Hazy Center is the only privately funded Smithsonian building, the construction of the module will be supported completely by federal money. Hensel Phelps was selected to conduct the work, and they were the original contractor of the building of the Hazy Center. The construction period is estimated to be 18 months with completion on budget in January 2019. This timeline is in sync with the overall project.

Browne noted that Revitalization was prompted by the need to address structural and mechanical issues. Potentially dangerous conditions caused by the warping of the exterior stone prompted the construction of walkways around the museum. Browne shared that good progress has been made toward selecting a stone that will reduce costs but provide the needed protection. The new design will bring the building up to the current safety standards as well as improve the guest experience.

Browne stated that the 100% revitalization design submission is under review and the design will be finalized in January 2018. **Exemption 5**

Exemption 5 Award of the artifact move contract is scheduled for the 2nd quarter FY 2018. NASM staff will handle the most precious artifacts while contractors will assist with the rest of the move. NASM staff relocation planning is also progressing

well. Advancement staff will move to leased office space in Capital Gallery East in November. The curatorial and research departments will relocate to leased office space nearby in March 2018. Other efforts include moving the Library and NASM Archives from the National Mall building into what is currently the Director's Suite area at the Udvar-Hazy Center. The Hazy Director's Suite will be relocated to the shell above the IMAX Theater. The construction award for this effort will be made in October 2017 and work will be done in phases. Contracts for these efforts are on schedule.

Browne provided an update on Transformation efforts. Current plans reflect the west end galleries being closed from 2018 to 2021. The east end galleries will be closed from 2022 to 2025. For the west end exhibits, the design will be complete in March 2018 and an exhibit production contract awarded in October 2018. For the east end exhibits, design will start in April 2018 with design complete expected in July 2020. The Museum plans to issue publicly announce the projects after the Regents meeting later this month. Communications will also go live with a webpage. Browne stated that the Museum is committed to keeping a portion of the museum open to visitors throughout Revitalization/Transformation.

Browne shared information on the impact that these efforts will have on revenue generation. Leadership is actively working to optimize and balance construction activities, artifact moves, exhibit installations, and revenue impacts all while being mindful of the visitor experience. Based on the current construction schedule, leadership anticipates revenue losses of \$55-\$73M to the Institution over 7 years. Although steps are being taken to reduce impacts, these losses will be caused by the closure of the shop, theater, planetarium, and restaurant. The McDonald's contract ends in November, Ex. 5 [REDACTED] Browne shared that the restaurant building is nearing the end of its service life and is presently planned for replacement in 2027, approximately two years after the Museum fully reopens. Recognizing the financial and customer service downside of the current plan, Secretary Skorton authorized the staff to prepare a cost and feasibility report to replace the restaurant during Phase 2 of Revitalization (2022-2025), rather than after.

Skorton provided an update on the status of federal appropriations. The Smithsonian requested and received monies for the Dulles Storage Center. The Smithsonian then placed a request for Revitalization funds. Following budget markdowns by the House and Senate, Smithsonian Leadership debated delaying Revitalization efforts by a year. Ex. 5 [REDACTED]

Rich Sugden requests that members be provided with talking points in order to best advocate. Skorton agreed and will work with OGC to develop materials.

Plueger asked if it is possible that the replacement stones will develop the same warping issues. Browne replied that they selected a granite that will be cut at a greater thickness. The new stone is estimated to last for 100 years.

Future State Committee Report and Discussion - Greg McAdoo, Chair, Future State Committee

Greg McAdoo provided an update on the Future State Committee. He emphasized that their recent work has been a team effort between the Museum and the Committee. Since the June Board meeting, the Committee met weekly to receive updates on and discuss the Virtual Hangar app project. He stated that the app represents the culmination of the Committee's work over the past few years to answer questions pertaining to how NASM will interact with stakeholders over the next 25 years. As McAdoo shared previously, the tenets of outside-in, rapid iteration/fail quickly, experience first, and agile content guide the work.

The Virtual Hangar app addresses one of the most common questions posed by visitors: "Can I go inside the artifacts?" The app gives visitors the ability to see inside of the *Columbia* module, Bell X-1, and Wright Flyer, and experience the artifacts in their natural environments. The Committee and Museum

worked with CerebralFix to develop the app. They are currently in the final development stage and beginning testing. The next step is to test the app on the museum floor before going to the app store.

McAdoo and Sarah Banks, a member of the Innovation Lab, provided a walkthrough of the Bell X-1 experience using Google Cardboard. Each experience includes a digital scan of the artifact, contextual information, and a demonstration of the artifact in its natural environment.

David Hurley asked if the app will include audio and McAdoo responded that it will.

McAdoo interviewed Bran Ferren. Ferren is the co-founder and co-chairman of Applied Minds, and is a designer and technologist working in entertainment, product development, engineering, architecture, and the sciences.

McAdoo highlighted Ferren's experience with working within an experience first development structure, particularly at Disney, and asked if Ferren believes there can be an intersection between an entertainment mindset and the educational goals of the Museum. Ferren responded that education and entertainment are not mutually exclusive. He believes that humans learn and remember through storytelling. At the museum, it is the contextualization of artifacts that gives them meaning and makes them significant. When looking to engage future generations, the Museum must ignite curiosity by providing young visitors with emotional connections and share why they should care about artifacts. NASM cannot be about hardware but rather must share the spirit of innovation and imagination that created the artifacts. He encouraged the Museum to present the artifacts with the stories behind them.

McAdoo asked how, in an effort to not just be a museum of the past but also be an institution of the now, NASM can implement rapid iteration to propel the Museum forward during Transformation. McAdoo noted that Ferren recently led a two day workshop for NASM staff during which they designed a guest experience around the "Future of Commercial Space Flight". Ferren stated that the Museum is at a key moment in its history as it can either decide to remain what it was in the 1970s or transform into an institution that will be relevant in the future. Rapid prototyping enables the Museum to pair their expertise with the knowledge and experience of outside contractors to create a vision and engaging experiences. The Museum should invent their own process to achieve this.

McAdoo acknowledged that the Future State Committee's goal of anticipating the best way to interact with stakeholder over the next 25 years is a daunting undertaking. He asked if other aspects of Ferren's work are applicable as the Museum works to anticipate future visitors' desires and needs. Ferren encouraged the Museum to get the best and brightest thinkers engaged on each project. The Museum's ability to embrace and act quickly on ideas will be key. He recommended not looking 25 years out but rather 5 - 10 years down the line with the goal of adapting current processes to be responsive. He said that Transformation should be a time for the Museum to quickly get artifacts on the floor for display so that there are opportunities to learn and adjust.

Plueger asked how the Museum can successfully anticipate and design for the future in light of the unknown. He specifically referred to designing for yet realized technologies. Ferren responded that the Museum can make an educated guess of what technology will be available within the next 5 - 10 years. While it is hard to anticipate what will be the most relevant and impactful innovations, the Museum knows that people's most basic needs will not change. The Museum should therefore set a foundation on storytelling and utilize technologies to share with future generations.

Skorton stated that the Smithsonian must bring the smartest people together and also plan for obsolescence. Ferren shared that the Smithsonian can plan for a changing environment by both anticipating change and engaging thought leadership to understand its overall direction. Ferren emphasized that, while display methods many change, it is the stories that matter.

McAdoo thanked Ferren for his input and work with the Museum.

Plueger and Skorton honored Dailey by revealing a recognition panel that will be displayed at the Udvar-Hazy Center. The text of the panel acknowledges his many achievements and the significant role he made in building the Udvar-Hazy Center.

Break

Smithsonian Security Overview - Jeanne O’Toole, Director, Office of Protective Services

Jeanne O’Toole provided an overview of protection services at the Smithsonian. She stated that the Office of Protection Services (OPS) is responsible for the operational, physical, and personnel security of the Institution. Operational refers staff who provide screenings, work with emergency management, and address crime. Physical refers to the Smithsonian buildings including the design criteria and construction of the structures. The Smithsonian must adhere to both internal and federal standards. Finally, personnel refers to processing background investigations for all staff, docents and volunteers. O’Toole expressed that collaboration between all three of these components is key. Collaboration is also important when the Smithsonian works with other entities, such as the District of Columbia or National Parks Service, on large events. The Smithsonian connects daily with partners in law enforcement and security.

O’Toole shared that the Smithsonian recently increased security screenings across the units. In addition to the uniformed presence, contractors now conduct the security screenings. This format allows armed officers to serve as managers and focus on overall observations at each museum. Ex. 5

She recently interviewed those in operations and leadership and incorporated their feedback during assessments, evaluations, and walkthroughs. Following their cyclical assessments, OPS issues a report highlighting the highest risks to the director. The report also includes risks that are acknowledged but cannot be changed.

O’Toole announced that OPS just released their own strategic plan which aligns with the new Smithsonian Strategic Plan.

Plueger asked Ex. 5

O’Toole stated that OPS works to establish a balance between serving visitors and keeping everyone and everything safe with limited resources. Plueger asked Ex. 5

Agnes Brown noted that security staff are often the first staff to greet visitors when they enter the museum and recommended Ex. 5. O’Toole shared that OPS Ex. 5

Rich Sugden suggested placing “See something, say something” signs in the museum.

O’Toole closed by reiterating that OPS does not take security at NASM lightly.

Nominations Committee Report and Discussion - Allan Holt, Chair, Nominations Committee

Allan Holt provided an update on Nominations activities. The Nominations Committee met via conference call on September 20, and recommended the following actions:

- Emeritus status: David Joyce and Robert Milton
- Reappointment for 2nd terms: Neil Cohen, Meredith Madden, Greg McAdoo, Ross Perot Jr., David Tolley and Paul Wood

Following Holt's request for a motion, the Board unanimously approved these appointments. Holt presented an emeritus certificate to Robert Milton and thank him for his 6 years of service. Holt announced that Fred Curado will step down from the Board after this meeting **Exemption 6**

Holt shared that the Committee has a strong list of potential candidates which are reviewed three times per year. With Joyce and Milton going emeritus and Curado's resignation, the Board will stand at 25 members. This allows for space for growth on the board. The Committee requested consideration for two nominees:

Ex. 6, a major player in the commercial space industry which is not currently represented on the board. **Ex. 6** has a history of generous philanthropy. **Ex. 6**.

Following Holt's request for a motion, the Board unanimously approved the nominees. Holt stated that the recommendations will be put forward to the Smithsonian Board of Regents for confirmation on January 29, 2018. With these transitions, the count will be back at 27.

Exemption 5

Holt thanked those who continue to make recommendations for potential candidates. These names are placed on a list and reviewed at each Nominations Committee meeting.

Plueger commented that the Board continues to seek gender and ethnic diversity.

Advancement Committee Report and Discussion - Dawne Hickton, Chair, Advancement Committee
Hickton provided an update on the Museum's fundraising progress, and specifically progress towards the ambitious goal of raising at least \$**Ex. 4** for Transformation.

Hickton stated that FY17 ended on September 30 and, while the books are not officially closed, Advancement raised over **Ex. 4** through September 27, which exceeds the FY17 **Ex. 4** by **Ex. 4**%. This was one of the best years on record, **Ex. 4**. Drilling down further into FY17's success, Hickton highlighted that, in addition to raising significant gifts for Transformation, Advancement also raised funds for other important priorities including education, public programming, and digital engagement. Board members personally contributed or facilitated support for **Exemption 4** raised last year. New gifts since the last meeting include:

- **Ex. 6** bequest from **Exemption 6** to support *Destination Moon* exhibition.
- The **Ex. 4** made a generous gift in support of a STEM camp for girls and the NASM Innovation Lab. Hickton thanked **Exemption 6** for his support.
- A gift from **Ex. 4** to support a new display case for our military avionics artifacts.

- A [Ex. 6] gift from [Exemption 6] and a [Ex. 6] commitment from [Ex. 4] to support the Innovation Fund and work of the Future State Committee. Hickton thanked [Ex. 6] and [Ex. 6] for their support.
- [Exemption 6] have made personal gifts to support Transformation.
- The Museum received several commitments for the sponsorship of next year's Trophy Awards including [Ex. 4]

The Museum also received three significant leadership gifts that deserve special recognition. Hickton thanked [Ex. 4] for championing [Ex. 6] in gifts from the American airline industry. This is an unprecedented philanthropic collaboration and the first time in its history that NASM received financial support from the airlines. These gifts will be used to support Transformation and the future *America by Air* gallery, the Museum's premiere exhibition that explores the history of commercial air travel and the evolution of America's airline industry. The gallery will be reimagined with a fresh, modern design and digital interactives to meet the expectations of a new, tech-savvy generation of visitors. The airlines participating in this effort include: American, Delta and United, who committed [Exemption 6] Alaska and JetBlue, who committed [Exemption 6] And Hawaiian, Frontier and Spirit, who committed [Exemption 6] Hickton thanked Mark Dunkerley for Hawaiian's significant gift. Once these gifts are officially approved by the Smithsonian Board of Regents, NASM will work with the airlines to make a press announcement. [Exemption 4]

Hickton thanked [Exemption 6] for their [Ex. 6] commitment to support the future *How Things Fly* exhibition which will be named for Textron. Hickton also recognized [Ex. 4] role as a member of [Ex. 4] board. The new gallery will be reimagined with a middle school-age audience in mind and will feature a more sophisticated design and immersive interactive experiences designed to challenge visitors in STEM concepts. A new Cessna 150 will be the centerpiece of the gallery, giving many visitors their first experience inside a cockpit - the only opportunity to sit inside an aircraft in the entire Museum. This gift is also not reflected in our FY17 totals, but will get us off to a huge start for the new fiscal year.

Hickton announced that [Exemption 6] and [Ex. 4] increased their sponsorship of the Design Hangar within the *How Things Fly* gallery. Their generous [Ex. 6] gift will provide for the expansion of the footprint of the AAR Design Hangar in the new gallery, as well as enable increased programming of this very successful "maker space" until the new location opens. The Design Hangar has been a game-changer for deepening students' understanding of core STEM topics, with an astonishing 30 minute average dwell time, and the Museum is grateful for their continued commitment to this important program.

Hickton provided an overview of the annual giving program. The National Air and Space Society and Wall of Honor provide unrestricted support to the Museum. There was a [Ex. 4] in FY17 over year-to-date of FY16. As of Sept 27, NASS raised over [Ex. 4]. NASM Board members play an important role through their annual gifts as Board support is used to leverage year-end donations from NASS members. Hickton announced that the Board reached their goal [Ex. 4]

Hickton provided an update on fundraising toward the goal of raising [Ex. 4] for Transformation. Unless specifically instructed otherwise by the donor, most unrestricted gifts will be applied toward Transformation. Advancement already raised [Ex. 4] toward Transformation and have another [Ex. 4] in verbal commitments which will book in Q1 of FY18. This represents [Ex. 4] to goal so we are off to a good start.

The NASM Advancement Team has been working closely with Ologie to develop the Transformation Campaign messaging. Hickton thanked the members who have been involved by providing their

perspective. Ologie presented their recommendations for Campaign strategy and some initial creative concepts during the Advancement Committee meeting following the Board meeting, and Hickton welcomed members to attend.

Old Business - John Plueger.

Plueger shared the following information:

2018 Board meeting dates: February 27-28; June 5-6; October 16-17 (Note: the October dates have since been moved to October 2-3)

Upcoming events:

October 21 - Air and Scare Family Day, Udvar-Hazy Center
November 2 - GE Aviation Lecture and Dinner with Miles O'Brien, National Mall
November 16 - NASS Flight Jacket Night Reception with Hoot Gibson, National Mall
January 26 - Retirement celebration for General Dailey, Udvar-Hazy Center

Ken Gazzola noted that the Board provided recommendations for education at the June Board meeting and asked how that information was utilized. Mark Kornmann responded that the Board's input was integrated into the reorganization of Education and Public Engagement.

New Business:

Plueger provided an update on exit procedures given the Udvar-Hazy parking system updates.

Wrap-up- General Dailey

General Dailey thanked the Board for their dedicated support. He appreciates their partnership and support. Dailey presented a slide presentation of many of the milestones the Board helped achieve during his tenure as director.

Executive Session

Meeting Adjourned

The Board meeting adjourned at 11:45 am.

National Air and Space Museum Board

*Present at the October 4, 2017 meeting

Board Members:	Board Members Emeritus:	
Mr. William S. Ayer*	Mr. James Albaugh	Dr. Jon A. Reynolds*
Mr. Daniel Baker*	Mr. Ronald W. Allen*	Dr. Donald B. Rice
Mr. Alain M. Bellemare	Mrs. Anne B. Baddour	Mr. John Safer
Ms. Marion C. Blakey	Mrs. Agnes M. Brown*	Dr. Richard Sugden*
Mr. Orlando P. Carvalho*	Mr. Armando C. Chapelli, Jr.*	Dr. Frederick Telling
Mr. Neil Cohen*	Mr. Max C. Chapman, Jr.	Mr. Charles Thornton
Mr. Frederico P.F. Curado	Mr. Joe Clark*	Ms. Patty Wagstaff
Mr. Scott Donnelly	Mr. Frank A. Daniels, Jr.	Mr. Bruce Whitman
Mr. Mark B. Dunkerley	Mr. Edsel B. Ford, II	
Mr. Stuart L. Fred*	Mr. Kenneth E. Gazzola*	SI/NASM Staff Members
Mr. Morton Fungler	Mr. S. Taylor Glover	Dr. David Skorton*
Mr. Thomas W. Haas*	Mr. James M. Guyette	Mr. John Davis*
Ms. Dawne S. Hickton*	Mr. Randall A. Greene	Dr. Richard Kurin*
Mr. Shepard W. Hill*	Mr. Ralph D. Heath*	General John R. Dailey*
Mr. Allan M. Holt*	Mr. David R. Hinson	Ms. Kelly Bloom*
Mr. David L. Joyce	Mr. David C. Hurley*	Ms. Meg Caulk*
Ms. Meredith Siegfried Madden*	Mr. Robert James	Ms. Michelle Delaney*
Mr. Gregory L. McAdoo*	Mr. Clayton M. Jones	Mr. Rick Flansburg*
Ms. Linda A. Mills*	Mr. Herbert D. Kelleher	Mr. Michael Garceau*
Mr. Robert A. Milton*	Mr. Rodney R. Lewis*	Ms. Laura Gleason*
Mr. H. Ross Perot, Jr.	Mr. Steven R. Loranger	Ms. Lindsey Jackson*
Mr. John L. Plueger*	Capt. James A. Lovell	Dr. Peter L. Jakab*
Mr. David Storch*	Mrs. Adrienne Bevis Mars*	Mr. Mark Kornmann*
Mr. David Tolley	Mr. Bruce R. McCaw*	Ms. Michelle Lambertson*
Mr. Steve VanRoekel*	Mr. Robert J. Mittman	Ms. Marian Livengood*
Mr. Thomas Vice*	Mr. T. Allan McArtor*	Ms. Anne McAllister*
Mr. Steuart L. Walton	Mr. Jameson J. McJunkin	Ms. Jessica McNally*
Mr. Paul Wood*	Mr. Thomas G. Morr	Ms. Elizabeth Wilson*
	Mr. Lloyd "Fig" Newton	
	Mr. Jack J. Pelton	
	Mr. Roger D. Percy*	
	Mr. Robert W. Pittman	
	Mr. Thomas F. Pumpelly*	

Smithsonian National Air and Space Museum Board Meeting
Wednesday, February 28, 2018
Executive Board Room
Steven F. Udvar-Hazy Center

Meeting Called to Order - John Plueger, Chair

John Plueger welcomed members to the February meeting and reviewed the agenda. He recognized attendees John Davis, provost/under secretary for Museums and Research, and Al Horvath, undersecretary of Finance and Administration. He welcomed new members Stan Deal, Tom Horton, Chris Jones, and Eren Ozmen and presented each with a Safer pin and Wright Flyer sculpture. Plueger acknowledged Chris Browne's service as Interim Director. He congratulated Allan McArtor on being designated a US Air Force Distinguished Graduate, David Joyce on receiving the Lifetime Aviation Industry Award, and Ross Perot, Jr. for being inducted into Living Legends of Aviation last month.

Plueger introduced John Davis to provide the "State of the Smithsonian" update.

"State of the Smithsonian" - John Davis, Under Secretary for Museums and Research/Provost

John Davis provided the "State of the Smithsonian" update. Davis congratulated Browne and the Board for their engagement and leadership. He announced that the Board of Regents approved the planning process for the implementation of the strategic plan. The Smithsonian established eleven working groups in order to articulate the process, establish infrastructure, and facilitate buy in. The next step in the implementation process is

Ex. 5

They will also discuss Ex. 5." Davis highlighted Goal Five of the strategic plan which is to drive large interdisciplinary research and scholarly programs. The Smithsonian is already moving forward on a number of initiatives including a focus on American women's history. An internal coordinating committee will help implement programs and events, including the launch of an annual conference. The Smithsonian received many lead gifts to help achieve the goal Ex. 4. These gifts will enable units to organize exhibitions and hire new staff to focus on American women's history. Davis highlighted areas where the Smithsonian's National Air and Space Museum is already embracing this topic, including the Women in Aviation and Space Family Day and research conducted by female scientists in the Center for Earth and Planetary Studies. Transformation provides as an opportunity to reevaluate and integrate American women's history into the galleries.

Davis announced that the Smithsonian is planning to host a pan-institutional Year of Music in 2019. A musical program of some sort will take place every day of the year. Other activities will include research and the display of artifacts.

Davis highlighted Goal Two of the strategic plan which is to catalyze national conversations on important topics of public interest. Exemption 5

One example is the National Museum of African American History and Culture and the National Museum of the American Indian's joint effort to host a conference on memorials. Davis announced that the theme for this year's James Smithson Fellows is "history, authenticity, memory."

Davis stated that, in order for the strategic plan to be successful, units must have a degree of flexibility in programming. The Solstice at Smithsonian program serves as an example of pan-institutional collaboration. This June, a morning to night celebration will involve all museums with the goal of attracting younger visitors. The Smithsonian is looking to the National Air and Space Museum's 24-hour anniversary celebration as a benchmark.

Davis is aware of facility issues. He stated that he is committed to housing and protecting collections correctly. Davis shared that the planning and work that the Museum is undertaking to successfully complete the Revitalization and Transformation of the National Mall building serves as a case study for the rest of the Smithsonian. Leadership is starting to think about a master plan for the Suitland storage.

Davis provided an update on the search for the National Air and Space Museum Director. A search firm started to analyze a prospect pool in June. They considered candidates currently serving in the government, commercial industry, science museums, and academia. They identified 130 potential candidates, and conducted 60 interviews. A search committee composed of Smithsonian and Museum stakeholders participated in extensive teleconference reviews of 30 candidates. The Committee selected three men and

three women to interview. Following the interviews, they recommended two candidates to move forward for a Castle review. The candidates will meet with Secretary Skorton and other SI leadership, their direct reports, peer directors, and a cohort of NASM staff. He announced that Secretary Skorton will select the final candidate. Davis thanked John Plueger, David Joyce, and Marion Blakey for representing the Board's interests and serving on the committee. He also thanked museum staff for their involvement. Davis noted that Adrienne Mars and Chris Hazy serve on the committee as representatives from the Regents Advancement Committee.

Davis welcomed questions and comments. Plueger asked, after his first six months in the position, what is Davis' impression of the Smithsonian. Exemption 5

Allan Holt asked when the new National Air and Space Museum Director will be in place. Davis responded that a candidate might be announced within the next month depending on the Secretary's decision. The start date also depends on when the candidate can free themselves from other commitments. Exemption 5

Plueger introduced Al Horvath to provide an update on the federal budget.

Federal Budget Update - Al Horvath, Under Secretary for Finance and Administration

Al Horvath provided an update on the federal budget.

Horvath reviewed the federal component of the National Mall building's Revitalization project. The Mall building renovation consists of two distinct projects. The first is the construction of a new collections storage facility next to the Udvar-Hazy Center, which will enable the movement and conservation of artifacts. We understand the Current Working Estimate for the project is approximately Exemption 4. The second is the renovation of the National Mall building, which will cost Exemption 4. Horvath shared that construction of the Dulles Collections Center is approximately 30% complete with the expected completion date of January 2019. The National Mall building design is complete and the contractor retained. The Museum is ready to start construction.

Horvath displayed a chart depicting the federal funding plan for Revitalization. All of the federal funding for the Dulles Collections Center has been obligated to the project. Horvath stated that the Smithsonian also allocated Exemption 4 to the National Mall building portion of the project. The Exemption 4 allocated for FY2019 will be used to secure items that require a long-lead time. The Museum will receive Exemption 4 between FY2019 and FY2022. The total federal investment for both projects is Exemption 4.

Horvath stated that, in the current fiscal year (2018) which began this past Oct 1, the federal government is now operating under a fourth continuing resolution. The resolution expires on March 23. At present, funding is at Exemption 4 & 5

Horvath stated that the Revitalization of the National Mall building is the Smithsonian's top priority. Tom Pumpelly asked if the Dulles Collections Center will offer enough storage space. Horvath responded that it will not so they are already planning for the construction of two additional facilities. Pumpelly asked if the construction of these facilities conflicts with the original lease that only allowed for aerospace activities at the Udvar-Hazy Center. Chris Browne responded that the language has been updated and is in the agreement until 2060. Marion Blakey asked if the Smithsonian will continue to use Suitland for storage and Davis

responded “yes.” He acknowledged that the Garber Facility will need to be completely transformed. His team is beginning a long-term discussion to identify options. He shared that the National Museum of American History will likely partner with the National Air and Space Museum for storage space at the Udvar-Hazy Center while the Suitland facility will focus on art.

Shephard Hill asked about the nature of the Revitalization contract. Horvath responded that the contract is one of guaranteed maximum price and leadership is working to establish GMP as well as manage the scope and cost of construction. He shared that they needed to set a ceiling in order to ensure credibility. Clark Construction was selected as the contractor. They have experience with working with the Smithsonian.

Plueger introduced Chris Browne to provide the “State of the Museum” update.

“State of the Museum” - Chris Browne, Interim Director

Browne presented the “State of the Museum” update. He highlighted the FY2017 Smithsonian’s National Air and Space Museum Annual Report and encouraged members to read it online.

Browne shared that the annual Vice Admiral Donald D. Engen Flight Jacket Night Lecture featured Robert L. “Hoot” Gibson. This year’s Exploring Space lecture series focuses on Hubble’s successor, the James Webb Space Telescope. The first lecture featured Dr. John Mather who was so popular the audience expanded into overflow seating. Browne thanked Aerojet Rocketdyne and ULA for sponsoring the series.

The annual Air & Scare event was as popular as ever, welcoming almost 24,000 attendees. Browne thanked Mars Wrigley Confectionery US, LLC for once again sponsoring the event. Browne noted that, as General Dailey was fond of saying, “we are great at tricking people into learning” and this is one of the Museum’s best forums for engagement. As a part of the Smithsonian’s Ingenuity Awards and Festival, the Museum hosted an Ingenuity Festival Family Day including public programming during the day and an over age 21 event in the evening. In continuing outreach to the young adult target audiences, Education and Public Programs held the first Tower Talk happy hour event and partnered with Brightest Young Things for “Found in Space.”

Browne referenced the listing of staff honors, publications, and appearances located in the member’s packets. He highlighted three recent staff books.

Browne provided an update on the construction of the Dulles Collections Center. The Museum will begin moving artifacts from the National Mall building to the Dulles Collection Center in January/February of 2019.

Browne provided an update on Revitalization. Leadership received the final design submission and final costs will be negotiated by April 2018. Exemption 4

The sequencing and schedule submitted by Clark Joint Ventures reflects a two-phase approach. Construction of the West end will take place between 2018-2021 while the East end will take place between 2021-2024.

Browne shared that Collections has completed treatment of 108 Transformation-related artifacts, 72 artifacts are in the lab, and 29 artifacts are on the shop floor. He announced that the selection of a contractor for artifact move services is scheduled for 2nd quarter FY2018. Browne highlighted the ATS-6 antenna as an example of the intricate planning and preparation that must take place before the conservation process can begin. Restoration staff fabricated a custom-built ladder that can be rotated to any position to facilitate the cleaning and treatment of the artifact. The antenna will be displayed in to the *One World Connected* exhibition.

Browne provide an update on Transformation. Leadership received the 95% design submittal for the West End Exhibit design. The East End Exhibit design contract is scheduled to be released for bid in March 2018. Bids for the design of the Commons Area were received by OCon in January 2018. The source selection process is ongoing. This project will develop the common spaces of the National Mall building and include public art, furniture and seating, digital media experiences, and coordination with the Revitalization project’s wayfinding designer. The intention is to design the space as an inclusive, flexible, and context-driven solution that attracts and draws visitors to key nodes and destinations of the building. The media contract for the interactives of the West end design was awarded to Aperture. This contract will develop the software components for the West end exhibit interactives needed for the renovated spaces of the National Mall

building. The Innovation Lab has been involved in testing these interactives with our staff and visitors.

Browne shared that construction has begun on moving the Library and Archives from the National Mall building to the Udvar-Hazy Center in the current Director's Suite area. The Hazy Director's Suite is being re-located to the shell above the Airbus IMAX Theater. Completion is targeted for September 2018. Other staff relocations are also progressing well. Some staff have been temporarily re-located to the Hazy Center. This has produced the benefit of more cross-departmental coordination and interaction. Downtown, Advancement staff have moved to leased office space. The curatorial and research departments will relocate to leased office space near the National Mall building in April/May 2018. Remaining National Mall building staff will be relocated to the East end of the third floor in the 3rd quarter FY2018.

Browne announced that McDonald's did not renew their contract. Plans are being finalized to make necessary alterations in order to bring a new vendor in to operate the restaurant. Browne stated that the restaurant building is nearing the end of its service life in 2027, approximately two years after the Museum fully reopens. Recognizing the financial and customer service downside of closing the restaurant after National Mall building revitalization is complete, Secretary Skorton

Ex. 5

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anticipated revenue losses of \$55-\$73 million to the Institution gross over 7 years (from all museum retail ventures) leadership is taking steps to mitigate further impact.

Browne welcomed questions and comments. Plueger shared that regional events are taking place across the country in order for staff to make connections and educate others about the Museum.

Nominations Committee Report and Discussion - Allan Holt, Chair, Nominations Committee

Allan Holt provided the Nominations Committee report. He again welcomed new members to the board. He announced that the Board of Regents confirmed David Joyce and Robert Milton for emeritus status. The Nominations Committee met via conference call on February 1. The Committee has a strong list of potential board candidates, which are reviewed three times per year. With recent updates, board membership totals 29. Holt announced that the Committee nominates Ex. 6 for membership. Ex. 6 is co-founder/CEO of Ex. 6 and his background as a software entrepreneur and pilot will provide valuable insight for the board. He shared that Ex. 6 is enthusiastic about joining and Nominations Committee feels he would be an excellent addition. Following Holt's request for a motion, the Board unanimously approved the nominee. Holt stated that this recommendation will be put forward to the Smithsonian Board of Regents for confirmation. Their next meeting is not until June 11, 2018 which would not have Ex. 6 attending first board meeting until October. Advancement staff are working with the Regents to request a special vote, allowing him to attend June meeting. With these transitions, the board count will be 30. Holt announced that three members are eligible for emeritus status this coming October. Their transition will bring board membership back down to 27. Holt thanked the members for recommending potential candidates.

Future State Committee Report and Discussion - Stuart Fred, Member, Future State Committee Katie Moyer- Lead, Future State Lab

In the absence of Committee Chair Greg McAdoo, Stuart Fred provided a report on the recent activities of the Future State Committee. The Future State Committee continues to work with the Museum's Innovation Lab on a variety of projects that are agile in execution, guest-centric, and experience-driven. The Committee strives to engage modern audiences. The Innovation Lab has adopted and embodied these principles in all of their projects, not just the ones they work one directly with the Future State Committee. Fred announced that the Innovation Lab is therefore officially changing their name to the Future State Lab, as they feel it more accurately describes the Lab's mission and projects.

Fred reported that the most recent project is the VR Hangar. The Board had the opportunity to experience a beta version of the VR Hangar at the last meeting. Fred invited members to view the completed version. The project focused on creating a beyond-the-walls virtual reality experience which repurposed 3D scan content from the Smithsonian's Digitization Program Office.

Fred introduced Katie Moyer of the Future State Lab to provide an update on the other projects and facilitate a breakout discussion. Moyer thanked The Hillside Foundation, Rolls-Royce North America Inc., and the Walton Family Foundation for supporting the work of the Future State Lab. Moyer shared that the Lab recently debuted the podcast *AirSpace*. With 67 million Americans listening to podcasts monthly, the Museum

has a great opportunity for outreach through this medium. Moyer shared that, with the podcast, they achieved 20,000 beyond-the-walls engagements in two months. The podcast will provide guests with an intimate air and space experience wherever they are. Moyer played a clip from an upcoming installment.

Moyer shared that the Lab is also involved with reinventing museum programming. They aim to build a new identity for the museum by reaching out to the 6.1 million people who live in the DC metro region. Their goal is to provide a relevant experience for all visitors. Moyer shared that the Lab is applying the Future State Committee's tenet of agility to these programs as they recently acted on a last-minute opportunity to offer a display and programming associated with the 50th anniversary of *2001: A Space Odyssey*.

The Lab is championing a guest-focused design as Transformation can redefine how the Museum approaches guest engagement. This design will create meaningful, tailored experiences for modern audiences so that each guest can see themselves reflected within the content.

Finally, the Lab is tasked with exploring new technologies. Moyer cited that there are over 2.5 billion smart phone users worldwide. Connecting with this user-group will allow the Museum to forge entrepreneurial agility. The Lab reasons that, since technology is a seamless part of visitor's lives, it should also be part of their museum experience.

Moyer concluded with the following statement, "To help build a nation of innovators and explorers, we need more than future-proof products. We need to build a future-ready Institution."

Moyer divided members into four groups to discuss the following question:

What lessons from your area of expertise should we leverage in the following areas?

- New Technology
- Public Programming
- Content Creation
- User-Focused Design

Following discussion, members of the Future State Lab reported each group's conclusions.

Ex. 5

[REDACTED]

Fred seconded Gazzola's recommendation to [REDACTED] Ex. 5. He stated that the Museum must [REDACTED] Ex. 5.

Visit to the Emil Beuhler Conservation Lab - Malcolm Collum, Engen Conservation Chair

Members visited the Emil Beuhler Conservation Lab to view ongoing work including the conservation of the Neil Armstrong spacesuit.

Plueger introduced Dr. Barbara Gruber. Dr. Gruber is the supervisor of School Programs and was formerly Loudoun County Public Schools' Aerospace educator-in-residence at the Museum.

Building a Nation of Innovators and Explorers: A Look to the Future of NASM

Barbara Gruber - Supervisor School Programs, Education and Public Engagement

Barbara Gruber provided an overview of the school programs that are offered by Education and Public Engagement (EPE). She reviewed Education and Public Engagement's mission, goals, and target audiences for school programs. School programs are designed to enrich middle school students as well as their teachers. Gruber shared that the US is struggling to establish a strong pipeline for STEAM-related fields. Therefore, middle school is a critical time for EPE to significantly influence interest and maintain skills building in STEAM-related subjects. By equipping middle school educators with the skills and high-quality content they need to teach STEAM topics, EPE can become a trusted resource and long-term partner for teachers nationwide. Gruber highlighted the current programs and thanked the generous sponsors including The Thomas W. Haas Foundation, GE Aviation, Boeing, and The Hillside Foundation.

Gruber introduced the programs for middle school students that are currently in development. The Girls Aviation STEM Camp will take place July 23-August 3. By exposing participants to a variety of career positions, the program empowers girls to enter into STEM fields. It also aims to cultivate a student ambassador program that maintains a student's connection to the Museum. Gruber thanked The Walton Family Foundation and DaRin Butz Foundation for their generous support.

EPE is also developing the Teacher Innovator Institute to train and inspire middle school teachers. The camp will take place July 9-20 and the pilot is funded through the Museum. EPE is striving to develop an elite High Flyer teacher program that designs and promotes National Air and Space Museum content and tools. With each year of the program, a network of equipped teachers will spread across the country and enable the Museum to reach even more students.

EPE is working to create audio tours targeted for the middle school audience. The tours will be available just in time for the spring break rush. Tours will be released on April 2 for the National Mall building and April 17 at the Udvar-Hazy Center.

EPE will launch the Ambassador Schools program in the Fall 2018-Spring 2019. Gruber thanked the Barron Hilton/Conrad N. Hilton Foundation for their generous support. The goal of the program is to establish a middle school network using existing community organizations to build long-term relationships.

Finally, Gruber provided an overview of the summer camps scheduled to debut in August 2018. Summer camps are funded by the Museum.

To demonstrate one of the activities students participate in during a class on coding, Gruber invited Holt and Plueger to fly drones. Plueger and Holt received instruction on how to use an iPad to code a drone so that it performs an action and flies through a hoop. Gruber explained that this activity teaches students the forces of flight, programming, and the basics of coding. Marion Blakey asked if there is an admission fee to participate and, Gruber responded that there is not.

Advancement Committee Report and Discussion - Laura Gleason, Director of Advancement Campaign Communications Presentation - Ologie

In the absence of Advancement Committee Chair Dawne Hickton and Advancement Committee Vice-Chair Tom Haas, Director of Advancement Laura Gleason provided the Advancement Committee report. Gleason provided an update on FY2018 YTD. The Museum has raised almost Ex. 4 through January 31, which exceeds the FY2018 goal of Ex. 4 by Ex. 4. In addition to raising significant gifts for Transformation, Advancement is also raising funds for other important priorities including education, public programming, and digital engagement. Board members have personally contributed or facilitated support for Ex. 4 of the funds raised. Gleason announced that new gifts since the last meeting include a Exemption 6 commitment from Ex. 4 to continue their support of Heritage Family Days. Ex. 4 made a Exemption 6 gift to support Innovations in Flight Family Day and a STEM in 30 program. Exemption 6 facilitated a Exemption 6 gift from the Ex. 4 to support education outreach through the Ex. 4 Alliance. Ex. 4 made a three-year commitment of Exemption 6 in support of the GE Aviation Lecture Series; Ex. 4 has been sponsoring this lecture series for 32 years. Ex. 4 pledged Exemption 6 to sponsor the 2018 Charles A. Lindbergh Lecture. Ex. 4 will again co-sponsor the 2018 Exploring Space Lecture, each with a Exemption 6 gift. Ex. 4 each made generous gifts to support Transformation. The Ex. 4 made a Exemption 6 gift. Exemption 6 of this gift will support Transformation and the reimagining of the *Barron Hilton Pioneers of Flight Gallery*, and Exemption 6 will be used to create an endowment to support middle school STEM programming.

This was another extraordinary donation from Ex. 4 who wanted to make this gift before General Dailey retired. Ex. 4 and the Ex. 4 have now contributed Exemption 6 to the Museum. Gleason announced that the Board's initiative to name the new Director's Conference Room after General Dailey raised over Exemption 6. She thanked the board members for their generous support. The conference room will be in the new Director's Suite above the IMAX Theater which is under construction. It will be complete in September.

The National Air and Space Society and Wall of Honor provide unrestricted support to the Museum. This year's goal is Exemption 4. So far in FY2018, Exemption 4

The Museum's goal every year is to get to Ex. 4 from board members in making a personal gift. So far in FY2018, participation has reached Ex. 4. Gleason encouraged members to contact herself or Liz Wilson with questions on personal giving.

Gleason provided an update on funds raised in support of Transformation. The Museum is working to raise Exemption 4 for Transformation. Unless specifically instructed otherwise by the donor, most unrestricted gifts will be applied toward Transformation. To date, Ex. 4 has been raised toward Transformation. This represents Ex. 4 which is a good start.

Gleason provided an update on some recent and upcoming events. Advancement worked with the Central Office of Advancement to host the Smithsonian National Board at the National Mall building and at the Udvar-Hazy Center. They spent two days with the Museum and were fully briefed on the Transformation project so they can be ambassadors on our behalf. There was great interest and a willingness to help identify potential donors. Last week Chris Browne and Laura Gleason were in Los Angeles for two donor events. The first was an intimate donor cultivation event at the home of new donor Ex. 4 and the second was the Smithsonian Campaign celebration event at the home of Ex. 4. Gleason thanked John Plueger for representing the Board at both events. On February 29, the US Chamber of Commerce will host the annual Aviation Summit, which is attended by many executive leaders in the industry. With the recent announcement of the Airlines \$28 million gift, the Museum has been invited to open the summit with a video. It is terrific audience to showcase our efforts and will hopefully get other companies excited to learn more. The Smithsonian-wide Campaign concluded in December having raised over Ex. 4. Members will be invited to a series of celebrations held April 7-8. It will be essential to introduce the new Director to our Museum donors and potential donors. Board members can play a critical role in this effort and there will be opportunities to participate in introductory meetings and host events. If you are interested in hosting an event, please see a member of the Advancement team. Gleason thanked Stuart Fred for assisting with the planning of a donor cultivation weekend of April 26-29 with members of the Citation Jet Pilots Association. In addition to bringing a new audience to the Udvar-Hazy Center, the attendees will be making a donation to support Transformation. Gleason thanked Scott Donnelly for Textron's sponsorship of part of the weekend.

Gleason provided an update on Advancement Communications. The Advancement team has been working closely with Ologie to develop the Transformation Campaign messaging and collateral materials. The Advancement Committee met with Ologie after the last meeting and provided feedback which has helped shape the campaign theme. The new campaign identity has been vetted by a group of corporate communications executives and approved by the Executive Committee of the Board.

Gleason introduced the team from Ologie to present the new campaign identity. Erin Burk introduced the new campaign's identity. She shared that they worked to define a distinct name and identity that would "allow this effort to feel special and memorable." She stated that a campaign identity matters because a campaign name and identity provides weight and significance to the effort. It gives the public and insiders something to rally behind outside of ongoing member support for the institution. An identity creates distinction and separation from previous or current campaigns or initiatives within the Smithsonian or National Air and Space Museum. She also shared that a strong name and identity will serve as a practical encapsulation of the idea behind the campaign, building recognition of the benefits and outcomes while feeling cohesive, powerful, and—ultimately—memorable.

Burke announced that the name of the Museum's Campaign for Transformation will be "Ignite Tomorrow."

Ologie developed the following narrative to support the name: “The stories and artifacts of the National Air and Space Museum have the power to spark the feats and discoveries of tomorrow. With your support of the most dramatic transformation in the history of the world’s most popular museum, and the boundless educational experiences that will arise from it, you will fuel the passions and imaginations of the next generation of visionaries and explorers. The world is watching. This is your moment to Ignite Tomorrow.” Ideas encompassed in the narrative include excitement, endless possibilities, and a dramatic transformation. Burk shared that the tagline “The mission to the support the National Air and Space Museum” will give context to the name.

Kyle Krastranec provided an overview of the creative platform for the campaign. He shared that the Advancement team and Ologie worked closely together to develop a logo and visual identity that would stand apart and be distinctive from other campaigns while also pointing to the purpose of the effort. The selected logo hints at the possibilities of tomorrow and what lies just over the horizon. The design gives a nod to the aeronautics and space industry in both the coloring and crest of the globe. From a practical perspective, the logo can be reduced in size but still be legible and recognizable. Krastranec revealed the cradle platform and other examples of campaign materials. They all utilize compelling images, moving text, and inspiring quotes from notable figures. The examples serve as possible tactics for outreach but have not been finalized. Krastranec presented draft visuals for a case statement, overview brochure, and microsite.

Partick Locy provided an overview of next steps. The Advancement team and Ologie will work closely together to create guidelines documenting the campaign elements and direction for usage and application. They will begin applying the campaign elements to the execution of specific campaign tools and tactics.

The Board viewed the previously referenced promotional video that will introduce the “Ignite Tomorrow” logo to the public when it is shown at the Aviation Summit.

Old Business - John Plueger

2018 Board meeting dates: June 5-6; October 2-3

2019 Board meeting dates: February 26-27; June 11-12; October 22-23

Upcoming events:

March 27- Trophy Awards honoring Gen J.R. Dailey for Lifetime Achievement/Shaesta Wiez, Current Achievement, National Mall

April 18 - Exploring Space Lecture with Ken Sembach, National Mall

April 26 - GE Aviation Lecture and Dinner with Jon and Patricia Sharp, National Mall

May 2 - Charles Lindbergh Memorial Lecture with Bud Anderson, National Mall

June 13 - John Glenn Lecture with Gen John E. Hyten, National Mall

New Business

Wrap-up - Chris Browne

Browne welcomed members to attend the Advancement Committee meeting to be held in the EBR following the general session. The discussion will focus on corporate prospects. He reminded members that the Future State Committee meeting is canceled.

Executive Session

National Air and Space Museum Board

*Present at the February 28, 2018 meeting

Board Members:	Board Members Emeritus:	
Mr. William S. Ayer	Mr. James Albaugh	Dr. Jon A. Reynolds
Mr. Daniel Baker*	Mr. Ronald W. Allen	Dr. Donald B. Rice
Mr. Alain M. Bellemare	Mrs. Anne B. Baddour	Mr. John Safer
Ms. Marion C. Blakey*	Mrs. Agnes M. Brown*	Dr. Richard Sugden

Mr. Orlando P. Carvalho*	Mr. Armando C. Chapelli, Jr.	Dr. Frederick Telling
Mr. Neil Cohen*	Mr. Max C. Chapman, Jr.	Mr. Charles Thornton
Mr. Frederico P.F. Curado	Mr. Joe Clark	Ms. Patty Wagstaff
Mr. Stanley A. Deal*	Mr. Frank A. Daniels, Jr.	Mr. Bruce Whitman
Mr. Scott Donnelly	Mr. Edsel B. Ford, II	
Mr. Mark B. Dunkerley	Mr. Kenneth E. Gazzola*	SI/NASM Staff Members
Mr. Stuart L. Fred*	Mr. S. Taylor Glover	Dr. David Skorton
Mr. Morton Fungler	Mr. James M. Guyette	Mr. John Davis*
Mr. Thomas W. Haas	Mr. Randall A. Greene	Mr. Al Horvath*
Ms. Dawne S. Hickton	Mr. Ralph D. Heath	Mr. Christopher U. Browne*
Mr. Shepard W. Hill*	Mr. David R. Hinson	Ms. Kelly Bloom*
Mr. Allan M. Holt*	Mr. David C. Hurley*	Ms. Meg Caulk*
Mr. Thomas W. Horton*	Mr. Robert James	Ms. Michelle Delaney*
Mr. Christopher T. Jones*	Mr. Clayton M. Jones	Mr. Rick Flansburg*
Ms. Meredith Siegfried Madden	Mr. David L. Joyce	Mr. Michael Garceau*
Mr. Gregory L. McAdoo	Mr. Herbert D. Kelleher	Ms. Laura Gleason*
Ms. Linda A. Mills*	Mr. Rodney R. Lewis	Ms. Lindsey Jackson*
Ms. Eren Ozmen*	Mr. Steven R. Loranger	Dr. Peter L. Jakab*
Mr. H. Ross Perot, Jr.	Capt. James A. Lovell	Mr. Mark Kornmann*
Mr. John L. Plueger*	Mrs. Adrienne Bevis Mars	Ms. Michelle Lambertson*
Mr. David Storch*	Mr. Bruce R. McCaw	Ms. Marian Livengood*
Mr. David Tolley	Mr. Robert A. Milton	Ms. Anne McAllister*
Mr. Steve VanRoekel	Mr. Robert J. Mittman	Ms. Jessica McNally*
Mr. Thomas Vice	Mr. T. Allan McArtor	Ms. Elizabeth Wilson*
Mr. Steuart L. Walton	Mr. Jameson J. McJunkin	
Mr. Paul Wood*	Mr. Thomas G. Morr	
	Mr. Lloyd "Fig" Newton	
	Mr. Jack J. Pelton	
	Mr. Roger D. Percy	
	Mr. Robert W. Pittman	
	Mr. Thomas F. Pumpelly*	

**Smithsonian National Air and Space Museum Board Meeting
Wednesday, June 6, 2018
Executive Board Room
Steven F. Udvar-Hazy Center**

Meeting Called to Order - Allan Holt, Vice Chair

In the absence of Chair John Plueger, Vice Chair Allan Holt presided over the meeting. Holt welcomed John and Adrienne Mars Director Ellen Stofan and new member Tyson Weihs to their first meeting. He presented Weihs with a Safer pin and Wright Flyer sculpture. He acknowledged Rob Spiller, new assistant secretary for Advancement, who joined the Smithsonian from Johns Hopkins. Spiller thanked the Board for their ongoing support and affirmed the central Office of Advancement's support of Transformation. Holt also introduced Marc Sklar, new director of Communications at NASM. As discussed at the last meeting, there is a need to increase marketing efforts and this will be one of Sklar's responsibilities. Sklar joins the museum from Boeing, where he was a senior communications specialist. Holt congratulated Bill Ayer who was honored with Angel Flight West's prestigious Endeavor Award, in recognition of his volunteer contributions to general aviation. He also acknowledged David Storch's retired from AAR Corp.

New Business

Holt provided an update on the executive board leadership terms. Terms conclude after the October meeting. John Plueger will step down as Chair and the committee chairs will also change. Succession planning discussions are underway, and the Chair will present a new slate of officers at the October meeting. Committee membership will also be confirmed in October. Members interested in joining a committee should talk to Holt or Stofan. Ex. 5

Leadership is exploring having the June 11-12, 2019 board meeting in Seattle. The *Destination Moon* exhibit will be at the Museum of Flight during this time and the museum has graciously agreed to host. Details will be forthcoming. Holt introduced Ellen Stofan. Holt played a [video](#) that was distributed to Museum friends on Stofan's first day.

A Conversation with Ellen Stofan - Ellen Stofan, John and Adrienne Mars Director and Allan Holt

Allan Holt asked Ellen Stofan what made her want to be the John and Adrienne Mars Director of NASM. Stofan responded that, following her departure from NASA, she gave great thought to what she was passionate about and concluded that she wants to inspire the next generation. She shared that as a participant in the World Economic Forum, they discuss what the world will look like in 2030. Stofan believes that cultivating a diverse generation of children who are inspired by science, technology, engineering, and math (STEM) is key to success in the future. She sees NASM as being a place to inspire the next generation.

Holt asked if Stofan attends Davos, and she responded that she has gone for the last two years. She stated that, at a working level, Davos is a place where people want to work together to make the world a better place. She hopes that her participation will give the Museum a greater presence.

Holt noted that Stofan has come into the Museum as a scientist. He asked if she sees the role of NASM as a history, cultural, or scientific museum. Ex. 5

Holt asked for Stofan's initial thoughts on NASM. She responded that Ex. 5

Holt asked what the terms “Transformation” and “Future State” mean to Stofan. Stofan affirmed that Ex. 5

[REDACTED]

Holt asked Stofan for her thoughts on the challenge of Transformation. Ex. 5

[REDACTED]

Holt noted that fundraising has always been critical at NASM, but perhaps never more so than now. Holt asked how Stofan’s experience as a member of non-profit boards will help her be successful. Stofan stated

Ex. 5
[REDACTED]

Holt asked for Stofan’s expectations of the Board as well as how they can support her vision for NASM. She acknowledged Ex. 5

[REDACTED]

Holt welcomed questions from the Board. Ex. 5

[REDACTED]

“State of the Museum” - Ellen Stofan, John and Adrienne Mars Director

Ellen Stofan gave the State of the Museum report. Stofan provided an overview of activities that took place during her first 30 days at NASM. She and the Advancement team set an ambitious schedule completing seven donor meetings and five donor calls. Staff are welcoming, and Stofan spent time at Garber, Hazy, 901 D Street, and the National Mall building as well as toured all the facilities including in depth tours of galleries, archives, conservation lab, and restoration hangar floor. Stofan hosted several events including the Lindbergh Lecture, donor events during the Annual Smithsonian Weekend, and a breakfast with summer interns. She conducted several interviews with news outlets covering her selection and the media coverage has been extensive and positive. Stofan thanked Allan and Shelley Holt for hosting a reception for her to meet local donors and friends of the Smithsonian.

Stofan reported that, for the first time in five years, the entire senior staff of the Smithsonian met to discuss the strategic plan at a Director’s Retreat. Discussions focused on Goals 1 and 7: Be One Smithsonian and Provide a nimble, cost-effective, and responsive administrative infrastructure. Leadership concluded that more communication and cooperation is needed and agreed to work toward creating open and transparent decision-making processes. On the topic of 21st Century engagement, leadership concluded that the Institution needs more data on visitors and their interests. Leadership will reconvene in the fall to discuss goals 2-6 of the strategic plan.

Stofan stated that attendance at the Smithsonian Institution dropped by nearly 14%. The Independence Avenue side of the Mall has seen a decrease in visitation at nearly every location. Though visitor numbers are down, DC welcomed 20.8M domestic visitors in 2017, a 4.2% increase from 2016. Stofan reported that, at the National Mall building, the YTD total is down 17.5% compared to average YTD numbers. At the Udvar-Hazy Center, the YTD total is up by 32.5% compared to average YTD numbers. The Smithsonian has traditionally counted attendance manually and will be phasing in an automatic count system. Early indications are that this more accurate counting method will reduce reporting numbers about 30%. The Smithsonian public affairs staff are coordinating to determine appropriate messaging. The National Air and Space Museum will begin using the automated system in October. The Museum is also discussing various ticketing options during and after the building project.

She shared that, in March, the National Air and Space Museum 2018 Trophy for Lifetime Achievement was awarded to General Dailey for his distinguished career of over 60 years of service to the United States in all aspects of aviation and space. In the category of Current Achievement, the Trophy went to Shaesta Waiz, founder of Dream Soar, Inc. and the youngest woman to circumnavigate the world solo in a single- engine airplane. The event was made possible by the support of BAE, Atlas Air, Shelley and Allan Holt through the Hillside Foundation, the Claude Moore Charitable Foundation, Pratt & Whitney, and Eren Ozmen through Sierra Nevada.

Recent lectures included the John N. Bahcall with Garth Illingworth; the Charles Lindbergh Memorial Lecture with Colonel Bud Anderson, sponsored by Pratt & Whitney; GE Aviation Lecture with Patricia and Jon Sharp; and Exploring Space with Ken Sembach, director, Space Telescope Science Institute and Jennifer Wiseman, Hubble Space Telescope senior project scientist at NASA’s Goddard Space Flight Center, sponsored by Aerojet Rocketdyne and United Launch Alliance. These lectures are an important tool for sharing current content with audiences both in person and online. One of the most successful is the Exploring Space series. The series had full capacity audiences with overflow and the online video reached almost 20,000 views. Stofan shared that the Museum hired a marketing firm to help reevaluate and package lecture programs under the new umbrella Air and Space Presents.

The Museum also hosted a myriad of public programs. In April, the Museum welcomed the Royal Air Force as they celebrated their 100th anniversary. A special fly-in at the Udvar-Hazy Center included the Canadian Warplane Heritage Museum’s Avro Lancaster, one of only two airworthy Lancasters in existence. Over 17,000

visitors were able to get up close to the aircraft and speak with their pilots. The day also included talks by RAF experts and pilots, hands-on activities, performances from the RAF Band, and drill displays from the Queen's Colour Squadron. The annual Steven F. Udvar-Hazy Center Open House took place on March 28. Museum staff showcased work being done towards revitalization and transformation efforts in the Mary Baker Engen Restoration Hangar, Emil Buehler Conservation Lab, and Archives. Over 10,000 people attended this year's Open House. It was the first time this program occurred during a weekday allowing more staff participation and gave locals an activity during Spring Break. The Holt Scholars and Northrop Grumman Family Day Programs partnered to host DC Public Schools students and families for an after-hours special event in March. Over 700 guests attended from 85 different schools in all eight wards across the District, including 20 public charter schools. With a focus on inter-generational co-learning, Explainers and staff provided activities and topics that invited conversation and interaction across all ages.

Stofan shared that the Museum is participating in a pilot program around tracking programs, audiences, experiences, and impact. Last year the Education and Public Engagement Department (EPE) interacted with over 1,434,725 guests, students, and teachers at the National Mall building. This number represents an increase of close to 600,000 people over the previous year. With four months remaining in FY18, the Museum has engaged with over 926,000 guests, students and teachers, and is on track to hit 1.4M again. Last year, EPE interacted with over 526,250 guests, students, and teachers at the Udvar-Hazy Center. This number represents a decrease of close to 43,000 people over the previous year. The Museum is working to verify the numbers, and identify opportunities to increase interactions moving forward. July and August still trend as the highest months of engagement, and November and February trend as the least number of engagements. In January, the Museum reached over 90,000 students, a record for the department. Smithsonian Education engaged with over 7.2 million guests, teachers, and students. Recently, the Museum entered into a partnership with Antennae to create audio guide tours for middle school students and adults at both locations. The tours are already proving to be popular, increasing revenue and public engagement.

Stofan announced the establishment of a new Teacher Innovator Institute. Thanks to generous support from an anonymous donor, the Museum secured Ex. 6 that enabled the launch. The inaugural Teacher Innovator Institute will teach middle school educators how to bring the museum experience into their classrooms by exploring connections between informal STEM education and authentic learning. The two-week immersive program will welcome 30 teachers from across the country in summer 2018. The program will include hands-on activities, museum tours, behind-the-scenes museum experiences, visits to other museums, and group work. Teachers will benefit from the expertise of museum educators and content experts as well as be able to use aerospace science, history, and technology to shape their ideas about authentic learning and bring informal education techniques to their classrooms. Educators in the program are asked to commit to two weeks each summer for three summers. During those two weeks, they will actively participate in sessions led by Smithsonian staff and guests and propose and complete an independent project. The Museum will incorporate an extensive annual evaluation of this program in order to measure its effectiveness and inform any changes needed to ensure the greatest impact.

Stofan shared that the "She Can" two-week STEM summer camp will take place in July and August at the Udvar-Hazy Center. Open to sixth-through eighth-grade girls, the Museum will offer the free aviation-focused experience to low-income students in Washington, D.C., Maryland, and Virginia. Secretary Betsy DeVos joined the Museum for the announcement of the camp and the opening of the application window. The Museum will accept applications until June 18 for the camp's 60 total slots. Stofan thanked Board Members Exemption 6 through the Ex. 6 and Exemption 6 through the Ex. 6 for helping to fund this initiative. Their support also inspired a \$100,000 grant from the Department of Education.

The *2001: A Space Odyssey* exhibit opened April 8 and closed May 28 at the National Mall building. The centerpiece was an installation entitled *The Barmecide Feast*, a full-scale recreation of the neoclassical bedroom from the climax of the film. Hosting the exhibit was an example of agility for our team as we quickly ceased on an opportunity with public appeal. The Museum gained great experience through the process. 30,000 people went through the room and an additional 32,000 engaged with online content. The exhibit was covered in the *New York Times*, *CBS This Morning*, *Vanity Fair France*, *Popular Mechanics*, and by outlets across the United States and in 10 countries around the world. In connection to the exhibit and the 50th anniversary of *2001*, the Museum held the largest Yuri's Night Celebration in the world with 2,000 attendees. Yuri's Night is a global celebration of humanity's past, present, and future in space, with more

than 200 events in 50 countries. The Museum hosted a screening of the film with introduction by the film's special effects artist Douglas Trumbull and a closing program with a talk from the artist, Simon Birch, using assets specially created for the event by TIME. Following the special exhibit, *the Barmecide Feast* is now being evaluated for a possible touring exhibit featuring NASM artifacts, archives, and scholarship by SITES.

Stofan highlighted a listing of staff honors, publications, and appearances available in the meeting packet.

Stofan announced that the Museum has been in conversations with NASA and the National Space Council and will be a leader in organizing Apollo 50th anniversary efforts. Objectives include raising awareness on Transformation/Revitalization specifically for *Destination Moon* and space related galleries, reinforcing the Museum's role as the nation's preeminent leader in holding legacy of Apollo/space program, enhancing external and internal partnerships, showcasing scholarship and scientific research, and inspiring future generations. Stofan called attention to the list of planned and proposed Apollo 50th activities located in the meeting packets. The Museum is developing a fundraising package and seeking sponsors. Stofan shared that the programs will celebrate a great human achievement by teams and the astronauts of Apollo, offering programs for K-12 students, scholarly work, and programs for the general public. They will provide roles for NASA and our corporate partners and inspire the next generation by talking about what is next. Programing, such as the SITES traveling exhibit, will reach beyond the walls of the museum.

Stofan reported on Smithsonian Enterprises (SE) revenue for FY17. Smithsonian Enterprises is the business arm of the Smithsonian providing vital revenue. Chris Browne is serving on the search committee for the new Smithsonian Enterprises president. Exemption 4

[REDACTED]

Steve VanRoekel requested additional information about the funding of the Apollo 50th anniversary programming. Stofan shared that Advancement is developing a fundraising packet.

Revitalization and Transformation Update - Chris Browne, Deputy Director

Chris Browne provided an update on Revitalization and Transformation. Regarding Revitalization, Browne announced that the Clark/Smoot/Consigli Joint Venture submitted their "final design" cost estimate. Costs came in high so leadership is currently in conversations to identify options. Schedule and contingency are under review as the Museum is holding on to critical scope. Notice to Proceed for the Construction contract is targeted for this summer and closures will begin in early fall with a construction wall going up mid-October. Browne shared that the Dulles Collections Center storage module continues to progress well. Construction has reached roughly the 50% stage, and the construction team will start the work needed to connect to the existing building soon. Tilt-up precast concrete exterior walls will be installed next month. Construction completion remains as January 2019.

Browne provided an update on staff relocations due to Revitalization. At the Udvar-Hazy Center, progress is being made on the 5th floor administrative space. Mechanical/electrical infrastructure is well underway for library and archives relocations and compact shelving is scheduled to be installed in July. Estimated completion remains as September 2018. At the National Mall building, Space History, Business Operations, CEPS, and Aeronautics relocated to the 901 D Street location. Staff remaining in the building are moving locations over the next month. The parking garage will close end of September, and this closure will have big impacts on volunteers and staff as well as evening events.

Browne reported on the artifact treatment status and artifact move contract. The Museum is still working to determine temporary storage for eight oversized aircraft. Proposals to de-install and move NASM artifacts from the National Mall building are under review and Collections is steadily completing a high volume of work. NMB currently houses over 3800 artifacts. All artifacts will be de-installed and moved out of the building during the Revitalization Project, except for 12 artifacts that require a Protect in Place and/or a Protect on Site approach. Approximately 1700 of these artifacts will be moved to swing space, inspected/treated, and then re-installed in the building as the Revitalization Project incrementally turns over renovated spaces for Transformation. The remainder will not return to the NMB; they will go into long-term storage, be displayed at the Udvar-Hazy Center, or be deaccessioned; loaned artifacts will be returned to their owners. In addition, Transformation will introduce to the NMB another approximately 1400 artifacts that are currently in storage, on display elsewhere, or loaned from other institutions. Browne reviewed progress and next steps for the project.

Regarding Transformation, the RFP for the exhibit design of the galleries of the east end of the museum has been issued. The goal is to complete the solicitation process by September 2018, with project start in October 2018. The RFP for the fabrication contract of the galleries of the west end of the museum was delivered to the Smithsonian Office of Contracting in May. The goal is to complete the solicitation process in September 2018, with off-site fabrication starting in October 2018. The design firm PGAV was selected for the Commons area and work is beginning.

Browne provided an update on the restaurant at the NMB. Restaurant Associates provides food service at a number of Smithsonian facilities and has been contracted by Smithsonian Enterprises to provide limited “grab and go” food service at the NMB until its permanent closure at the beginning of Phase 2 (est -mid 2021). The facility will be named the “Flightline Café.” As previously noted, Exemption 5

Advancement Committee Report and Discussion - Laura Gleason, Director for Advancement

In the absence of Advancement Committee Chair Dawne Hickton and Advancement Committee Vice Chair Tom Haas, Laura Gleason provided the Advancement Committee report. The Museum raised Exemption 4 through April 30, which exceeds the entire FY18 goal of Exemption 4

In addition to raising significant gifts for Transformation, NASM also raised funds for other important priorities including education, public programming, and digital engagement. New gifts since the last meeting include: a pledge from an anonymous donor for Ex. 6 in support of a new Teacher Innovator Institute (this is not yet reflected in our numbers); numerous new pledges/gifts to support Transformation from individuals, including Exemption 6; Ex. 6 made a Exemption 6 pledge in support of *Destination Moon*; Ex. 6 made a Exemption 6 gift to support a Simulation Center at the Hazy Center; and the Ex. 6 gave Exemption 6 to support STEM in 30.

Gleason provided an update on annual giving. The National Air and Space Society and Wall of Honor provide unrestricted support to the museum. The goal for this year is Ex. 4, and as of today NASS has raised

Exemption 4

Gleason reported on efforts to reach Ex. 6 Transformation goal for the Ignite Tomorrow Campaign. Unless specifically instructed otherwise by the donor, most unrestricted gifts will be applied toward Transformation. To date, \$ Ex. 6 toward Transformation. This represents Ex. 6 to goal.

Advancement continues to focus on introducing Stofan to key shareholders of the Museum, Smithsonian leadership, volunteer leadership, major benefactors and key prospects, industry leaders, and important Museum friends. She has participated in several donor meetings and visits since she arrived. On Stofan’s first day, the Museum released a video that was shared widely across many platforms. The video received positive feedback and her appointment created major media interest. There was notable coverage in the *Washington*

Post, NPR's "All Things Considered", *New York Times*, and *USA Today*. Stofan was a featured participant in the Smithsonian Weekend activities for annual donors from across the Institution. Allan and Shelley Holt hosted an event in their home to introduce Stofan to donors, Smithsonian friends, and business leaders in the DC area. She will host a NASM Reception at Oshkosh and Steve and Chris Hazy will also host an event at their home in Los Angeles on October 9. All Board members will receive an invitation. Gleason asked members to contact herself or a member of the Advancement Committee if they are interested in hosting an event.

The NASM Advancement team continues to work closely with Ologie to develop collateral materials for the campaign. The new Ignite Tomorrow overview brochure provides basic information about the campaign to a wide audience. Next month, Ologie will start working on a campaign video, including a version designed for the IMAX theaters.

Nominations Committee Report and Discussion - Allan Holt, Chair, Nominations Committee

Allan Holt provided the Nominations Committee report. The Nominations Committee convened on May 7. The board currently has 30 members. In October, three members are eligible for emeritus status: John Plueger, Stuart Fred, and Morty Fungler. This will bring membership back to 27. The Committee continues to have a strong list of potential candidates. They will not put forth any names at this meeting, but are working to invite a few prospective members to a future dinner. Stofan suggested that the Committee identify a mechanism for prioritizing nominees, taking into consideration industry, gender, ethnic and geographic diversity, and giving capacity. These recommendations will be incorporated into the nominations process. There are more names than available spots so the Committee needs to prioritize to ensure diversity on the board.

Future State Committee Report and Discussion - Greg McAdoo, Chair, Future State Committee

Greg McAdoo provided the Future State Committee report. McAdoo shared that the Committee is focused on planning for portions of the Museum's participation in the Apollo anniversary celebration. The Committee is working in collaboration with Lab and leadership to forward the Committee's goals of experience first, outside-in, agile content, and fail quickly through this programming.

The first program is the Race to the Moon virtual marathon. The Museum seeks to host a virtual marathon with the goal of running 500,000 combined miles, the distance to the Moon and back. This program will be launch in partnership with state parks in October 2018. Progress will be tracked on a website that will reflect overall progress toward the mileage goal, showcase user-submitted content (Twitter and Instagram posts), share highlights from the Apollo program, and raise awareness of NASM's various Apollo 50th activities. The Committee intends to engage other partners, including Exemption 5

The second program is Armstrong Across America. The program would place fiberglass Armstrong suit statues in cities and towns across the country to raise awareness of the 50th anniversary and provide endless selfie opportunities. The Lab is exploring supplementing the in-person experience with a digital engagement component (possibly AR) that would encourage social sharing. This program will launch in May of 2019 when the Armstrong suit returns to display at the National Mall building. Potential partners include Exemption 5

The Lab is exploring coordinating Race to the Moon events with the Armstrong Across America launch. McAdoo stated that these programs are not fully realized or funded.

The Visitor Experience - Caitlin Haugen, NASM Department of Education and Public Engagement

Caitlin Haugen provided an update on audience engagement at the National Air and Space Museum. Haugen shared that the Department of Education and Public Engagement (EPE) is starting the process of measuring the guest experience. Haugen stated that one of the audience engagement goals is to maintain guest excitement throughout Transformation. This will require the department to become agile and adaptive in their programming, both in location and content. As spaces begin to close for Revitalization and Transformation, EPE is being mindful to ensure that guests continue to have memorable experiences. EPE is also analyzing how to maintain attendance and revenue levels during Transformation. They are working to identify and implement new approaches to elevate the guest experience. Part of their approach will be to encourage people to visit the Udvar-Hazy Center. Haugen stated that it will take cooperation and collaboration across the Museum to ensure that guests continue to have an inspiring experience during

Transformation.

Haugen shared that current audience engagement strategies include deploying new tactics to best understand the guest experience. EPE tests interactives for the new galleries on the museum floor with the goal of assessing whether they meet the physical and educational criteria for the new space but to also raise excitement for the project. EPE is examining entrance control options as attendance will need to be limited at certain times. Ticketing could be introduced throughout various phases. EPE consulted other Smithsonian units to learn about their ticketing options and interviewed ticketing vendors. EPE is also engaging guests with new program offerings, such as the Reels on the Ramp movie series. These events will help move the focus to the Udvar-Hazy Center.

Haugen shared upcoming strategies for increasing audience engagement. Through the in-kind support of Ex. 6 [REDACTED], EPE will pilot heat mapping to better understand guest behavior in the *Moving Beyond Earth* gallery. They will work with a vendor who specializes in multi-use spaces to evaluate the gallery as an agile production space. EPE will conduct a gallery behavior study this summer to analyze visitorship to various galleries, movement, and dwell time. NASM may introduce a shuttle with programming between the National Mall and the Udvar-Hazy Center. EPE is developing portable Discovery Stations that feature innovative technology and are tied to the new galleries. Finally, docent and audio tours will be adjusted to reflect gallery closures and changes during Revitalization and Transformation.

Following group discussion, Haugen invited members to share their thoughts on three questions.

Ex. 5



An Update from the Surface of Mars - John Grant, NASM Center for Earth and Planetary Studies
John Grant posed the question “Is there Life on Mars?” He shared that the answer to the question is something he has wondered about since reading Ray Bradbury’s *Martian Chronicles* as a child. Grant stated that, while Mars is cold and dry, evidence preserved on the surface in the form of ancient channels and

valleys suggests that conditions were once more Earth-like and that water flowed and ponded on the surface. As such, the possibility of life on Mars is intriguing, and has contributed to the planet being the focus of long-term exploration. Although Mars is relatively smaller than Earth, with about 40% of the mass, it has approximately the same land area as above sea level on Earth. Moreover, Mars preserves sedimentary rocks, whose layers hold evidence of the conditions and environments when they were deposited and formed. Coupled with Mars proximity to the Earth, which affords opportunities to launch missions every ~26 months, Mars represents an attractive and relatively accessible target for exploring whether we are alone in the Universe. Work with the Mars Exploration and *Curiosity* rovers is making strides towards answering that question. The Mars Exploration Rovers *Spirit* and *Opportunity* began 90 day missions of discovery in 2004, with *Opportunity* now 12+ years into her mission. *Curiosity* landed in 2012. *Spirit* and *Opportunity* focused on the role of water in shaping the surface, whereas *Curiosity* is focused on understanding the past habitability of Mars. *Spirit* and *Opportunity* are robotic field geologists, whereas *Curiosity* uses her more extensive payload to probe for evidence of past habitable conditions. Grant has participated in these missions from the start, both in tactical and strategic roles. The results of these missions help demonstrate that Mars was once a much different place than it is today.

The Mars Exploration Rover *Spirit* landed in Gusev, where images from orbit showed what once may have held a lake. A large, ancient channel flowed into the crater and its floor has been buried by deposits that at least in part may have been carried by the channel. These deposits were later mostly buried by volcanic materials, but were deemed locally accessible to the rover. Once safely on the surface, *Spirit* headed to the Columbia Hills, named for the astronauts that lost their lives in the shuttle accident. The Columbia Hills poked up through a surrounding lava plain and were hoped to provide access to the ancient water-related deposits below. *Spirit* continued her exploration until becoming stuck in soft sediment in May 2011. *Spirit* and the Columbia Hills did not disappoint, and revealed evidence of ancient environments, perhaps ~4.0 Ga or older, that may have resembled those found on Earth in places like Yellowstone National Park. With one wheel no longer turning, *Spirit* drove backwards, dragging her bum wheel, and scratching a shallow trench into the surface. Once the red dust of the surface was scraped away, bright white deposits were visible and found to be composed almost entirely of silica. Coupled with nearby volcanic features and layers, results indicate that there were once steam vents and/or fumaroles on the floor of the crater. These required the presence of significant water in the past and suggests that conditions may have once been habitable.

The Mars Exploration Rover *Opportunity* landed on the opposite side of Mars on a flat plain known as Meridiani Planum. The landing site was selected because data from orbiting spacecraft indicated the presence of the mineral hematite, which often forms in association with water. *Opportunity* has traversed more than 42.7 km across the plains, just over the length of a marathon. This set the record for the longest traverse on the surface of another planet. The Meridian Plains are mostly covered by windblown drifts of sand. *Opportunity* spent the first seven years of her mission crossing these wide-open and vast plains to reach local outcrops of the underlying rock where it discovered the source of the hematite viewed from orbit. Close up imaging of the rocks showed small spheres about the size of a BB that contained the source of the hematite. These “blueberries” so dubbed because of their purple appearance in false color occur in a random spacing and within layered sedimentary rocks that contain sulfates deposited when water evaporated to leave minerals behind. The chemistry and structure of the rocks paint a picture of a past landscape that may have resembled the Rub al Khali in Saudi Arabia. There, dry conditions and sand dunes dominate, but it does rain occasionally. When it does, water pools between dunes and seeps into the surface. As the surface dried on Mars, the sulfates were deposited, followed by ground water deposition of the hematite-bearing “blueberries” as concretions. Although not exactly equivalent to the Amazon rain forest in terms of water abundance, these rocks do indicate more earthlike conditions persisted on Mars until ~3.5-4.0 Ga.

Curiosity has been exploring the floor of Gale crater, which is highlighted by layered sediments forming the 3 mile high Mt Sharp. Orbiter data show that these rocks transition from clay-bearing to sulfate-bearing to more Mars dust like from bottom to top and are thought to record the slow drying and cooling of Mars overtime. The focus of exploration to date has been on the rocks near the base of Mt Sharp and reveals numerous tiled layers of sandstone that merge into finely layered mudstones with clays towards the center of the crater. The sediments that form these rocks have diagnostic bedding and structures that confirm their deposition around and within a lake that once filled the crater. Channels descending down the walls of the crater carried water and sediment that formed small deltas near the margin of the lake and resulted in deposition of clays and organics further from the shore. Collectively, these discoveries confirm at least

locally habitable conditions persisted on Mars until -3.5-3.2 Ga, or about the same time as drying was occurring in Meridiani Planum. Grant noted that these discoveries are shared with visitors on the media wall in the *Boeing Milestones of Flight* gallery.

Another rover will be sent to Mars in 2020 and will make the next step towards understanding whether there was ever life on Mars. The rover will be a twin to *Curiosity*, but will carry different instruments and cache samples for possible later pickup and return to Earth. The goal of the mission will be to look for evidence of biosignatures, which is evidence of past or present life. Grant is co-leading the landing site selection for this mission, and the team has narrowed the search down to eight final candidate sites. These sites occur in a range of terrains, but all are thought to possess evidence of past water and habitable conditions.

Grant shared that he is fascinated by evidence that indicates there were once lakes and rivers on the Red Planet. All this prompts him to think that long ago, maybe things were not so different on Mars than they are on Earth. He believes that man is closer than ever to answering the question of whether there was ever life on Mars, and we now realize that the planet was more Earthlike early in solar system history. Chris Jones and Scott Donnelly asked about the payload capacity and capabilities of the 2020 rover. Grant responded that the new rover will carry seven scientific instruments and a sample acquisition, processing, and caching system. Greg McAdoo asked for Grant's thoughts on how NASM can better educate and inspire the generation who will walk on Mars. Grant responded that he is encouraged by the "What's New" sections of the museum. He also shared that, when a child asks him a question pertaining to how he would do something, Grant turns the question back on the asker and inquires how they would tackle the problem. Soliciting their ideas suggests that it could be them doing the research or going to Mars. Stofan added that it is key to let visitors look over the scientists' shoulders. By grappling with fundamental questions, NASM can be a place where visitors come to learn more.

Old Business - Allan Holt

2018 Board meeting dates: October 2-3

2019 Board meeting dates: February 26-27; June 11-12 (Seattle); October 29-30

Upcoming events:

June 13 - John Glenn Lecture with Gen John E. Hyten, National Mall

June 16 - Innovations of Flight Day, Udvar-Hazy Center

June 20 - Exploring Space Lecture with Robert Smith, National Mall

July 25-26 - EAA AirVenture, Oshkosh, WI

September 18: Dinner reception hosted by Steve and Chris Hazy, Los Angeles, CA

September 26 - GE Aviation Lecture with Shaesta Waiz, National Mall

Wrap-up - Ellen Stofan

Executive Session

Meeting adjourns

National Air and Space Museum Board

*Present at the June 6, 2018 meeting

Board Members:	Board Members Emeritus:	
Mr. William S. Ayer	Mr. James Albaugh	Dr. Jon A. Reynolds
Mr. Daniel Baker*	Mr. Ronald W. Allen	Dr. Donald B. Rice
Mr. Alain M. Bellemare	Mrs. Anne B. Baddour	Mr. John Safer
Ms. Marion C. Blakey*	Mrs. Agnes M. Brown	Dr. Richard Sugden
Mr. Orlando P. Carvalho	Mr. Armando C. Chapelli, Jr.	Dr. Frederick Telling
Mr. Neil Cohen*	Mr. Max C. Chapman, Jr.	Mr. Charles Thornton
Mr. Stanley A. Deal*	Mr. Joe Clark	Ms. Patty Wagstaff
Mr. Scott Donnelly*	Mr. Frank A. Daniels, Jr.	Mr. Bruce Whitman
Mr. Mark B. Dunkerley*	Mr. Edsel B. Ford, II	
Mr. Stuart L. Fred*	Mr. Kenneth E. Gazzola	SI/NASM Staff Members
Mr. Morton Funger	Mr. S. Taylor Glover	Dr. David Skorton
Mr. Thomas W. Haas	Mr. James M. Guyette	Dr. John Davis
Ms. Dawne S. Hickton	Mr. Randall A. Greene	Mr. Robert Spiller*
Mr. Shepard W. Hill*	Mr. Ralph D. Heath*	Dr. Ellen R. Stofan *
Mr. Allan M. Holt*	Mr. David R. Hinson	Mr. Christopher U. Browne*
Mr. Thomas W. Horton	Mr. David C. Hurley	Ms. Kelly Bloom*
Mr. Christopher T. Jones*	Mr. Robert James	Ms. Meg Caulk*
Ms. Meredith Siegfried Madden	Mr. Clayton M. Jones	Ms. Michelle Delaney*
Mr. Gregory L. McAdoo*	Mr. David L. Joyce	Mr. Rick Flansburg*
Ms. Linda A. Mills	Mr. Herbert D. Kelleher	Mr. Michael Garceau*
Ms. Eren Ozmen*	Mr. Rodney R. Lewis	Ms. Laura Gleason*
Mr. H. Ross Perot, Jr.	Mr. Steven R. Loranger	Ms. Lindsey Jackson*
Mr. John L. Plueger	Capt. James A. Lovell	Dr. Peter L. Jakab*
Mr. David Storch	Mrs. Adrienne Bevis Mars	Mr. Mark Kornmann*
Mr. David Tolley	Mr. Bruce R. McCaw	Ms. Michelle Lamberton*
Mr. Steve VanRoekel*	Mr. Robert A. Milton	Ms. Marian Livengood*
Mr. Thomas Vice	Mr. Robert J. Mittman	Ms. Anne McAllister*
Mr. Steuart L. Walton	Mr. T. Allan McArtor	Ms. Jessica McNally*
Mr. Tyson Weihs	Mr. Jameson J. McJunkin *	Ms. Elizabeth Wilson*
Mr. Paul Wood	Mr. Thomas G. Morr	
	Mr. Lloyd "Fig" Newton	
	Mr. Jack J. Pelton	
	Mr. Roger D. Percy*	
	Mr. Robert W. Pittman	
	Mr. Thomas F. Pumpelly	

installing an automated visitor count mechanism. The mechanism will provide an accurate count that is not susceptible to human error which leads to over counting. Davis acknowledged that, while visitorship is important, it will not enable the Smithsonian to reach one billion people. The Institution is therefore channeling efforts to reach online visitors. Plueger noted that popular events, such as the *First Man* premiere, may serve as a positive tool for spurring visitation. Stofan shared that we anticipate a drop in visitorship at the Museum due to Revitalization construction. She acknowledged that numbers have already dropped over the past year, and the decline is being attributed to the closing of food services during the peak season.

“State of the Museum” - Ellen Stofan, John and Adrienne Mars Director

Ellen Stofan gave the “State of the Museum” report. Over the past couple of months, Stofan participated in many meetings with major benefactors and leading corporate donors and their executive leadership including Wes Bush of Northrop Grumman, Marillyn Hewson of Lockheed Martin, and Tom Kennedy of Raytheon; also numerous meetings with directors of aerospace, science and cultural agencies including Jim Bridenstine, Administrator of NASA and France Cordova with National Science Foundation. Upcoming commitments include meeting with Dennis Muilenburg of Boeing, and Tory Bruno of ULA. Stofan recently addressed the AIA Executive Committee and provided a pitch on Transformation. Stofan will also meet with several of the aerospace association’s executive leadership for AOPA, GAMA, and NBAA to identify potential areas of collaboration. She was the keynote speaker at the National Aeronautics Association luncheon addressing a group of industry executives, again having a platform to educate this community about Transformation. Eric Fanning, Christyl Johnson, and Stofan hosted three students from Banneker High School who received racial backlash during a NASA competition. Stofan and the Advancement team had a successful trip to EAA’s AirVenture. While there, the Museum announced Exemption 6 tremendous Ex. 6 gift for the “Thomas W. Haas We All Fly” gallery and shared that the Museum will receive Sean D. Tucker’s Oracle Challenger III high-performance aircraft which will be prominently displayed in the new gallery. Stofan will travel to New York, St. Louis, Los Angeles, Denver and Dubai in the fall.

Stofan provided an update on recent outreach to Congress. Over the summer, the Museum hosted the Smithsonian’s annual Congressional Family Night. Stofan spoke to members of the Congressional Black Caucus during their STEM brain trust and participated in a hearing before the U.S. Senate Subcommittee on Space, Science, and Competitiveness titled “The Search for Life: Utilizing Science to Explore our Solar System and Make New Discoveries.” She also participated in an interview with David Rubenstein and Charles Alcock, director of the Harvard-Smithsonian Center for Astrophysics, during a Congressional outreach event sponsored by Rubenstein. Museum leadership joined the Office of Government Relations in a briefing on the NASM project to Oversight Committee staff.

Stofan provided an update on recent educational programming. Stofan reported on the success of the “She Can” STEM Summer Camp. Each session was two weeks, with 30 local girls participating in each session. The Camp was funded by board members Steuart Walton through the Walton Family Foundation and Linda Mills through the DaRin Butz as well as the U.S. Department of Education. Stofan noted that the Museum is conducting an evaluation of what provided the most value during the camp. She shared that the long-range goal after refining the program in house for three to five years is to partner with groups like AOPA to take the model to communities across the country. Stofan announced that, thanks to the generous support from an anonymous donor, the Museum also launched a new Teacher Innovator Institute. The inaugural Teacher Innovator Institute instructed middle school educators on how to bring the museum experience into their classrooms by exploring connections between informal STEM education and authentic learning. The two-week immersive program was held downtown and welcomed 30 teachers from across the country. The Museum is pursuing an extensive annual evaluation of this program in order to measure its effectiveness and inform future changes.

Stofan provided update on recent lectures including the John H. Glenn Lecture with General John E. Hyten, Commander of USSTRATCOM, sponsored by Boeing; the Exploring Space Lecture with Robert Smith from the University of Alberta, sponsored by Aerojet Rocketdyne and United Launch Alliance and the GE Aviation Lecture featuring Shaesta Waiz. Other public programs include the Museum’s participation in the Smithsonian’s summer solstice celebration. NASM hosted daytime programs at both facilities exploring the science of the solstice with activities for all ages. The National Mall building stayed open late and offered activities such as stargazing at the Phoebe Waterman Haas Public Observatory. The Udvar-Hazy hosted the first Reels on the Ramp outdoor family movie night. The Udvar-Hazy Center’s STEAM family day enabled over

6000 attendees learn through hands-on activities. The Heritage Family Day series is made possible by the generous support of Northrop Grumman Corporation. Mars Day celebrated the Red Planet with activities that exposed visitors to the latest developments in planetary science. The public could even see a real meteorite that came from Mars with scientists from the National Museum of Natural History.

Stofan provided an update on Museum artifacts. She recalled that, at the June meeting, a question was raised about how pop culture fits in with telling the Museum's story and reaching new audiences. Stofan shared that the original prototypes for LEGO's "Women of NASA" set joined NASM's collection. Another recent acquisition of note is the Nemesis NXT.

In staffing news, Stofan shared that she recently held her first town hall with museum staff. She has also shared that Mark Kornmann, associate director for Education and Public Engagement has resigned and Chris Browne is leading the Department until a new associate director is hired. Browne transferred several digital experts who manage web design and social media into the Communications Department under Marc Sklar, where they will assist with messaging throughout Transformation. He also transferred the management of the Docent Program to Visitors Services under Rose Soldano where their critical activity will be fully supported and coordinated. In order to make sure that new galleries achieve educational goals, several Education staff members were assigned to participate on the Museum's gallery design teams.

Stofan continues to accept interviews and appearance opportunities including the Kojo Nnamdi Show, the Slate podcast, and The Atlantic Festival. The *Washington Post* Live Transformer: Space streaming broadcast with Vice President Pence is tentatively rescheduled for October 23. She shared that the National Mall building will serve as the site of the US premiere of *First Man* as well as Tom Cruise's *Mission Impossible: Fallout* premiere. The Museum hosted several live shots with Good Morning America in connection to the release of the *Captain Marvel* trailer. The Museum collaborated with Google Arts & Culture to celebrate the 34th anniversary of Space Shuttle *Discovery's* first flight. On August 30, NASM launched its presence on the Google Arts & Culture platform--a tool that allows online visitors to explore content from museums and cultural heritage sites located around the world. The GAC platform includes a 360 degree video of astronauts Kathryn Sullivan and Charlie Bolden exploring the interior of Space Shuttle *Discovery*. Stofan noted that this project would not have been possible without Meredith Madden's gift to conduct 3D scanning of the interior. The platform also features digital exhibits and stories, virtual tours of the Museum in Washington, DC and the Udvar-Hazy Center using Google (Interior) Street View, a Google cardboard tour in the Space Hangar, and more than 200 images and artifacts related to the Shuttle.

Stofan provided a brief overview of Apollo anniversary programming. The Museum's intent is to honor the past and inspire future generations. Stofan announced that Boeing and Raytheon committed to supporting anniversary programming. In order to announce the Apollo 50th activities, the Museum invited the media to the Hazy Center to get an up close look at several Apollo artifacts in the Emil Buehler Conservation Lab. Stofan shared a [video](#) that was created to publicize the anniversary.

In celebration of the Udvar-Hazy Center's 15th anniversary, the Museum will host a day of public programming that revisits the history of the Center and why it was created. Experts will highlight key artifacts in the Center and touch on its importance to the local community as well as to aerospace scholars and conservators.

Revitalization and Transformation Update - Chris Browne, Deputy Director

Chris Browne provided an update on Revitalization and Transformation. He welcomed Stofan to share her thoughts on the meaning of Transformation and what the undertaking will mean to Museum guests. She shared the following thoughts:

- Exemption 5 [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

In light of this, and based on numerous conversations with staff, Stofan worked to create more flexibility in the designs for Transformation. Museum leadership recently announced the following two decisions:

- The gallery intended for simulators on the East End will become a gallery capturing advances in commercial spaceflight that will lead to an increased human presence in space- from low earth orbit to the Moon and Mars- in the 2020s and 2030s.
- The gallery intended for *Reinventing Flight* on the West End will become a rotating gallery focused around innovation in flight and exploration. As part of Transformation, the Museum wants to explore a new way of telling stories and showing artifacts that will bring fresh content to our visitors in a timely fashion at lower cost. The content of *Reinventing Flight* will replace *Nation of Speed* when that exhibit ends.

Exemption 5

Browne reported that the National Mall building (NMB) Revitalization contract was awarded in the amount of \$480M (Guaranteed maximum price for initial scope). The initial construction kick-off meeting will take place on October 9. The contractor, a joint venture between Clark, Smoot, and Consigli (CSC), has been with the Museum for over a year performing pre-construction activities. The Museum will start to close galleries this fall, and artifact and exhibitry deinstallation will begin. Browne shared that Zones 1 and 2 will close January 2019, and a construction wall will be installed between Zones 2 and 3 in early 2019. Zone 3 exhibits are expected to close in August 2019. The exhibits in galleries 108/208 and south entry are expected to close in November 2019, followed by the closure of the Museum Store and Planetarium December of the same year.

Browne shared that the Dulles Collections Center storage module continues to progress well. The project is 75% complete and completion remains as January 2019. Relocation updates for the Udvar-Hazy Center include that the new Director Suite at the Udvar-Hazy Center is scheduled for completion by end of year. The Library and Archives area is now complete, and staff will be relocating to the space over the next couple of weeks.

Browne announced that a separate artifact move contract was awarded to CSC for +/- \$20 million, which includes the deinstallation of the artifacts included in the Phase 1 areas. This contract team held their initial kick-off meeting on September 11. A design/build contract award is imminent for improvements to the Ramsey Building in order to temporarily store eight oversized aircraft. Browne shared that the Ramsey Building lease extension is currently with Metropolitan Washington Airports Authority for signature and will provide for a five-year extension with an added five-year option.

Browne reported that the NMB currently houses over 3800 artifacts, and almost all artifacts will be de-installed and moved out of the building during the Revitalization Project. Approximately 1700 of these artifacts will be moved to swing space, inspected/treated, and then re-installed in the building as the Revitalization Project incrementally turns over renovated spaces for Transformation. The remainder will not return to the NMB; they will either go into long-term storage, be displayed at the Hazy Center, or be deaccessioned. Loaned artifacts will returned to their owners. In addition, the Transformation effort will introduce to the NMB another approximately 1400 artifacts that are currently in storage, on display elsewhere, or loaned from other institutions.

Browne provided a summary of recent progress toward Revitalization and outlined next steps. Leadership received a GAO draft report that describes their review and analysis of the NMB Revitalization cost estimate. The draft report found that the Smithsonian met three of four GAO best practices and is taking steps to fully address the 4th cost estimating best practice. The Smithsonian is currently reviewing the report, and the Institution will have an opportunity to comment before the final report is submitted to Congress.

Browne provided an update on the Transformation of the National Mall building. Ralph Appelbaum Associates (RAA) has been selected as the East End design firm). RAA specializes in the planning and design of museums, exhibits, educational environments and visitor attractions. Design firm PGAV has been selected to develop the Commons spaces. They have been conducting a series of workshops with staff and started visitor evaluations for West End (existing galleries) this month. The Smithsonian completed the feasibility study of replacing the current restaurant with a purpose-built facility that would expand food and beverage opportunities and increase revenues. The report is with senior Smithsonian leadership for consideration.

Agnes Brown asked whether the gift shop will remain open during Transformation and Browne responded that the shop will move into swing space for the duration of the project. Browne shared that he anticipated a drop in revenue due to the reduction of retail offerings. Stofan added that Smithsonian Enterprises is in the process of hiring a new director who will focus on increasing revenue. Effort should include the expansion of online retail offerings. Daniel Baker asked whether there is funding for the next session of the SheCan Camp. Stofan responded that the Museum will report to the current funders and give them first right of refusal. Stuart Fred asked how the Museum is documenting the process of Revitalization and Transformation. Browne responded that Communications is leading this effort. They have already initiated conversations with the Smithsonian channel, as well as discussed taking photo documentation and time-lapse videos. Stofan added that the story of construction can provide a connection to the Museum and they are in discussions with a major media company to document Transformation. Shep Hill asked whether SI Facilities is the program manager for Revitalization and Browne confirmed that they are. Browne described that NASM staff are embedded in the process and serve as the project manager for Transformation. Hill asked whether there are contractual incentives for cooperation and Browne confirmed that there are. He also noted that the publically funded nature of Revitalization leads to additional oversight. Orlando Carvalho questioned whether SI Facilities has previously overseen a project of this scope and Browne responded that they served as lead during the construction of the National Museum of African American History and Culture. Jamie McJunkin encouraged that the quality of the content following Transformation needs to be good, and that the Museum should strive to understand how guests consume content.

New Business - John Plueger

Plueger welcomed members to raise topics for discussion.

Nominations Committee Report and Discussion - Allan Holt, Chair, Nominations Committee

Allan Holt shared that the Nominations Committee convened on September 25 and recommended the following actions:

- John Plueger, Stuart Fred, and Morty Fungler be voted to emeritus status. Holt asked for a motion and a vote on offering emeritus status to Plueger, Fred and Fungler. The Board unanimously voted to offer emeritus status to all three members. Plueger and Fred were presented with an emeritus certificate.
- The conclusion of Board service for Orlando Carvalho and Alain Bellemare. Carvalho was thanked for his service and presented with a certificate of appreciation and a *Milestones of Flight* book.
- Scott Donnelly, Mark Dunkerley, and Dawne Hickton to be voted for reappointment for a second term of board service. Holt asked for a motion and a vote for reappointing Donnelly, Dunkerley, and Hickton for second terms. The Board unanimously approved a second three-year term for all three members.
- John Plueger announced that Allan Holt concluded his first term, and asked for a motion and vote to reappoint Holt for a second term. The Board unanimously approved a second three-year term for Holt.

Holt stated that, with the approved changes, the board will have 25 members. He shared that the Nominations Committee has a good list of potential board candidates which it reviews three times per year. Holt and the Committee nominated [REDACTED] Ex. 6, for membership. After opening the floor for comments, Holt asked for a motion and a vote. The Board unanimously approved [REDACTED] Ex. 6 for membership. [REDACTED] Ex. 6 nomination will be presented to the Smithsonian's Board of Regents for official approval at their January meeting. Holt welcomed recommendations for nominees and stated that the Committee is particularly interested in broadening the Board's diversity.

Holt stated that the Executive Committee leadership has fulfilled their 2-year term which will conclude after this meeting. He thanked John Plueger for his leadership as chair, Dawne Hickton for serving as chair of the Advancement Committee with Tom Haas as vice chair, and Greg McAdoo for serving as chair of the Future State Committee. Holt shared that the Nominations Committee concluded that it would be wise to have vice chairs for each position to help with future succession planning and also provide a back-up to run meetings when the chair cannot participate. Holt presented the slate of officers for the next two years with himself serving as chair, Mark Dunkerley as vice chair and chair of Nominations with Dawne Hickton serving as vice chair of Nominations, Marion Blakey as chair of Advancement and Chris Jones as vice chair, and Steve VanRoekel as chair of the Future State Committee. Holt asked for a motion and vote, and the Board unanimously approved the new slate of officers.

Holt welcomed members to participate on the various committees. He stated that the new slate of officers and those members approved for emeritus status to will be put forward to the Smithsonian Board of Regents for confirmation at their January meeting. Holt recognized John Plueger for his unparalleled service to the Board and the Museum. Holt presented Plueger with a flag that was flown on Space Shuttle *Discovery* and photos of the museum.

Associate Director Rick Flansburg invited members to visit the newly constructed space for Library and Archives.

Congressional Support - Cheryl Johnson, Director, Office of Government Relations

In response to an inquiry made at the June 2018 meeting, Cheryl Johnson, director of the Office of Government Relations, was invited to speak on how the Smithsonian is garnering support for the Revitalization and Transformation of the National Mall building with Congress. Johnson stated that the Smithsonian, in particular the National Air and Space Museum, is well received on the Hill. While Congress has not yet passed the 2019 spending bill, within that bill is over a billion dollars earmarked for the Smithsonian. More than \$200M is specifically designated for the museum. Johnson noted that the Smithsonian's 2019 request for the National Air and Space Museum was Exemption 4. However, the House marked \$225M for the museum and the Senate marked \$200M. If the government continues under a Continuing Resolution, the National Air and Space Museum is guaranteed \$198M. Johnson stated that, to date, Congress has given \$250M toward the \$650M needed to complete Revitalization. Congressional support remains strong and individual members are excited for the project. Members receive positive feedback from their constituents following visits to the museum motivating Members to support the Institution. Johnson stated that Congress is aware that NASM leverages the federal dollars by raising money to match the allocation with \$250M private dollars.

Johnson acknowledged Stofan's positive and regular presence on the Hill.

Steve VanRoekel asked if the federal support is no year or fixed year. Johnson responded that it is no year. Mark Dunkerley asked if there are particular messages about NASM that resonate well with Congress. Exemption 4

[REDACTED]

Advancement Committee Report and Discussion - Dawne Hickton, Chair, Advancement Committee

Dawne Hickton provided an update on fundraising progress. As of August 31, the Museum raised Ex. 4, which exceeded the FY18 goal of Ex. 4. Across the Smithsonian's 19 fundraising units, NASM raised Ex. 4 of the total Ex. 4 raised through August. The National Museum of African American History and Culture was closest behind having raised Ex. 4 against NASM's Ex. 4. In addition to raising significant gifts for Transformation in FY18, the Museum also raised funds for other important priorities including education, public programming, and digital engagement. New gifts since our last board meeting include a Exemption 6 from Ex. 4 to support Apollo 50 programming as well as a verbal commitment from Ex. 4 to also support Apollo. These pledges are not yet reflected in the numbers, so the Museum will kick off FY19 with a strong start. The Museum received a Ex. 6 planned gift and a Ex. 6 outright gift for *Destination Moon* from Exemption 6. This demonstrates the importance of annual giving and how these annual donors are a key part of the major gifts pipeline. Lockheed Martin donated a "Mars Bus", valued at Ex. 6, to facilitate educational programming. The Mars Bus will be located at the Hazy Center and will provide an immersive virtual reality experience that replicates the landscape on the planet Mars and allows riders to experience a virtual drive along the Martian surface. The Museum also received a Exemption 6 pledge from Exemption 6 to *Destination Moon*. Exemption 6

[REDACTED] Mars, Inc. has once again made a commitment to sponsor Air & Scare at the Udvar-Hazy Center. Mars has been sponsoring this event since 2006. New commitments received in support of Transformation include gifts from Exemption 6 through Foreflight. Although not reflected in the numbers, the Museum received an in-kind gift from A&E of Exemption 6 that will help create the interactives in the new galleries.

The National Air and Space Society (NASS) and Wall of Honor provide unrestricted support. The programs exceeded the FY18 goal of Exemption 4. Working with the direct response strategy partner,

Avalon Consulting, NASS conducted a long-range forecast for growing membership program which will be rolled out in FY19.

Hickton stated that one of the expectations of board membership is to personally support the Museum on an annual basis. The Board's goal every year is to get to Ex. 4 participation from members in making a personal gift. Hickton was pleased to share that the Board met their goal of Ex. 4 participation in FY18. She also acknowledged that many members play a critical role in facilitating and/or advocating for corporate support from companies and that, along with personal support, is greatly appreciated and the reason why NASM has been as successful as it has.

The Museum continues to make progress towards achieving the ambitious goal of raising at least Exemption 6 for the Ignite Tomorrow Campaign. Unless specifically instructed otherwise by the donor, most unrestricted gifts are applied toward Transformation. Exemption 6 has been raised toward Transformation. Exemption 6

The Advancement team continues to focus on introducing Stofan to key shareholders of the Museum and potential donors, often through events. Stofan will be introduced to NASM supporters in the Los Angeles area at the home of Steve and Chris Hazy. An event will be held in Pittsburgh this winter since the *Destination Moon* exhibit is now at the Heinz History Center. Stofan participates in weekly meetings with donors, potential donors, and industry leaders, and this will continue to be a priority for her.

Hickton provided an update on the Ignite Tomorrow campaign. The NASM Advancement team continues to work closely with Ologie to develop collateral materials for the campaign. The final proof of the "inspiration piece", the Ignite Tomorrow case statement, as well as two more specific mini-case statements will be shared at the Advancement Committee meeting. Hickton showed the new campaign video.

Hickton stated that the main goal for the Museum and Committee in 2019 is to secure financial support. Next year's goal is Ex. 4, which reflects an increase of Ex. 4 over this past year's goal. Exemption 4

The Advancement team is working diligently to share the Campaign case statement. They are also working to bring on additional staff to help take on the increased fundraising requirements. The new hires for this year will include a new director of Individual Giving, an associate director of Corporate Giving, and a writer. There are five additional hires in the pipeline, dependent on funding.

Plueger announced that Exemption 6 committed making a donation in support of providing parking for the 15th Anniversary Celebration of the Steven F. Udvar-Hazy Center.

Future State Committee Report and Discussion - Greg McAdoo, Chair, Future State Committee

Greg McAdoo provided the Future State Committee report. He shared that, since the last board meeting, the Future State Committee has focused on helping the NASM team with the plans for the Apollo 50th.

McAdoo announced that the *AirSpace* podcast launched in January. The podcast continues to do well and has been downloaded over 100,000 times. The show is released on the second and fourth Thursday of every month through the end of the year. He encouraged members to download the podcast.

McAdoo stated that he has been in conversation with Stofan to discuss the future of the Future State Committee and her approach to innovation. Stofan will attend the Future State committee meeting this afternoon and will share her vision, changes that she is making to Transformation, the way in which the Museum approaches gallery design, and embedding innovation into the culture of the Museum. McAdoo announced that he will step down as chair of the committee, but has full confidence that Steve VanRoekel will carry the committee forward to support the Museum.

Presentation on Apollo 50 - Katie Moyer, Program Specialist, Apollo Planning Committee

Nick Partridge, Public Affairs Specialist, Apollo Planning Committee

McAdoo introduced Katie Moyer and Nick Partridge who have been leading the efforts for the Museum's plans to celebrate the Apollo 50th anniversary.

Moyer shared that the Museum is working to kick-off a yearlong celebration of the 50th anniversary of Apollo. The Museum is taking a leadership role in arranging the programming with the goal of commemorating Apollo as well as inspiring the next generation of explorers. The Museum’s mission is to stimulate a nationwide conversation about the legacy of Apollo and strive to define what the next “Moon shot” is. The Museum seeks to share stories and spark a conversation around the topic of team achievement. Moyer shared that this is an applicable theme as the Apollo program required the work of 400,000 individuals to send three men to the Moon. The Museum aims to develop programming that speaks to a wide range of audiences including K-12 students, families, the general public, and scholarly audiences. The Museum is working with a variety of partners, including the White House, Space Counsel, *TIME* magazine, and NASA, to arrange the celebrations.. **Ex. 4** has been raised to date to support Apollo celebration programs.

Moyer shared about two nationwide campaigns. She stated that, while planning is underway, funding has not been confirmed. *Apollo Across America* will utilize the 3D scans of the Armstrong spacesuit to create life-size models that will be displayed across the country. The goal is to place a suit in each of the 50 states in recognition of the communal spirit and nationwide initiative of the Apollo program. *Race to the Moon* is a virtual marathon where runners from across the country will log their millage in an effort to run the distance to the Moon and back, roughly 500,000 miles. Stofan commented that these programs are critical initiatives as they show the reach of the Museum beyond the Washington area. She shared that Advancement has a number of asks before corporations for funding.

VanRoekel asked if the Museum is aware of any major news networks planning special programming around Apollo. Partridge answered that, while his is not aware of the networks’ plans, he does know that a number of documentaries are in the works. Meredith Siegfried Madden asked how the team plans to reach out to each state to place the Armstrong models. Partridge responded that they are still brainstorming ideas but hope to find a private entity that has a presence in every state. One goal is to ensure that the suit is available to the public. Locations may be determined by funding. Armando Chapelli asked if the team will approach corporations for funding. Roger Percy shared that he worked to facilitate a meeting with Nike but was told that the deadline was too close for funding. Stofan shared that, in the future, the Museum will work to provide corporations with enough lead time so that they can actively consider funding opportunities. VanRoekel suggested connecting with the National Association of Governors and Stuart Fred recommended reaching out to the Mayor’s Conference. Jamie McJunkin suggested organizing a suite of sponsors for the *Race to the Moon* opportunity.

Old Business - John Plueger

Plueger shared results from the survey sent to members following the June 2018 meeting. **Ex. 5**

[REDACTED]

[REDACTED] Plueger stated that the new Executive Committee will work with Stofan and team to address this feedback.

2019 Board meeting dates: February 26–27; June 11-12 (Seattle); October 29-30

Upcoming events:

- October 9 - Dinner Reception hosted by Steve and Chris Hazy, Los Angeles, CA
- October 10 - GE Aviation Lecture with John Petersen and Will Hetzler, National Mall
- October 11- US Mint Apollo Coin Design Unveiling, National Mall
- November 8 - Flight Jacket Night with Gene Kranz, National Mall
- December 5- GE Aviation Lecture with Brand Lang & Beverly Bass, National Mall
- December 11- “Spirit of Apollo” Event at National Cathedral, Washington, DC

Wrap-up - Ellen Stofan

Executive Session

Meeting adjourns

Plueger adjourned the meeting at 11:54 am.

National Air and Space Museum Board

*Present at the October 3, 2018 meeting

Board Members:	Board Members Emeritus:	
Mr. William S. Ayer*	Mr. James Albaugh	Dr. Jon A. Reynolds
Mr. Daniel Baker*	Mr. Ronald W. Allen	Dr. Donald B. Rice
Mr. Alain M. Bellemare	Mrs. Anne B. Baddour	Mr. John Safer
Ms. Marion C. Blakey	Mrs. Agnes M. Brown*	Dr. Richard Sugden
Mr. Orlando P. Carvalho*	Mr. Armando C. Chapelli, Jr.*	Dr. Frederick Telling*
Mr. Neil Cohen	Mr. Max C. Chapman, Jr.	Mr. Charles Thornton
Mr. Stanley A. Deal*	Mr. Joe Clark	Ms. Patty Wagstaff
Mr. Scott Donnelly*	Mr. Frank A. Daniels, Jr.	Mr. Bruce Whitman
Mr. Mark B. Dunkerley*	Mr. Edsel B. Ford, II	
Mr. Stuart L. Fred*	Mr. Kenneth E. Gazzola*	SI/NASM Staff Members
Mr. Morton Fungler	Mr. S. Taylor Glover	Dr. David Skorton
Mr. Thomas W. Haas*	Mr. James M. Guyette	Dr. John Davis*
Ms. Dawne S. Hickton*	Mr. Randall A. Greene	Mr. Robert Spiller*
Mr. Shepard W. Hill*	Mr. Ralph D. Heath	Dr. Ellen R. Stofan *
Mr. Allan M. Holt*	Mr. David R. Hinson	Mr. Christopher U. Browne*
Mr. Thomas W. Horton	Mr. David C. Hurley	Ms. Kelly Bloom*
Mr. Christopher T. Jones*	Mr. Robert James	Ms. Meg Caulk*
Ms. Meredith Siegfried Madden*	Mr. Clayton M. Jones	Ms. Michelle Delaney*
Mr. Gregory L. McAdoo*	Mr. David L. Joyce	Mr. Rick Flansburg*
Ms. Linda A. Mills	Mr. Herbert D. Kelleher	Mr. Michael Garceau*
Ms. Eren Ozmen	Mr. Rodney R. Lewis	Ms. Laura Gleason*
Mr. H. Ross Perot, Jr.*	Mr. Steven R. Loranger	Ms. Lindsey Jackson*
Mr. John L. Plueger*	Capt. James A. Lovell	Dr. Peter L. Jakab*
Mr. David Storch*	Mrs. Adrienne Bevis Mars	Ms. Michelle Lamberton
Mr. David Tolley	Mr. Bruce R. McCaw*	Ms. Marian Livengood*
Mr. Steve VanRoekel*	Mr. Robert A. Milton	Ms. Anne McAllister*
Mr. Thomas Vice	Mr. Robert J. Mittman	Ms. Jessica McNally*
Mr. Steuart L. Walton*	Mr. T. Allan McArtor	Ms. Elizabeth Wilson*
Mr. Tyson Weihs*	Mr. Jameson J. McJunkin*	
Mr. Paul Wood*	Mr. Thomas G. Morr	

	Mr. Lloyd "Fig" Newton	
	Mr. Jack J. Pelton	
	Mr. Roger D. Percy*	
	Mr. Robert W. Pittman	
	Mr. Thomas F. Pumpelly	

Smithsonian National Air and Space Museum Board Meeting
Wednesday, February 27, 2019
Executive Board Room
Steven F. Udvar-Hazy Center

Meeting Called to Order - Allan Holt, Chair

Allan Holt called the meeting to order at 9:02 am.

“State of the Museum” - Ellen Stofan, John and Adrienne Mars Director

Ellen Stofan gave the “State of the Museum” report. Stofan highlighted impacts of the recent shutdown of the federal government on the Museum. The Museum lost over \$500,000 during the closure, and the Arsenal of Democracy press announcement had to be relocated to the National Press Club. She stated that there was no impact on the Revitalization and Transformation schedule as the Museum was able to take advantage of the empty building enabling contractor work.

The latest \$210M authorized in the 2019 Consolidated Appropriations Act brings the total Revitalization appropriation to \$460M. Therefore, the Museum needs **Exemption 4** appropriated in the 2020 bill to fulfill the entire **Ex. 4** commitment.

Stofan is serving on the search committee for the Institution’s new Secretary. The Committee selected the search firm Heidrick and Struggles, and plans to interview candidates by the end of April. In other staffing news, Stofan shared that the Museum has advertised for the Associate Director for Education position and has formed a selection committee. The Committee is working to have a selection made by this Spring.

Stofan announced the winners of the 2018 Trophy Awards. The Current Achievement award will be awarded to Ligo Scientific Collaboration while Charlie Bolden will receive the Lifetime Achievement Award. Board members will be invited to the March 26 dinner and presentation.

Stofan reviewed her recent activities. The Museum hosted the National Air and Space Museum Advisory Board in October. The board was established in our Congressional legislation and is comprised of senior representatives of the military branches, the Administrators of NASA and the FAA, and three citizens. Stofan participated in the Smithsonian Advisory Board Forum in December and presented to the Smithsonian National Board. She also participated in industry meetings with **Ex. 4**

Ex. 4 Stofan’s involvement in donor meetings included attending a reception hosted by **Ex. 4** in their Pittsburgh home, timed to coincide with the *Destination Moon* exhibit at the Heinz History Center. The exhibit drew roughly 100,000 visitors and was the second most attended exhibition in their history. In addition to participating in several meetings with LA donors, Stofan and Laura Gleason attended an event hosted by the **Ex. 4** in their home the same week as the October board meeting. Stofan traveled to St. Louis to meet with **Ex. 4** as well as to New York and Denver. Stofan did not attend the World Economic Forum in Davos but hopes to attend in 2020. Ross Perot, JR. represented the Museum while attending a dinner with David Rubenstein. Stofan made some good connections for the Museum at the Alfalfa Club dinner. She also met with contacts in Florida and spoke at Embry-Riddle. Stofan will return to Florida for a Raytheon Leadership forum on February 28.

Stofan provided an overview of her upcoming travel. She will attend the invite-only MARS Conference in Palm Springs, where Jeff Bezos gathers innovative minds in machine learning, automation, robotics, and space to share new ideas. She will also speak at the International Women in Aviation Conference that takes place nearby. Stofan will attend the opening of *Destination Moon* at The Museum of Flight in Seattle on March 29. She will also have a speaking role at Johnson & Johnson’s Women in STEM programming in April, which aims to encourage women at various points in their career to continue pursuing STEM. Also in April, she will speak at a conference in Arizona and meet with donors there. NASM is testing to see if South by Southwest in Austin

is a good audience for the Museum and have been working with AIA on this. Margaret Weitekamp will be featured in a panel and the podcast team will be doing a live broadcast. On April 7, the Museum will host the Smithsonian Academy for the Institutions \$1M+ benefactors. The Museum has arranged a special opportunity for them to see a new Apollo 11 documentary, and David Rubenstein will interview the film's director and Teasel Muir-Harmony.

Stofan reported on recent educational programming hosted by the Museum. The "Mars Experience" bus is a traditional school bus outfitted with audio and visual technology to provide an interactive experience that virtually transports visitors to Mars. The bus was produced by and donated to the museum by Lockheed Martin. The Museum welcomed visitors for the Mars landing of the InSight spacecraft. NASA brought an InSight half-scale model to the Hazy Center and Education offered related programming. Stofan announced that the Museum received funding to extend the S.H.E. Can Summer Camp for the next 3 years. She thanked **Ex. 4** for making this possible, and **Ex. 4** for funding the interns who support the Camp. The Udvar-Hazy Center has a new Cessna 206 educational interactive. The campaign to replace the Cessna 150 on display was spearheaded by Daniel Baker and Stuart Fred, and was made possible by Scott Donnelly and his team at Textron Aviation. The Cessna 206 has been specifically modified to accommodate the needs of the over 60,000 kids who sit in the cockpit each year. It has a new paint job, the interior has been updated, and a Garmin G1000 NXi Avionics cockpit was installed in demo mode. Stofan thanked Donnelly, Baker, and Fred for their leadership to update one of the key educational interactives at the Udvar-Hazy Center. Stofan shared that Air & Scare remains a signature event at the Hazy Center and this year was no exception with over 33,000 attendees. The Udvar-Hazy Center was also the site of a WWI Family Day concluding a year of Centennial programming sponsored by Javier Arango. The Museum welcomed the National Symphony Orchestra to the Hazy Center to commemorate Veterans Day. It was a great example of ways the Museum is including the Arts in STEAM. At the National Mall building, the Museum held the year's first Northrop Grumman Heritage Family Day, "African American Pioneers in Aviation".

Stofan shared that recent lectures include the National Air and Space Society's Flight Jacket Night with Gene Kranz. The GE Aviation Lecture "Surprising Roles of Drones" featured John Petersen of Air Shepherd, Will Hetzler of Zipline, Sharon Rossmark of Women & Drones, and was moderated by Jim Williams of Unmanned Solutions LLC and former head of the FAA's Unmanned Aircraft Systems (UAS) Integration Office. The GE Aviation Lecture "Breaking Boundaries in the Sky" featured speakers Beverley Bass, first female pilot to be named captain by American Airlines, Brad Lang, a Delta Captain and the son of a Tuskegee Airman, Refilwe Ledwaba, a South African social entrepreneur and pilot, and was moderated by Phil Tiemeyer, associate professor of history at Kansas State University.

The Museum celebrated the 15th Anniversary of the Steven F. Udvar-Hazy Center on December 15. Stofan thanked **Ex. 4** for generously supporting this event which enabled the Museum to provide free parking to all guests. Steve and Chris Hazy, John and Celeste Plueger, and several board members attended the celebratory day. The day featured activities on the museum floor from talks with curators to concerts and educational activities, including an interview of Steve Hazy with an Explainer. Steve Hazy's childhood airplane models were unveiled for display for the first time on this occasion.

Stofan provided an update on the 50th Anniversary of Apollo. The Museum officially launched Apollo 50 programs thanks to the generous support of Boeing and Raytheon. Programs launched so far include:

- Dialogues Workshop - Senior and emerging scholars met for a full day workshop to raise fresh questions about space history to stimulate new research. The day concluded with a public screening of *First Man* and program with its screenwriter Josh Singer and author Jim Hansen.
- Spirit of Apollo at National Cathedral - The event was live streamed on several platforms, broadcast live on NASA Television, and promoted on all of the Museum's social media outlets. Estimated viewers is over 22,000. The program was re-broadcast on NASA TV on the evening December 24. Stofan stated that feedback has been overwhelmingly positive. Several media outlets were covering it and there was a special feature on CBS Evening News with Jim Lovell at the museum.
- Strike Event for the 2019 Apollo 11 50th Anniversary Commemorative Coin in Philadelphia - Chris Browne represented the Museum at the event. Other donors and prospects, including NASM emeritus board member Jim Guyette, also participated.
- Race to the Moon and Apollo at the Park - Planning continues for these two initiatives. Stofan thanked Allan Holt for generously funding Apollo at the Park. She also thanked the members who helped make introductions to various ballparks and team owners.

In artifact news, Stofan reported that the Museum acquired Virgin Galactic's SpaceShip Two hybrid rocket engine for display in the *Future in Space Flight* gallery. The Museum held a press event earlier this month attended by Richard Branson and several Virgin Galactic representatives and future astronauts. The fuselage of a Northrop T-38 "Talon" was delivered to the Restoration Shop. This aircraft was flown to numerous speed and altitude records by famed woman pilot Jacqueline Cochran in 1961.

For an update on communications outreach, Stofan shared that she participated in a number of appearances including the Today Show, National Press Club, Washington Post Live Space Exploration Summit, Economist Space Summit in NY, Commercial Space Federation, wrote a column for *Aviation Week*. Stofan stated that the Museum's Annual Report will be released online next week.

Stofan announced that **Exemption 6** have made a generous pledge of **Ex. 6** in support of the Museum's *Future Innovations* gallery and a new lecture series. She stated that this leadership gift is essential to the campaign's success.

Revitalization and Transformation Update - Chris Browne, Deputy Director

Chris Browne provided an update on Revitalization and Transformation. In regards to Transformation, Browne reported that the west end fabrication notice to proceed was issued on December 7. Fabrication will begin in November 2019. The design of the east end has officially started. He shared that Ralph Applebaum Associates is proving to be innovative in their approach, and the Museum is impressed with initial work.

The 35% design for the Commons space has been submitted for review. The design firm PGAV enlisted the services of RK&A to conduct formative visitor surveys of the public, non-exhibition spaces of the museum. The purpose of the report is to inform the Commons' design process based on NASM's visitors' perceptions, understandings, and interpretations of various aspects of the museum as well as to "test" preliminary concepts for resonance and understanding. Browne shared that key takeaways from the report include that visitors want more immersive experiences, updated exhibits, improvements for visitors with disabilities, better flow to reduce crowding, and to see more representation and stories of women, African Americans, those with disabilities, and other minorities. Visitors also want more access to content, which speaks to the need for bringing content online. In response to the visitor surveys, **Ex. 5**

[REDACTED]. The report is with senior SI leadership for consideration.

Browne provided an update on the Dulles Collections Center noting it is nearly complete. The Museum received partial occupancy permits. The first delivery of artifacts began on January 22 and shipments continue weekly.

Browne reported on the Revitalization of the Museum in Washington, DC. Work to the interior of the building includes the closure of the *Looking at Earth* and *Apollo to the Moon* galleries on December 3. Deinstallation of these artifacts/exhibits will take 5 months. Zones 1 and 2 of the museum closed in January and temporary barriers are in place. Deinstallation of artifacts in these zones will take approximately 7 months to complete. A temporary construction wall between Zones 2 and 3 will be installed in March. The construction of the basement barrier wall began in December. Work to the exterior of the building includes the installation of construction fencing, traffic controls, and construction trailers. West terrace structural upgrades began in February and will take 5 months to complete. *Delta Solar* (the sculpture on west terrace) will be deinstalled and protected on-site in Mar/Apr 2019.

Browne provided an overview of the move contract, which is expected to be awarded in early May of this year. The Revitalization Construction Manager, Clark Smoot Consigli (CSC) will be the overall move contractor, for continuity. The contract is then broken into various task orders that will be issued to specialty move companies as the project proceeds. These task orders are further broken into three specialties - rigging, for large and hanging artifacts; medium/small; and murals, which have unique challenges on their own. This will ensure that the right move company is in charge of artifacts for which they have experience. The Museum is working with SI Construction on the selection of these artifact move contractors and will continue to have the opportunity to review and select the preferred MC per task order to ensure sufficient qualifications.

Browne shared that, in the upcoming months, the Museum will continue to focus on finalizing subcontractor contracting. He stated that updated baseline schedules were submitted last week. Zone 3 exhibits are expected to close this summer (July/Aug 2019). When the Zone 3 close, a total of 10 galleries will be closed. The Museum Store, Planetarium, the *Pioneers of Flight* exhibit, and the south entry are expected to close in this fall (Oct/Nov 2019).

Browne highlighted that the Museum's 50th anniversary coincides with the nation's 250th. The Smithsonian and others are already thinking about how we will mark this occasion.

Browne stated that a separate artifact move contract was awarded to Clark Smoot Consigli for +/- \$20 million, which includes the deinstallation of the artifacts in the Phase 1 areas. The design/build contract for improvements to the Ramsey Building to temporarily store eight oversized aircraft is progressing. Approximately 1,000 objects have been deinstalled and well over 800 objects have been moved out of the galleries.

Browne outlined how the contractors, Smithsonian, and Museum have defined roles for efficient and necessary coordination.

Board members should receive a copy of the internal newsletter "Flight Plan." This is intended to keep staff and stakeholders informed on the current status of the project. Notify Meg Caulk or Marc Sklar if you do not receive the newsletter.

Given that half of the museum will be closed throughout Transformation, Chris Jones asked if the Museum anticipates overcrowding. Browne responded that, while the Museum does not want to turn visitors away, they will need to abide by occupancy codes. Installing the new automated visitor count system will provide accurate occupancy information. Browne stated that key artifacts, such as the *Spirit of St. Louis* and the Wright Flyer will remain on display throughout Transformation.

Nominations Committee Report and Discussion - Tom Horton, Member, Nominations Committee

In the absence of Nominations Committee Chair Mark Dunkerley and Committee Vice Chair Dawne Hickton, Committee Member Tom Horton provided the Nominations Committee report. Horton stated that the Committee convened on Feb 6. At the October board meeting, Gary Kelly, president and CEO of Southwest Airlines, nomination was approved. His appointment was approved by the Smithsonian Board of Regents on Jan 29. With Kelly's appointment, there are 26 members. Bylaws stipulate that there can be up to 32 members. Horton noted that five current members are eligible for emeritus status this October. He welcomed members to nominate board candidates by sharing them with Dunkerley, Stofan, or Gleason. The Committee is particularly interested in broadening diversity on the board. The Nominations Committee reviews candidates three times per year.

The Committee recommended that [REDACTED] Ex. 6 [REDACTED] be considered for board nomination. Horton stated that Lockheed Martin is one of the Museum's most generous corporate benefactors and the sponsorship of the IMAX Theater at the downtown Museum is up for renewal in 2022. With Orlando Carvalho concluding his board term upon his retirement from Lockheed, Stofan met with [REDACTED] Ex. 6 [REDACTED] who asked that the Board consider [REDACTED] Ex. 6 [REDACTED]. Several board members met with [REDACTED] Ex. 6 [REDACTED], and Stofan and her team also met with her last month. After opening the floor for comments, Horton asked for a motion and vote to approve [REDACTED] Ex. 6 [REDACTED] nomination. The Board unanimously voted to approve [REDACTED] Ex. 6 [REDACTED] nomination. Her nomination will be presented to the Smithsonian Board of Regents for official approval at their June meeting. With her appointment, we will be at 27 members.

The Committee also nominated [REDACTED] Ex. 6 [REDACTED]. Airbus has been a major benefactor of the Museum thanks to the leadership we have had on the board by Allan McArtor. The Airbus IMAX Theater sponsorship is up for renewal in 2023 and it will be important to have leadership on the board. Many board members know [REDACTED] Ex. 6 [REDACTED] well, and Stofan met with him on February 26 to confirm his interest. [REDACTED] Ex. 6 [REDACTED] also has experience having served on the [REDACTED] Ex. 6 [REDACTED] board which will be very helpful to the museum. After opening the floor for comments, Horton asked for a motion and vote to approve [REDACTED] Ex. 6 [REDACTED] nomination. The Board unanimously voted to approve [REDACTED] Ex. 6 [REDACTED] nomination. His nomination will be presented to the Smithsonian Board of Regents for official approval at their June meeting. With his appointment, we will be at 28 members.

Horton stated that Board Candidate [REDACTED] Ex. 6 [REDACTED], attended the February

board dinner. While the Committee originally explored having [redacted] Ex. 6 join the board, she indicated she could not make the commitment and suggested we consider Ex. 6. Gulfstream is owned by General Dynamics. [redacted] Ex. 5 [redacted] Horton opened the floor for discussion on Ex. 6. The Nominations Committee will discuss his nomination based on feedback during their next meeting.

Overview of Art Gallery - Carolyn Russo

Holt introduced museum specialist Carolyn Russo to provide an overview of the National Air and Space Museum’s art collection and share plans for the new art gallery at the National Mall building. She noted that the museum has over 8,000 pieces of artwork in the collection. Russo shared that, before the completion of the National Mall building in 1976, the Smithsonian had an Air and Space art gallery located in the Arts and Industries building. Congress mandated that the new museum have an art gallery, and the *Flight in the Arts* gallery has featured over 30 exhibitions. As the space has undergone minimal updates over the past 40 years, Transformation provides a key opportunity to update and reimagine this gallery.

The transformed gallery will be a rebirth of the Congressional mandate and provide a contemporary environment to display the collection. The gallery will feature a two level design. The upper mezzanine will have a rotating display of the permanent collection. It will also have kiosks that visitors can use to research the collection and will include an office for an art history fellow or researcher. The lower level will feature a modular design with movable wall units and cases in order to best display temporary exhibitions. An educational area toward the rear of the gallery will be used for programs and performance art. The gallery is scheduled to open in 2025. Ideas for post-transformation exhibitions include *100 Years of Robert Rauschenberg* and photographs by Alfred Sieglitz. Russo aims to establish the *Flight in the Arts* gallery as a “happening place” for the arts in the minds of both locals and those outside of Washington, DC. The Museum’s art collection and exhibitions serve a critical purpose in our mission to inspire the next generation of innovators. These works are not merely celebrations of past achievements, but are an expression of the imagination, curiosity, and wonder that drive humans to push the boundaries of the known universe and explore ever farther.

Exploring NASM’s Art Collection

Members participated on a tour of the Emil Buehler Conservation Laboratory and Art Box.

Advancement Committee Report and Discussion - Marion Blakey, Chair, Advancement Committee

Marion Blakey provided an update on fundraising progress. Blakey provided an overview of fundraising totals since 2010. Through January 31 of this fiscal year, the Museum raised [redacted] Ex. 4 of the fiscal year goal of [redacted] Ex. 4. However, with the inews of [redacted] Ex. 4 generous gift in support of the *Innovations* gallery, this number will shift significantly to being over the [redacted] Ex. 4 mark to the goal. Blakey thanked [redacted] Ex. 4 for his leadership gift which established great momentum for the campaign. Blakey reviewed the variation in fundraising totals over the past 10 years. [redacted] Ex. 4

[redacted] Major gifts tend to be cyclical and the board should expect that to continue as Transformation progresses.

Blakey provided an overview of how the National Air and Space Museum’s fundraising in FY2019 compares to the other Smithsonian units. [redacted] Exemption 4

[redacted]

In FY2019, the majority of funds raised thus far are supporting programming at the museum. New gifts since the last board meeting include [redacted] Ex. 4 support for the S.H.E. Can STEM Summer Camp for the next three years. Blakey thanked [redacted] Exemption 6 for his support. [redacted] Ex. 4 pledged [redacted] Ex. 6 and [redacted] Ex. 4 pledged [redacted] Exemption 6 to support the Apollo 50th programming. [redacted] Ex. 4 and [redacted] Ex. 4 each made [redacted] Exemption 6 to support the Exploring Space Lecture Series. [redacted] Exemption 6 made major gifts in support of Transformation. [redacted] Ex. 4 committed to supporting the annual Trophy Awards. Blakey thanked [redacted] Exemption 6 for her support. Blakey also thanked the [redacted] Ex. 4 [redacted] Exemption 6 for their generous support of Apollo at the Park.

Blakey provided an overview of the annual giving program. The National Air and Space Society and Wall of Honor provide unrestricted support to the Museum. At the most attended Flight Jacket Night ever last November, over 520 members gathered to hear Gene Kranz share stories from his time in mission control for the Apollo program. For FY2019, the National Air and Space Society and Wall of Honor have a goal of Ex. 4 . So far, Exemption 4 of the goal has been raised. Working with the direct response strategy partner Avalon Consulting, Advancement has conducted a long range forecast for growing the membership program. The program is being rolled out this year.

Blakey stated that one of the expectations of board membership is to personally support the Museum on an annual basis. The goal every year is to get to Ex. 4 participation from members in making a personal gift. Exemption 4

Blakey provided update on the Ignite Tomorrow Campaign, noting , Ex. 4 has been raised against the Ex. 4 . Unless specifically instructed otherwise by the donor, most unrestricted gifts will be applied toward Transformation. Blakey acknowledged that, with Ex. 4 commitment, the total raised Exemption 4

Blakey shared that the U.S. Mint is producing a commemorative coin to celebrate the Apollo 11 50th anniversary. Liz Wilson, assistant director of Advancement, was instrumental in arranging for half of the revenue generated by these coin sales to go to NASM, specifically in support of *Destination Moon*. The maximum possible surcharges for NASM's *Destination Moon*: Exemption 4 . Blakey encouraged members to consider securing some of these coins as VIP gifts for companies, clients, or themselves. The coins are now available in the NASM museum store downtown as well on the Mint's website. There are four different types of coins to choose from, including a \$5 gold coin that retails for \$430, a silver dollar coin that retails for \$60, a half dollar clad coin which is about \$32, and a five oz. proof silver dollar which about \$230. Blakey stated that the Museum needs help ensuring that they get the half dollars sold since the total mintage of it was so high (Exemption 4).

Blakey announced that the Museum recently initiated an additional method of collecting donations from visitors that has already proved highly successful. The museum already had donation boxes strategically placed around the floor for cash donations. Now, however, Smithsonian Enterprises has every cashier in the stores asking customers if they would like to contribute a donation to the museum along with their payment. These funds are considered unrestricted and count toward NASM's key fundraising needs, like Transformation. The Museum started doing this in the final quarter of the last fiscal year, which brought in Ex. 4 . In the first quarter of this current fiscal year, Ex. 4 came in from in-store donations. For a frame of reference, the donation boxes placed around the museum floor routinely bring in well over Ex. 4 per year.

The Ignite Tomorrow microsite is live. This will serve as the "inspirational front door" and the introduction to the campaign primarily for the general public. The Museum will continue to update the site with new behind the scenes stories and news about the project. Advancement launched the campaign on Tuesday, February 5 across all NASM platforms. The video has been very well received and has inspired several online gifts. The Museum has also launched marketing and message testing on social media to boost those posts. The IMAX cut of that video is now playing in advance of all films at both IMAX theaters, expanding campaign awareness to hundreds of new people a day. Finally, you should have received the case statement in the mail earlier this month. This was sent to all major donors, prospects, and Smithsonian National Board members and Regents. Advancement is planning personalized follow up with everyone who received the case statement. Blakey encouraged members to think about others who might be inspired by receiving these materials.

Direct Response Fundraising - Allison Porter, President and Kerri Kerr, Chief Operating Officer, Avalon Consulting

Elizabeth Wilson, assistant director of Advancement, provided an overview of membership and annual giving at the National Air and Space Museum. The National Air and Space Society (NASS) has approximately 8,800 membership households across the country. The Society is on track to raise Ex. 4 in FY2019. NASS was

formed in 1995 to raise funds for the construction of the Udvar-Hazy Center. Membership levels range from \$35 - \$10,000. In addition to funding its own operational expenses and staff, NASS has generated Exemption 4 to provide unrestricted support to the museum. Wilson thanked the board members who make their annual gift through the National Air and Space Society.

Wilson explained that NASS serves as the base for the donor pyramid at the museum. Some members increase their giving levels as they participate while others make a major gift or include the museum in their estate. Over the past five fiscal years, Exemption 4

The Society aims to offer benefits that are experiential so that members feel like stakeholders in the Museum's success. One of the main benefits remains the *Air & Space* magazine, which NASS pays Smithsonian Enterprises to produce and distribute to members. Wilson noted that Smithsonian Enterprises also runs their own membership program that offers the magazine as a benefit which often causes confusion. The Museum continues to evaluate this relationship.

Wilson shared that NASS participates in a Smithsonian-wide membership co-op. The group was formed during the pan-institutional campaign, and continues to be instrumental in managing shared contracts with vendors and maximizing efficiencies across the programs.

Wilson introduced Kerri Kerr of Avalon Consulting. The Museum started working with Avalon Consulting in 2016 as a strategy partner.

Kerr stated that Avalon is a specialized membership and fundraising consulting agency that helps nonprofit organizations maximize their revenue and engagement. Avalon currently works with four Smithsonian units to develop integrated and strategic programs.

Kerr provided an overview of individual direct marketing in the U.S. She shared that 70% of giving comes from individuals, but arts, cultures, and the humanities organizations receive only 5% of the giving. She stated that the best way for the National Air and Space Society to claim their piece of the pie is Ex. 4

Ex. 4. Kerr shared current direct marketing trends. She stated that nonprofits still generate the majority of fundraising through direct mail. Specifically, 10% of giving is made online while 80% of giving is generated through direct mail. 32% of online donors will give offline the following year. Kerr acknowledged that online revenue Ex. 4. Therefore, Avalon recommends Ex. 4

Kerr shared that, currently, 61% of all giving comes from Baby Boomers and Matures. Building relationships with young supporters/visitors is important, but may not lead to financial return until decades later. Millennials have half the response rate and it often costs two times as much to acquire a donor under age 50. Avalon recommends target Ex. 4

Kerr presented data focusing on the National Air and Space Society donor profile. Ex. 4

Kerr provided an overview of the National Air and Space Society membership program. Exemption 4

Kerr compared NASM's National Air and Space Society to the other Smithsonian membership programs. Exemption 4

[REDACTED]

Kerr stated that with strong program metrics, inspiring new leadership, and the exciting Transformation at hand, now is the time to grow the National Air and Space Society. Exemption 4

[REDACTED]

Tolley requested an update on progress at the June board meeting. McAdoo noted that a current buzzword is “multichannel”, and asked if direct mail ever leads to a spike in online giving. Kerr confirmed that they see that behavior. Websites are becoming payment channels for direct mail. Tolley asked how *Air & Space* magazine is related to direct mail. Kerr responded that it is challenging to quantify the impact of the magazine. Avalon believes

Ex. 4

Tolley commented that he enjoys the magazine, but feels that the advertising is potentially dilutive to the franchise. Stofan stated that this is an issue that the Museum is currently working with Smithsonian Enterprises to address. Smithsonian Enterprises produces the publication, and the magazine is currently breaking even. The Museum is working with Smithsonian Enterprises to evaluate the value proposition of the magazine, and determine its fate. The Museum is determining whether there is value in bringing the magazine in-house. Stofan hopes to bring a small group together to discuss what should be done with the magazine. Gazzola believes that the Museum should have more input to the magazine, and Marc Sklar shared that they have met to discuss increasing the Museum’s involvement including adding NASM’s identity to the *One More Thing* column.

Museum Communications Plan - Marc Sklar, Director of Communications

Marc Sklar provided an update on the Museum’s 2019 communications plan. Sklar shared that, while the Smithsonian and the Museum each have their own goals, there are many similarities between what each is working to achieve. Based on these goals, the Museum developed principles for internal and external communications. Principles for external communication include linking messaging to institutional goals, reaching audiences such as middle school students, underserved communities, and international visitors, highlighting the themes of exploration, conversation, and inspiration, and making content available anytime, anywhere, for anyone. Sklar stated that the communication plan seeks to build on a strongly engaged domestic core to reach the outer bands of the less-aerospace focused, global universe. The Museum will achieve this by maintaining enough detailed, behind-the-scenes, and lesser known facts to hold engagement with known enthusiasts, and then demonstrate links to other science and technological topics to attract those fans. Museum content will highlight the human in our achievements to engage with those who might not be interested in the Museum’s natural content, while offering content in multiple languages and showing visitors themselves within stories in order to attract a global audience.

The Museum identified specific tactics through social, web, and digital to reach the various audiences. The Museum developed a relatable “NASM voice” to be used cross platforms. Common social “playbooks” for events will increase efficiency and recognition. Global social engagement growth will be achieved by expanding hours, increasing responsiveness, developing relationships with micro-influencers, and diversifying outreach. Pursuing paid social marketing and web optimized websites will enable the Museum to better understand how people use the web and engage with content. The Museum is producing mobile friendly content that is maintainable and updateable that can be useful inside and outside the museum.

Sklar shared that Communications is working closely with Ologie on marketing to ensure a consistent look and feel across materials. Also, the Museum’s social presence will be promoted across marketing efforts. Since the Museum does not have the in-house capacity for international marketing, it is maximizing promotional opportunities by partnering with organizations such as Destination DC and Welcome China. Communications is developing living press kits to increase media engagement for ongoing projects such as Apollo 50 and Transformation. Communications is actively building relationships with media outlets so that they feel comfortable engaging the Museum on stories. In relation to sponsored events, Communications is increasing the use of metrics and reporting in order to refine marketing strategies. Communications and Advancement are working closely together on the timing and content of newsletters, direct mail, and other efforts to embed Advancement messaging in non-Advancement focused materials.

Sklar shared Robert Goddard’s words “Every vision is a joke until the first [person] accomplishes it: once realized it becomes commonplace.” He stated that the Museum will share ideas that defy convention, expectations, the usual, all boundaries, and gravity. Communications will promote these themes through #IdeasThatDefy. The National Air and Space Museum is a place where visitors can learn about ideas that defy, where they can explore them, where they can discuss them, and where they can be inspired to create their own.

Future State Committee Report and Discussion - Steve VanRoekel, Chair, Future State Committee
Committee Chair Steve VanRoekel provided the Future State Committee report. Since the last board meeting, VanRoekel and Steuart Walton met with the Museum team in early December to discuss realignment of the Future State Committee. The Committee convened on February 14 and the morning of February 27 and identified goals for FY2019. Throughout the year, the Committee will work to build a network of strategic external partnerships. Committee members will assist with building the network by leveraging their connections across industries. The Committee will create a culture of data-collection and insights-driven decision making. By learning about visitors, the Committee aims to be able to best target new audiences and create tailored experiences. This next year, the Committee wants to integrate ways that they can better analyze the existing data on visitors (both online and in person) and find new ways to collect information. They are working to establish and cultivate a brand identity that feels seamless across platforms, engages new and diverse audiences, and drives users to become brand advocates. The Museum needs a strong brand identity that will inform digital strategy. The Committee wants to explore better use of influencers and other 21st century marketing techniques to create demand generation and allow followers to be ambassadors of the brand. The Committee will also investigate innovative ways to raise funds.

VanRoekel provided updates on two major initiatives associated with the Apollo 50th anniversary programing. VanRoekel again thanked Allan and Shelley Holt for their support of the Apollo at the Park initiative. Apollo at the Park will place spacesuits at 12-15 Major League Ballparks this summer. Several board members connected the Committee with ballparks and team owners. The response has been overwhelmingly positive. VanRoekel asked for the board’s assistance with making connections to a stadium in Chicago and New York. He stated that a vendor has been selected to fabricate the statues. The spacesuit statues will be installed at the participating ballparks at the beginning of June.

VanRoekel provided an update on the Race to the Moon initiative. Thanks to an introduction by Jamie McJunkin, Strava (a social fitness network that is primarily used to track cycling and running using GPS data) agreed to help the Museum create a virtual race challenge on their platform. The Museum will create a club on their platform for athletes to join the race and we will work together to create a marketing plan to promote the race. The Museum will create a microsite on NASM’s website that includes the Strava race details and a link to the race. The virtual race is scheduled to launch June 1.

VanRoekel provided an update on the Apollo illumination initiative. 59 Productions was selected to create projections on National Mall July 16 - 20. 59 Productions has extensive experience doing projection mapping, including productions for Boeing, the Freer Sackler, Dubai World Cup, and London Olympics. The Saturn V will be projected on the Washington Monument and other images will be projected throughout the week. The Museum is working to get final approvals from the White House. This project remains at close hold.

VanRoekel reported that the *AirSpace* podcast continues to be popular. It has been downloaded over 180,000 times. The show is released on the second and fourth Thursday of every month. Season two will launch in March, and the team will do a live podcast from South by Southwest on March 10. The podcast has been successful at attracting a younger demographic (20/30-year olds). One of the priorities this year is to get more women to listen.

Looking forward, a major effort for the Museum and the Future State Committee is to focus on data collection of visitors to gain a real understanding of who museum visitors are. Historically, the Museum has collected data through on-site surveys. The Museum is looking at a new platform, Dexhibit, that can ingest data from multiple sources like attendance numbers, point of sale, and social traffic to provide dashboards and insights on visitor behavior. The Museum aims to bring them on as a pilot. The board will help guide what data is collected and what preliminary questions we can seek to answer through data, including questions specific to audience and dwell time.

Old Business - Allan Holt

2019 Board meeting dates: June 11-12 (Seattle); October 29-30 (Washington, DC)

2020 Board meeting dates: February 4-5; June 9-10; October 20-21

Upcoming events:

March 26 - NASM Trophy Awards Dinner, NMB

March 28 - Exploring Space Lecture with Farouk El-Baz sponsored by Aerojet Rocketdyne and United Launch Alliance, NMB

April 11 - NASS Chasing the Moon Lecture, UHC

April 24 - Exploring Space Lecture with Brett Denevi sponsored by Aerojet Rocketdyne and United Launch Alliance, NMB

May 22 - Exploring Space Lecture Noah Petro sponsored by Aerojet Rocketdyne and United Launch Alliance, NMB

July 19 - Apollo 50 Gala, NMB

New Business - Allan Holt

Holt welcomed members to introduce new business. He announced that an evaluation survey will be sent following the meeting to gather member's input.

Wrap-up - Ellen Stofan

Executive Session

Meeting adjourns

Holt adjourned the meeting at 12:45 pm.

National Air and Space Museum Board

*Present at the February 27, 2019 meeting

Board Members:	Board Members Emeritus:	
Mr. William S. Ayer	Mr. James Albaugh	Mr. John L. Plueger
Mr. Daniel Baker*	Mr. Ronald W. Allen	Dr. Jon A. Reynolds
Ms. Marion C. Blakey*	Mrs. Anne B. Baddour	Dr. Donald B. Rice
Mr. Neil Cohen*	Mrs. Agnes M. Brown*	Dr. Richard Sugden

Mr. Stanley A. Deal*	Mr. Armando C. Chapelli, Jr.	Dr. Frederick Telling
Mr. Scott Donnelly	Mr. Max C. Chapman, Jr.	Mr. Charles Thornton
Mr. Mark B. Dunkerley	Mr. Joe Clark	Ms. Patty Wagstaff
Mr. Gary C. Kelly	Mr. Frank A. Daniels, Jr.	
Mr. Thomas W. Haas*	Mr. Edsel B. Ford, II	
Ms. Dawne S. Hickton	Mr. Stuart L. Fred*	SI/NASM Staff Members
Mr. Shephard W. Hill*	Mr. Morton Fungler	Dr. David Skorton
Mr. Allan M. Holt*	Mr. Kenneth E. Gazzola*	Dr. John Davis
Mr. Thomas W. Horton*	Mr. S. Taylor Glover*	Mr. Robert Spiller
Mr. Christopher T. Jones*	Mr. James M. Guyette	Dr. Ellen R. Stofan *
Ms. Meredith Siegfried Madden*	Mr. Randall A. Greene	Mr. Christopher U. Browne*
Mr. Gregory L. McAdoo*	Mr. Ralph D. Heath	Ms. Kelly Bloom*
Ms. Linda A. Mills*	Mr. David R. Hinson	Ms. Stephanie Brinley*
Ms. Eren Ozmen*	Mr. David C. Hurley	Ms. Eleanor Brtva*
Mr. H. Ross Perot, Jr.	Mr. Robert James	Ms. Meg Caulk*
Mr. David Storch	Mr. Clayton M. Jones	Ms. Michelle Delaney*
Mr. David Tolley*	Mr. David L. Joyce	Mr. Rick Flansburg*
Mr. Steve VanRoekel*	Mr. Rodney R. Lewis	Mr. Michael Garceau*
Mr. Thomas Vice*	Mr. Steven R. Loranger*	Ms. Laura Gleason*
Mr. Steuart L. Walton*	Capt. James A. Lovell	Ms. Lindsey Jackson*
Mr. Tyson Weihs*	Mrs. Adrienne Bevis Mars	Dr. Peter L. Jakab*
Mr. Paul Wood*	Mr. Bruce R. McCaw*	Ms. Marian Livengood*
	Mr. Robert A. Milton	Ms. Anne McAllister*
	Mr. Robert J. Mittman	Ms. Jessica McNally*
	Mr. T. Allan McArtor*	Mr. Francisco Torres*
	Mr. Jameson J. McJunkin	Ms. Elizabeth Wilson*
	Mr. Thomas G. Morr	
	Mr. Lloyd "Fig" Newton	
	Mr. Jack J. Pelton	
	Mr. Roger D. Percy*	
	Mr. Robert W. Pittman	
	Mr. Thomas F. Pumpelly*	

Smithsonian National Air and Space Museum Board Meeting
Wednesday, June 12, 2019
The Museum of Flight
Seattle, WA

Meeting Called to Order - Allan Holt, Chair

“State of the Museum” - Ellen Stofan, John and Adrienne Mars Director

Revitalization and Transformation Update - Chris Browne, Deputy Director

Nominations Committee Report and Discussion - Jamie McJunkin, Member, Nominations Committee

In the absence of Nominations Committee Chair Mark Dunkerley and Committee Vice Chair Dawne Hickton, Committee Member Jamie McJunkin provided the Nominations Committee report.

Advancement Committee Report and Discussion - Marion Blakey, Chair, Advancement Committee

Future State Committee Report and Discussion - Steve VanRoekel, Chair, Future State Committee
 Committee Chair Steve VanRoekel provided the Future State Committee report.

Old Business - Allan Holt

2019 Board meeting dates: October 29-30 (Washington, DC)

2020 Board meeting dates: February 4-5; June 9-10; October 20-21

Upcoming events:

New Business - Allan Holt

Holt welcomed members to introduce new business. He announced that an evaluation survey will be sent following the meeting to gather member’s input.

Wrap-up - Ellen Stofan

Executive Session

Meeting adjourns

Holt adjourned the meeting at XX pm.

National Air and Space Museum Board

*Present at the June 12, 2019 meeting

Board Members:	Board Members Emeritus:	
Mr. William S. Ayer*	Mr. James Albaugh	Mr. John L. Plueger
Mr. Daniel Baker*	Mr. Ronald W. Allen	Dr. Jon A. Reynolds
Ms. Marion C. Blakey*	Mrs. Anne B. Baddour	Dr. Donald B. Rice
Mr. Neil Cohen	Mrs. Agnes M. Brown	Dr. Richard Sugden
Mr. Stanley A. Deal*	Mr. Armando C. Chapelli, Jr.*	Dr. Frederick Telling*

Mr. Scott Donnelly	Mr. Max C. Chapman, Jr.	Mr. Charles Thornton
Mr. Mark B. Dunkerley	Mr. Joe Clark*	Ms. Patty Wagstaff
Ms. Michele A. Evans	Mr. Frank A. Daniels, Jr.	
Mr. Gary C. Kelly	Mr. Edsel B. Ford, II	
Mr. C. Jeffrey Knittel	Mr. Stuart L. Fred	SI/NASM Staff Members
Mr. Thomas W. Haas*	Mr. Morton Fungler	Dr. David Skorton
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Mr. Shephard W. Hill*	Mr. S. Taylor Glover	Mr. Robert Spiller
Mr. Allan M. Holt*	Mr. James M. Guyette	Dr. Ellen R. Stofan *
Mr. Thomas W. Horton	Mr. Randall A. Greene	Mr. Christopher U. Browne*
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Mr. David Tolley	Mr. Steven R. Loranger	Ms. Laura Gleason*
Mr. Steve VanRoekel*	Capt. James A. Lovell	Ms. Lindsey Jackson*
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Mr. Tyson Weihs	Mr. Robert A. Milton	Ms. Anne McAllister
Mr. Paul Wood*	Mr. Robert J. Mittman	Ms. Jessica McNally
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	Mr. Thomas G. Morr	
	Mr. Lloyd "Fig" Newton	
	Mr. Jack J. Pelton	
	Mr. Roger D. Percy*	
	Mr. Robert W. Pittman	
	Mr. Thomas F. Pumpelly*	

**Smithsonian National Air and Space Museum Board Meeting
Wednesday, June 12, 2019
The Museum of Flight
Seattle, WA**

Allan Holt thanked The Museum of Flight for hosting the June Board meeting and presented Matt Hayes, president and CEO, with an *Apollo to the Moon: A History in 50 Objects* book. Holt also thanked [REDACTED] Exemption 6 [REDACTED] for their generous support of *Destination Moon*, and for enabling the traveling exhibition to be displayed in Seattle. Hayes made remarks and welcomed NASM Board members to the Museum. Holt invited the members to tour the *Destination Moon* exhibition led by Geoff Nunn, exhibit designer and adjunct curator for space history at The Museum of Flight.

Meeting Called to Order - Allan Holt, Chair

Holt thanked Bruce McCaw for making the Four Seasons Hotel Seattle available to the Board and for also sending members a book about The Museum of Flight in advance of the meeting. Holt acknowledged that Secretary Skorton's last day at the Smithsonian is June 15. Ellen Stofan served on the selection committee for the search for the new Secretary, and will share additional information on Lonnie Bunch's appointment as the 14th Secretary.

Since the February meeting, Holt participated in several Museum and Smithsonian activities including an intimate dinner at NASM with Google executives and guests to celebrate Google Arts & Culture's new project on Invention and Discovery – "Once Upon a Try". He attended the Trophy Awards on March 26 which honored the award recipients Charlie Bolden and the LIGO Scientific Team. On March 29, Holt hosted a group of individuals and prospective donors at the Hazy Center that were flown in courtesy of Regent John McCarter and Smithsonian National Board Member Dennis Keller. Last month, he attended the Regents Advancement Committee meeting and learned that NASM continues to lead the way on fundraising across the Smithsonian. He also attended the unveiling of the Armstrong statue at Nationals Stadium launching Apollo at the Park.

Holt reviewed feedback collected from the February 2019 board meeting survey. Ex. 5

[REDACTED]

"State of the Museum" - Ellen Stofan, John and Adrienne Mars Director

Stofan announced that a fifth and final venue has been added for the *Destination Moon* tour - the Cincinnati Museum Center. A public announcement will be made on June 14.

Stofan provided a report on the "State of the Museum." She announced that the Smithsonian Regents elected Lonnie Bunch as the Secretary. She believes that Bunch will offer innovative ideas to move the Smithsonian forward. He was the motivating force behind the development, construction, and opening of the National Museum of African American History and Culture, and that experience should be a benefit to NASM during Revitalization and Transformation. Stofan also shared that the Museum selected a new Associate Director for Education. Beth Crownover is currently the director of Learning at the Field Museum in Chicago, a position which she has occupied since 2010, although she has been with that museum in various capacities for over 20 years. Crownover brings to NASM a rich background in public education and community outreach initiatives, serving 900,000 teachers, students, families and children annually through

a variety of experiences, resources and partnerships, and managing a budget of over \$2 Million. She will begin her new position on August 19. Stofan shared that Crownover will help initiate plans for the creation of an Education Counsel to start assessing how NASM can create a STEM ecosystem that could be a model nationally. Stofan shared that, last month, the senior leadership team held a retreat to discuss future big ideas and lay the groundwork for the Museum's next strategic plan. The retreat also included a discussion on the issue of diversity and inclusion, and it was determined that Museum will hire consultants to assist in these efforts.

Stofan stated that she continues to get better acquainted with those in the aerospace industry and has met with Tom Gentile, president and CEO, Spirit AeroSystems as well as representatives from United Technologies, GE Aviation, and Aurora Flight Sciences. Stofan was a guest at Jeff Bezos' table at the *Destination Moon* opening at The Museum of Flight. She also attended the AIA's Centennial Gala, the Goddard Memorial Dinner, and the AAAE Women in Aviation Scholarship Luncheon honoring Sharon Pinkerton from A4A. International efforts include an event with the British Embassy honoring Marillyn Hewson, a reception at the Swiss Embassy, and, at the request of the State Department, she participated in a STEM tour through Italy. Advancement related meetings continue to be a major focus for Stofan. Within the Smithsonian, she engaged donors at the SI Regional Council Summit and the Annual Smithsonian Weekend. Stofan and the Advancement team recently met with GE to discuss their renewal of support of the Explainers Program, United Technologies Corp to start discussions about a potential gift in support of Transformation, and numerous individual meetings with some of our current, emeritus, and prospective board members. Stofan thanked **Ex. 6** for hosting a reception for the Museum in his Florida club. Chris Browne, Mike Garceau, and Jeremy Kinney represented the Museum. Stofan shared that Museum representatives will return to EAA's AirVenture in Oshkosh. Stofan's speaking engagements included conferences such as the American Climate Leadership Summit, Humans to Mars, the World Science Festival, and the National Space Society ISDC. She also presented to K.W. Barrett Elementary as a part of The Nifty Fifty, a program of Science Spark, in which science and engineering professionals fan out across the country to speak about their work and careers at various middle and high schools. Corporate speeches have including Johnson & Johnson's WiSTEM2D event, the Investment Company Institute General Membership Meeting, and Alaska Airlines Women in Tech Conference. Stofan gave commencement addresses at Worcester Polytechnic Institute in Boston and locally at Holy Child High School.

Regarding communication efforts, Stofan shared that the Museum is doing a broad spectrum of communications to reach target audiences. These range from a 30 minute Girl Power Gurus podcast to co-sponsoring the premiere of *Apollo 11: First Steps Edition* with AIA where Vice President Pence and Administrator Bridenstine were special guests. The CBS *This Morning Saturday* story about the Neil Armstrong space suit going on display has had roughly 2 million viewers. The Museum is developing stories with WETA on the art collection, WTOP on Transformation, and the *Washington Post* on spacesuits. Stofan announced that, in March, the Udvar-Hazy Center reached the impressive milestone of welcoming over 20 million visitors since its opening. Earlier this month, the Udvar-Hazy Center was named Best Museum in the *Northern Virginia Magazine's* annual reader's poll. The Museum continues to explore audience outreach and one of those tools is through the Smithsonian's *Air & Space Magazine*. Leadership is in conversations with the magazine regarding its future and measuring its value to our members. Stofan welcomed input from members who have an interest in the magazine. The Museum partnered with Google Arts & Culture to launch their newest interactive online exhibit, "Once Upon A Try", which pays tribute to the stories of humanity's greatest invitations and discoveries. The Museum is working on two more projects with Google, the STAMP program where the search of some Apollo related topics will bring up museum branded stories as featured content on the search page. NASM is also working with Google on Apollo 11 content for Arts & Culture, similar to the *Discovery* content. Google translate is now available on NASM's webpages for ten languages.

Since the February board meeting, Stofan shared that the Museum hosted a variety of public programs including Women in Aviation and Space, Northrop Grumman Heritage Family Day *Kites of Asia*, NASS Member Evening featuring the PBS program "Chasing the Moon" with presenters Roger Launius, Poppy Northcutt, and Robert Stone, and Yuri's Night. Toward the end of June, NASM will host Innovations in Flight Day. Recent lectures include The Exploring Space lecture series sponsored by ULA and Aerojet Rocketdyne. Speakers in the first three lectures of the series were Brett Denevi from the Applied Physics Laboratory, Farouk El-Baz, and Noah Petro from NASA Goddard. In honor of the Apollo 11 50th anniversary, this year's series explores lunar exploration with an eye toward yesterday, today, and tomorrow. The GE Aviation lecture series continued with presenter Gene Nora Jessen on her path-breaking career.

This year, as in previous years, Visitor Services facilitated a week for staff to show appreciation for volunteers by working a shift at the Southwest Airlines Welcome Center at the Museum in DC or the John L. Plueger Family Welcome Center at the Udvar-Hazy Center. This is an important opportunity to see first-hand the valuable work our volunteers put into create a welcoming experience for our visitors, and to thank them for their contributions. The effort culminated with a Volunteer Appreciation Night event. This year volunteers donated 93,899 hours, which equates to about 45 full-time staff positions.

Increasing outreach remains a priority and the Smithsonian recently launched Aira, a new accessibility service for people who are blind or have low vision. Aira is an app that connects users with live, sighted agents who can provide visual descriptions on-demand using the video stream from a smartphone camera. The agents can help users navigate through the museum, find amenities, and get visual descriptions of artifacts. The subscription service is free for users who are in an SI building and connected to SI wi-fi.

Stofan provided an update on plans to celebrate the 50th anniversary of Apollo. The Museum's Apollo 50 programs are well underway thanks to the generous support of Boeing and Raytheon. She thanked Allan and Shelley Holt for delivering Apollo in the Park to ballparks nationwide. The Museum also launched the Race to the Moon initiative. Stofan stated that the Apollo 50 gala will take place on July 19. Mike Collins is confirmed for the evening as well as representatives from the Armstrong family. The Museum expects 250 to 300 guests including donors, government officials, representatives from NASA, and the Apollo missions.

Stofan reported that a new case of Apollo artifacts was recently installed in the *Space Race* gallery at the National Mall building. The case, "50 Years from Tranquility Base: Humanity's First Visit to Another World," contains a variety of Apollo artifacts. In March, the Museum's newest artifacts arrived at the Udvar-Hazy Center: an EA-6B Prowler. This addition to the collection came after the last Marine Prowler squadron, VMAQ-2, was formally deactivated, and this was the last flight of a Prowler. Stofan announced that the Museum made the major decision to relocate the *Spirit of Saint Louis* to the *Barron Hilton Pioneers of Flight* gallery as keeping it in the *Boeing Milestones of Flight* Hall with greater light exposure is not conducive to long-term preservation of the artifact.

Revitalization and Transformation Update - Chris Browne, Deputy Director

Chris Browne provided an update on the Revitalization and Transformation of the National Mall building. Regarding the transformation of the East End exhibits, Browne shared that, in addition to deciding on the relocation of the *Spirit of St. Louis*, leadership is processing a design change order for the addition of two new exhibitions: the *Allan and Shelley Holt Innovations* gallery and *Future of Space Flight* gallery. In the West End, the Museum received the 10% design on West End galleries. The West End fabrication team is on schedule to start phased fabrication of the West End exhibits in the 4th Quarter of FY19. The Commons Team is in concept design to finish the scope definition portion of this project. The first set of workshops covered the West End gallery entrances and building elements that will impact the Revitalization project. The Museum is working to finalize the concepts, establish budgets, and transition elements to the Revitalization project.

Browne provided an update on the Dulles Collections Center (DCC). The Museum received the final Certificate of Occupancy for the DCC Storage Module on May 2. The Dulles Collections Center storage module will begin receiving multiple shipments of large artifacts weekly. He also shared that Ramsey Building upgrades are now +/- 50% complete. The project is estimated to be completed in June 2019.

Browne provided an update on the Revitalization of the National Mall building. Regarding work on the public floors, a construction wall was installed in late-May to replace the temporary partitions separating *America by Air* and the galleries west of that from the open area of the museum. The simulators have re-opened in what was previously the *Looking at Earth* gallery. CSC's request for closure of *Early Flight* and *Exploring the Planets* on July 8 has been approved by NASM Leadership. In non-public spaces, work, including structural upgrades, continues in the basement and asbestos abatement has been completed in spaces available to the contractor on the 3rd floor. In the work site, the West Terrace structural upgrades are nearly complete. The Museum expects that *Delta Solar* will soon be de-installed and protected on-site. The North Tower crane will be installed in early July.

Browne announced the Museum is sharing project efforts online and in social media. The Museum's Flickr page is updated regularly and time-lapse videos will provide an up-close look at Transformation efforts for the public. Browne played a time-lapse video of the deinstallation of the U-2.

Browne updated the Board on artifact moves and treatment status. A gantry has been installed in the West End to facilitate movement of large artifacts on the 2nd floor. Nearly all of the small/medium artifacts are deinstalled and moved out of the closed galleries. NASM has requested the initial “Big 8” artifacts, including the Boeing 247-D, Douglas DC-3 and Ford Trimotor, be moved directly to the UHC Restoration Hangar for treatment. A team has been evaluating the steps necessary to construct the wall in *Milestones*, which includes relocation or removal of several large artifacts. The Museum is suspending the booking of special events not already under contract until after the wall is erected. This will have an impact on revenue. The team is currently finalizing the testing of the Armstrong case, which is the first climate control case for the Transformation program. The case and spacesuit will be unveiled on July 16.

Regarding Museum stores, IMAX Theater, and Planetarium, Browne shared that designs are being finalized for the main store fit-out (post-Revitalization), as well as the IMAX Lobby and multiple smaller “fill-in” kiosks/stores. The main Museum store is expected to close in Oct 2019, after which Smithsonian Enterprises (SE) will activate the temporary Museum store in the former art gallery on the second floor. Browne shared that the temporary/pop-up store outside the Café is doing well financially. So far SE operations are outperforming their revenue projections. Browne shared that the Future State Committee is also helping to identify revenue generating activities.

Looking ahead, Browne stated that one of the Museum’s major upcoming milestones is the construction of the barrier wall between phase one and phase two of the project. The Independence Avenue entrance is expected to close in October. Other impacts include the removal of the interactive wall and relocation of the Southwest Airlines visitor desk in the Boeing *Milestones of Flight Hall* immediately after the Apollo activities on July 20. Anecdotally, it seems that the National Mall building’s visitor numbers remain consistently high. Leadership recognizes that, once this wall goes up, the building will reach capacity limits. The Museum is putting plans in place to manage this with the public. Zone 3 exhibits are expected to close this summer (July/Aug 2019), bringing the total galleries closed to 10. The Museum store, Planetarium, the *Pioneers of Flight* gallery, and the south entry are expected to close in the fall (Oct/Nov 2019). Browne noted that the Museum’s 50th anniversary coincides with the nation’s 250th as NASM was a bicentennial gift to the country. The Smithsonian and others are already thinking about how to mark this occasion.

Advancement Committee Report and Discussion - Marion Blakey, Chair, Advancement Committee

Marion Blakey provided an update on fundraising progress. Blakey presented a comparison of the total amount raised in each fiscal year to the amount raised by April 30. Exemption 4

[Redacted]

Drilling down into funds raised so far in FY19, the Museum has achieved a good balance of funds raised for Transformation vs. other programming. New gifts since the last board meeting include Exemption 6 pledge to support the future *WWII in the Air* gallery. Blakey thanked Ex. 6 for his support. The Museum also received a Ex. 6 gift from Booz Allen Hamilton in support of Transformation. Exemption 6 generously gave Ex. 6 towards education programming at the Hazy Center. Blakey thanked Ex. 6 for his leadership gift in support of Transformation. Conservation and restoration received a Ex. 6 gift from a Exemption 6. The Museum also confirmed a few significant planned gifts, including a Ex. 6 bequest that will endow support of NASM education, public programs, and exhibits. Exemption 4

[Redacted]

Blakey provided an update on the Ignite Tomorrow campaign. Exemption 4

[Redacted]

Blakey thanked the Board members who are also members of the National Air and Space Society (NASS). NASS and the Wall of Honor provide unrestricted support to the Museum. They also join together a community of

aviation and space enthusiasts. Blakey shared that NASS has a goal of generating Ex. 4 this fiscal year and, as of April 30, Exemption 4. In April, NASS topped 9K members.

The Museum continues to collect donations from visitors by asking if customers at the Museum store would like to make a small donation along with their purchase. These funds are considered unrestricted and count toward NASM's key fundraising needs, like Transformation. Blakey shared that Ex. 4 customers at the National Mall building make a donation compared to the Ex. 4 customers that make a donation at the Udvar-Hazy Center.

Blakey provided an update on the Apollo 11 50th anniversary commemorative coin that the U.S. Mint is producing. Half of the revenue generated by these coin sales will go to NASM, specifically in support of *Destination Moon*. The maximum possible surcharges for NASM are Ex. 4, and the surcharges generated for NASM so far are Ex. 4. The Mint advised that typical commemorative coin sales at this point represent approx. 85-90% of the total that will be sold. Therefore, it is up to the Museum to market the coins to new audiences for the rest of 2019 in order to increase that amount. Plans are in the works to increase marketing for them around the anniversary celebrations, and the Museum has placed full-page ads in the *Air & Space* Apollo Commemorative Issue and in EAA's *Sport Aviation*. Blakey welcomed member's recommendations for further promotion.

Blakey reported on a number of Advancement related events. In April, Ex. 6 graciously hosted NASM Deputy Director Chris Browne and Curator Jeremy Kinney at his home in North Palm Beach for a reception focused on Transformation and the future WWII gallery. Kinney also presented at a reception hosted by Ex. 6 in Orlando. Both events helped to develop new relationships and resulted in several gifts to support Transformation. The NASM Team will be in Oshkosh and are co-hosting a press event and luncheon with Textron, announcing Textron's Exemption 6 gift in support of the *How Things Fly* gallery. The Museum will also host a breakfast in Oshkosh with conversations centered on fundraising for the WWII gallery. Blakey announced that plans are in the works for an August event hosted by Ex. 6 in Jackson Hole (this event has been postponed) and for a November dinner co-hosted by Ex. 6 in San Francisco (this event has been moved to January 2020).

Exemption 4

[Redacted]

Blakey reported that, at yesterday's Advancement Committee meeting, the Committee discussed clarifying board giving expectations. Ex. 5

[Redacted]

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

[Redacted]

Break

Holt introduced special guest David Concannon who led Jeff Bezos' expedition to recover the Apollo F-1 Engines from the ocean floor. The recovered engines are on display in the *Destination Moon* traveling exhibit. The Apollo 11 recovered engines have been accessioned into NASM's collection and will be displayed as part of the *Destination Moon* exhibition at NASM to open in 2022.

Recovering the Apollo F-1 Engine - David Concannon, Founder and Principal, Explorer Consulting

Using examples from his personal life and exploratory work, David Concannon spoke on the power and importance of inspiration. He showed a video chronicling the search for and recovery of the Apollo F-1 Engines. Board members engaged in a question and answer session where they discussed his projects.

Nominations Committee Report and Discussion - Jamie McJunkin, Member, Nominations Committee

In the absence of Nominations Committee Chair Mark Dunkerley and Vice Chair Dawne Hickton, Committee Member Jamie McJunkin provided the Nominations Committee report. The Committee last convened on May 13. At the February 2019 meeting, the Board approved the nominations of Michele Evans, executive vice president Aeronautics of Lockheed Martin, and Jeff Knittel, chairman and CEO of Airbus Americas. Their nominations were voted upon and approved by the Smithsonian's Board of Regents yesterday, and they will attend their first meeting in October. With their appointments, the Board has 28 members. As a reminder, our bylaws stipulate that we can go up to 32. The Nominations Committee maintains a good list of potential board candidates which are reviewed three times per year. The Committee put forth two nominations.

Ex. 6 . Ex. 6 previously served as an officer in the Navy and oversees Ex. 6 consulting business. Ex. 6 is a management and information technology consulting firm who has generously supported the Museum and Smithsonian. Ex. 6 just made a Exemption 6 commitment to Transformation Exemption 6 CEO Horacio Rozanski suggested Ex. 6 as a good candidate, and Stofan spoke with her last month to confirm her interest. McJunkin opened the floor for comments and then called for a vote. The Board unanimously voted to approve Ex. 6 nomination. McJunkin stated that the other priority candidate for nomination is Ex. 6 . Ex. 6 designs, develops and manufactures structures for the aerospace industry, and their customers include Ex. 6 . Ex. 6 has been in the industry for some time, having previously served in leadership roles at GE. Several members know Ex. 6 and strongly endorse his candidacy, and Stofan also met with him to confirm his interest in joining. McJunkin again opened the floor for comments and called for a vote. The Board unanimously voted to approve Ex. 6 nomination. Ex. 6 nomination will be placed before the Regents in October.

With Ex. 6 nominations, Board participation will reach 30 members. McJunkin noted that five members are eligible for emeritus status in October, which will bring membership down to 25. While the Committee desires to maximize membership to the full 32 members during the Campaign, they want to make sure the slots are filled strategically and address the need to increase diversity on the Board. One of the priorities for the next quarter is to do a gap analysis of the Board to help guide the prioritization of our recruitment of prospective members. Alan Hilliker, partner at Egon Zehnder, is going to help with this effort. Egon Zehnder is an executive search firm that specializes in executive and CEO searches, board advisory, CEO succession, and executive assessment. Stofan knows Hilliker from the William & Mary Board and he has met with Holt and Dunkerley to discuss his desire to help NASM. McJunkin encouraged members to submit their recommendations for diverse board candidates to Dunkerley.

Common Area Re-design - Chris Browne

Browne provided an update on the work being done to re-design the common areas of the museum. The Commons team is currently in concept design phase and held their first workshops in April and May. Browne clarified that the term "Commons" refers to the entrances, flooring, hallways and gallery thresholds, as well as the lower level that previously included the Education briefing room. Referencing the current design of the vestibule, Browne stated that the walk off grid and security layout is still be determined by architect Quinn Evans. Quinn Evans will confirm that the terrazzo mixes indicated meet the requirement for minimum percentage of pink limestone. The installation of media units will enable the Museum to display real-time content to our visitors. PGAV has proposed that concourses offer a good opportunity for media panels. These are produced using projectors so the content can be easily modified and controlled.

Gallery thresholds are another important part of the Commons design. These will help unify the exhibits and provide continuity between the East and West Ends. The Museum aims to incorporate the following elements for the thresholds: entice and encourage visitors to enter, hint at gallery content inside, promote discovery, punctuate the visitor experience, promote visitor flow, discouraging dwell time and preventing bottlenecks, and support a common zone theme with gallery IDs. Browne shared artist renderings of the *Nation of Speed* gallery to demonstrate the visual impact of the thresholds. The "attractor" for the gallery is intended to evoke a sense of movement with a vertical screen of dragsters, race cars, rockets and airplanes speeding by. He also showed a rendering for *Destination Moon* that uses a physical object as an "attractor" - a rotating model of the Moon.

Browne shared that the lower level at the base of the escalators off of *Milestones* will be called the “Launch Pad.” He reminded the Board that this area cannot be used as exhibit space due to the low ceilings, pillars, and flood zone. Leadership determined that providing the floor space to Smithsonian Enterprises (SE) will maximize potential for revenue generation, particularly with the decision to remove the existing the simulators. SE is exploring an expansion of retail with interactive offerings. Their objective is to maximize revenue generation per square foot, and they will provide the Museum with concepts to review and approve. There will be public access to restrooms and the Museum will retain use and access to the three Education classrooms located adjacent to this space.

Browne provided an update on the restaurant. A Request for Interest was issued to 7 companies and 3 have requested informational meetings over the next two weeks. Based on the extent of interest, responses will further inform whether we issue a Request for Proposals for food service operations. Potential options being evaluated take into consideration construction costs, duration, and anticipated functions to be included in the facility.

Browne stated that the Museum remains committed to the STEAM Park but designs are on hold as we determine the status of the restaurant and have a better-defined footprint.

Future State Committee Report and Discussion - Steve VanRoekel, Chair, Future State Committee

Future State Committee Chair Steve VanRoekel provided the Future State Committee report. He shared that the National Air and Space Museum podcast, AIRSPACE, is currently in its second season. The podcast team traveled to SXSW this year to record a live show at the WeDC house. The team is hoping to return to SXSW next year with an even bigger activation. New episodes of AIRSPACE are released on the second and fourth Thursday of every month. The podcast will release a special Apollo two-part episode in July. AIRSPACE is distributed by PRX.

VanRoekel provided an update on the Apollo 50 celebration. The Apollo 50 Festival, in collaboration with NASA, will take place on the National Mall in front of the museum (between 4th and 7th streets) July 18 - 20. Various NASA centers will display exhibits, along with program sponsors Boeing and Raytheon, and LEGO will build a 20-foot tall SLS rocket. In addition to the festival, the National Mall building will have special late night hours on July 20 with programming from 8pm - 2am. The Apollo Illumination project continues to advance. The viewing area will be on the National Mall in front of the Smithsonian Castle. Illumination will occur nightly from July 16 - 20.

VanRoekel reported that Race to the Moon launched on STRAVA on May 31. NASM worked closely with the STRAVA team on the design and promotion of the Race. Within the first three days, the challenge already had over 80,000 participants who had ran over 500,000 miles. The stretch goal is for the community to run more than 50 times the distance to the Moon. As of June 11, the community had already run 3.2M miles. Participants will receive a digital trophy and milestone badge as well as a digital wallpaper for completing the challenge. STRAVA is also interested in having two in-person media/press events to promote Race to the Moon. They are also looking into organizing community races in different cities throughout the summer. VanRoekel thanked Jamie McJunkin for making this collaboration with STRAVA possible.

In reference to Apollo at the Park, VanRoekel shared that 15 statues are being delivered and installed in 15 MLB ballparks throughout the month of June. Statues will remain on display throughout the baseball season and then be relocated to Smithsonian Affiliate museums after de-installation at the MLB parks. Individual Board members connected the Museum to the parks and team owners which was critical to the success of this project. Apollo at the Park was officially announced to the public on May 15 and marketed on social media platforms including Twitter, Facebook, and Instagram. Several of the teams have also been posting on their social media platforms. Activations vary at the different parks. The suit at the Nationals Stadium was unveiled on June 4. On July 5, the Nationals will host Apollo Night and Mark Armstrong will throw out the first pitch. NASM also produced a 90-second video narrated by Mark Armstrong explaining the Apollo at the Park program that ballparks will play throughout the summer. Adam Savage and tested.com are doing a feature on the statue production. Adam and Tested will be at the Museum over the anniversary week to participate in programming.

Looking ahead, the Future State Committee is working to help the Museum identify other revenue generating experiences and other types of content monetization opportunities during Transformation. NASM has built relationships with many companies that have potential for interesting collaborations. For example, the Museum is working with LEGO for the Apollo 50 Festival, perhaps there could be some future product collaboration.

Old Business - Allan Holt

Holt reminded members that the October dinner and meeting will take place in downtown Washington, DC.

2019 Board meeting dates: October 29-30 (Downtown DC)

2020 Board meeting dates: February 4-5; June 9-10; October 20-21

Upcoming events:

June 15 - Innovations of Flight Day sponsored by United Airlines, UHC

June 19 - Exploring Space Lecture sponsored by Aerojet and ULA with Jim Green, NMB

July 19 - Apollo 50 Gala sponsored by Boeing and Raytheon, NMB

July 24 -25 - EAA AirVenture, Oshkosh, WI

September 12 - Glenn Lecture sponsored by Boeing with Carolyn Huntoon, Jo Ann Morgan, Poppy Northcutt, NMB

October 26 - Air & Scare, UHC

New Business - Allan Holt

Holt welcomed members to introduce new business. He announced that an evaluation survey will be sent following the meeting to gather member's input.

Wrap-up - Ellen Stofan

Stofan stated that her priorities for the remainder of FY19 include: ensuring success of Apollo 50 activities, working to reach the \$30M fundraising goal, working with SE to maximize revenue, and ensuring successful onboarding of new Director of Education.

Executive Session

Meeting adjourns

Holt adjourned the meeting at 12:45 pm.

National Air and Space Museum Board

*Present at the June 12, 2019 meeting

Board Members:	Board Members Emeritus:	
Mr. William S. Ayer*	Mr. James Albaugh	Mr. John L. Plueger
Mr. Daniel Baker*	Mr. Ronald W. Allen	Dr. Jon A. Reynolds
Ms. Marion C. Blakey*	Mrs. Anne B. Baddour	Dr. Donald B. Rice
Mr. Neil Cohen	Mrs. Agnes M. Brown	Dr. Richard Sugden
Mr. Stanley A. Deal*	Mr. Armando C. Chapelli, Jr.*	Dr. Frederick Telling*
Mr. Scott Donnelly	Mr. Max C. Chapman, Jr.	Mr. Charles Thornton
Mr. Mark B. Dunkerley	Mr. Joe Clark*	Ms. Patty Wagstaff
Ms. Michele A. Evans	Mr. Frank A. Daniels, Jr.	
Mr. Gary C. Kelly	Mr. Edsel B. Ford, II	
Mr. C. Jeffrey Knittel	Mr. Stuart L. Fred	SI/NASM Staff Members
Mr. Thomas W. Haas*	Mr. Morton Fungler	Dr. David Skorton
Ms. Dawne S. Hickton	Mr. Kenneth E. Gazzola	Dr. John Davis
Mr. Shephard W. Hill*	Mr. S. Taylor Glover	Mr. Robert Spiller
Mr. Allan M. Holt*	Mr. James M. Guyette	Dr. Ellen R. Stofan *
Mr. Thomas W. Horton	Mr. Randall A. Greene	Mr. Christopher U. Browne*

Mr. Christopher T. Jones*	Mr. Ralph D. Heath*	Ms. Kelly Bloom
Ms. Meredith Siegfried Madden*	Mr. David R. Hinson	Ms. Stephanie Brinley
Mr. Gregory L. McAdoo*	Mr. David C. Hurley*	Ms. Eleanor Brtva*
Ms. Linda A. Mills*	Mr. Robert James	Ms. Meg Caulk*
Ms. Eren Ozmen*	Mr. Clayton M. Jones	Ms. Michelle Delaney
Mr. H. Ross Perot, Jr.	Mr. David L. Joyce	Mr. Rick Flansburg
Mr. David Storch	Mr. Rodney R. Lewis	Mr. Michael Garceau
Mr. David Tolley	Mr. Steven R. Loranger	Ms. Laura Gleason*
Mr. Steve VanRoekel*	Capt. James A. Lovell	Ms. Lindsey Jackson*
Mr. Thomas Vice	Mrs. Adrienne Bevis Mars	Dr. Peter L. Jakab
Mr. Steuart L. Walton*	Mr. Bruce R. McCaw*	Ms. Marian Livengood
Mr. Tyson Weihs	Mr. Robert A. Milton	Ms. Anne McAllister
Mr. Paul Wood*	Mr. Robert J. Mittman	Ms. Jessica McNally
	Mr. T. Allan McArtor	Mr. Francisco Torres
	Mr. Jameson J. McJunkin*	Ms. Elizabeth Wilson
	Mr. Thomas G. Morr	
	Mr. Lloyd "Fig" Newton	
	Mr. Jack J. Pelton	
	Mr. Roger D. Percy*	
	Mr. Robert W. Pittman	
	Mr. Thomas F. Pumpelly*	

Smithsonian National Air and Space Museum Board Meeting
Wednesday, October 30, 2019
National Museum of the American Indian, Washington, DC

Allan Holt thanked the Smithsonian's National Museum of the American Indian and Director Kevin Gover for hosting the October board meeting. Gover made remarks and welcomed NASM board members to the museum. Mr. Gover was later given *Apollo to the Moon: A History in 50 Objects* book as a token of appreciation.

Meeting Called to Order - Allan Holt, Chair

Holt welcomed new members Karen Dahut, Tom Gentile, and Jeff Knittel to their first meeting and presented each an *Ascent* pin and Wright Flyer sculpture. As Chair of the Board, Holt reported that he attended the Apollo Gala, Regents Advancement Committee meeting, and multiple donor meetings. He also participated on a call with Secretary Lonnie Bunch and will attend the Secretary's Installation.

"State of the Museum" - Ellen Stofan, John and Adrienne Mars Director

Ellen Stofan presented the "State of the Museum" report. She announced that the Museum hired The Raben Group to assist with the development of a Strategic Plan. The expectation is that the Strategic Plan will be in place by late winter/early spring of 2020, and will include guidelines for priorities, programs, and initiatives for roughly the next 3-4 years. Stofan shared that, at a retreat held over the summer, she and the Senior Leadership team discussed the Museum's organizational culture, underlying values, and behaviors that contribute to the social and psychological environment of the organization. The team identified that NASM employees have a 'can do' attitude, pride in their profession, and agreed that the National Air and Space Museum is a museum of experts. The final value discussed was stewardship. Being part of something as grand and aspirational as the Smithsonian is valued. Stofan encouraged staff to think about what the other values are and what new values would make the organization stronger. The Museum has further discussed topics such as respect, integrity, empowerment, and accountability as well as how NASM remains one organization, despite multiple locations. The Museum hired Cook Ross to work with staff on issues of diversity, equity, accessibility, and inclusion. In November, Cook Ross will conduct a two-day charrette that will inform the core of the plan.

Stofan reported that outreach and speaking engagements remain a priority. The Museum hosted Virginia Congresswoman Jennifer Wexton on a visit to the Udvar-Hazy Center. While Stofan and Laura Gleason met with prospective donors in New York, Chris Browne hosted Ex. 6 for a behind-the-scenes look at the UHC. Ex. 6 is a helicopter pilot and major prospect. Following his visit, Ex. 6 posted on Instagram that Ex. 6". Stofan continues to meet with industry leaders and individual prospective donors, and Advancement is working on several major proposals including Exemption 6

Stofan reported that the Museum continues to highlight the great success of the Apollo 50 events. She thanked Boeing and Raytheon for their support. The Museum is now focusing on communicating that the National Mall building is open and engaging the public in Transformation. Efforts included the distribution of a hospitality industry newsletter to update groups like tour providers, bus operators, and hoteliers. The Communications team secured local and national media stories including an article in *The Washington Post* on the X-15 and behind-the-scenes segments on WTOP, WUSA9, and WETA. The team is doing critical work to keep Museum at the forefront and relevant despite diminished public presence during construction. Another activity that caught media attention was the lowering of the *Spirit of St. Louis*. For two days, the plane was lowered to the museum floor and available to visitors for an up close look. This was only the second time in 27 years it had been lowered.

The Museum received the in-kind donation of a new JLG lift. Similar gifts include an Airbus cockpit simulator and Federal Express transportation of the Apollo 11 command module. Stofan thanked the board

members who assisted with acquiring the glass cockpit Cessna at UHC for hands-on education. The Board can be instrumental in helping Advancement identify and obtain in-kind support to offset Transformation costs. She stated that they are currently looking for help with Exemption 6

Stofan shared that the Smithsonian will be announcing its Open Access Initiative in February. Open Access will encourage broader public use of the Institution's digital images. The Smithsonian is releasing 3.3M 2D and 3D images into the public domain with a Creative Commons license. The initial NASM Open Access release will include over 1,200 high-resolution object photos and interior panoramas created as part of the *Air and Space Photos* project funded by the Ryna and Melvin Cohen Family Foundation as well as 3D models of Apollo 11 Command Module, Wright Flyer, and Bell X-1. The Museum is currently working to digitize the Sally Ride collection. As this effort continues, outcomes will include over 10,000 NASM images shared, new high resolution photographs of over 2,500 objects in the collection and 100 hours of digitized public domain film from the Museum's Film Archives, and an enhanced website experience. One of the questions open access raises is who will the Museum partner with in the future to share content. Earlier in the month, NASM hosted a Wikipedia edit-a-thon for Ada Lovelace Day, an annual event focused on increasing articles about Women in STEM on Wikipedia. Within 24 hours of the event, 19 new Wikipedia articles were created about women in aerospace and aviation, and there were 107 new references about women added to Wikipedia articles. A large percentage of these references are trackable Smithsonian links. This event strengthened the Museum's relationship with the Wikipedia editor community and will allow for expanded access to object photography produced with support of the Cohen Family Foundation.

Stofan reported on recent public programs. Since the June meeting, the Museum hosted several programs of note including a visit from the Red Arrows, the Hispanic Innovators in Air and Space Heritage Family Day sponsored by Northrop Grumman, and the ever popular Air & Scare sponsored by Mars Wrigley Confectionery. In its second year of programming, the Teacher Innovator Institute brought together 30 teachers from around the country to learn innovative best practices for incorporating STEM learning throughout their classroom experience. This program is sponsored anonymously. At the S.H.E. Can STEM Summer Camp students spent their summer learning from the Museum's education team, building and flying drones, touring local aviation businesses, and even got to go indoor skydiving and practice flying a real plane with instructor pilots. This program is sponsored by the Walton Family Foundation thanks to Stuart Walton's passion for inspiring the next and more diverse generation of aviation professionals. Stofan showed a news clip about the program. The Museum began a new online education series titled EZ Science in conjunction with Dr. Thomas Zurbuchen who leads NASA's science mission directorate. The program is receiving good viewership so far and is now beginning paid promotion. From Episode One to Episode Two, the program jumped 20,000 views on YouTube. Partnering with an organization like NASA allows the Museum to tap into their powerhouse social media.

The final segment of the Exploring Space lecture series sponsored by ULA and Aerojet Rocketdyne featured NASA Chief Scientist Jim Green. Apollo anniversary programming continued with the annual John H. Glenn Lecture sponsored by Boeing, which featured "The Women of Apollo" with JoAnn Hardin Morgan, Poppy Northcutt, and Carolyn Leach Huntoon. The GE Aviation lecture focused on the *USS Hornet: Stories of the Apollo 11 Recovery* with Clancy Hatleberg, Bill Carpentier, Bruce Johnson, and Robert Fish.

In May, Washington will again host a WWII Victory Commemoration Flyover. Dozens of World War II aircraft flying in historically sequenced warbird formations will fly over the Washington Mall. This will coincide with the dedication of the Eisenhower Memorial. The formations will represent the War's major battles, from the Battle of Britain through the final air assault on Japan, concluding with a missing man formation. More than 20 different types of vintage military aircraft are expected to participate. The Museum has been in conversation with Pete Bunce and the other Arsenal of Democracy organizers. While NASM's education plans are still in development, UHC will host a fly-in of these special aircraft and Education will incorporate this anniversary in a variety of programs throughout the year. Advancement is determining how to leverage these events for fundraising activities. In celebration of the 50th anniversary of Earth Day in 2020, the Smithsonian will host the second Earth Optimism Summit. The Smithsonian and its partners plan to convene the global conservation community to focus on positive stories of success in conserving natural and cultural resources, and create a powerful and hopeful narrative for the future of our planet. Earth Optimism takes advantage of the Smithsonian's ability to convene and curate stories from individuals and institutions all over the world about what's working in conservation, while also highlighting the contributions of the Institution's own scientists, curators, artists, writers, digital experts, and

administrators. This multifaceted effort will shine a spotlight on the Smithsonian’s extraordinary combined holdings, scholarship, and activities related to conservation and build a resource base to support global conservation practitioners of all ages. Beyond the Earth Optimism Summit in Washington, public events at Smithsonian venues are being planned as well as “sister summits” around the globe, digital story-sharing platforms, and fellowship and internship programs. NASM will highlight the role of Earth observation for climate understanding and resilience.

Stofan concluded by stating the Museum’s upcoming areas of focus which include Revitalization and Transformation, developing DEAI and Strategic Plans, repositioning Education, and increasing visitations to the Udvar-Hazy Center.

Holt introduced Mike McCarthy to provide the “State of the Smithsonian” report since Secretary Lonnie Bunch could not attend.

“State of the Smithsonian” - Mike McCarthy, Acting Chief Operating Officer and Under Secretary for Finance and Administration

Mike McCarthy shared that 2019 brought both challenges and opportunities as the year began with a shutdown of the federal government and also included transitions in the Finance and Administrative Office and Office of the Secretary. Lonnie Bunch was selected as the 14th Secretary of the Smithsonian in June. Secretary Bunch is the first internal choice in 80 years as well as the first African American and historian to hold the position. Bunch therefore brings a strong understating of how the individual units and the Smithsonian as a whole operate.

McCarthy shared a number of Secretary Bunch’s priorities with the board. Exemption 5 [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Secretary Bunch is currently engaged with two ongoing projects. Regarding the London Initiative, the Smithsonian’s partnership with the Victoria and Albert Museum, Bunch is assessing Ex. 5 [REDACTED]. Secretary Bunch also inherited discussions on the Hill regarding new Smithsonian museums, specifically legislation on a National Latino Museum and a National Woman’s Museum. Bills supporting these museums have passed in Congress to varying extents, and there are four to five other museums in the pipeline. Under Secretary Bunch, the Smithsonian will move forward with broadening the impact of the Women’s Initiative and Latino Center regardless of the status of legislative matters. Secretary Bunch is also initiating a conversation around Ex. 5 [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED].

McCarthy also reported on the financial health of the Institution. On the federal side, the Smithsonian’s funding bill is currently with the Senate. Ex. 5 [REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] Congress has only yet to appropriate \$90M of the \$650M of federal funds required for the Revitalization of the National Mall building. Smithsonian leadership now feels comfortable stating that the National Air and Space Museum will receive all of the federal funding needed for this project. On the trust side, the Smithsonian raised Ex. 4 [REDACTED] in FY19. The Smithsonian also had a record year on raising the endowment, raising Ex. 4 [REDACTED]. The endowment has now reached Ex. 4 [REDACTED] and serves as a source of strength for the Institution. While the endowment experienced a Ex. 4 [REDACTED] return on investment in FY19, leadership is prepared to act if the market changes.

McCarthy acknowledged that the business activities side of the Smithsonian is currently a challenge. The National Air and Space Museum is the most successful retail operation in the Smithsonian and Revitalization is decreasing revenue. Leadership is also evaluating the Institution's print magazines as they work to balance the business challenge with the important mission fulfillment of the publications. Lastly, the Smithsonian and Smithsonian Enterprises are working to develop an online presence for retail. The goal is to move away from catalogues and develop strong e-commerce. McCarthy shared that ViacomCBS has invested in the Smithsonian Channel. The Smithsonian retains a strong relationship with Smithsonian Channel as they generate up to Ex. 4 a year in revenue for the Institution. McCarthy reported on the status of the restaurant at the National Mall building sharing that leadership is working to define and develop a space that is worthy of the National Air and Space Museum.

McCarthy spoke to the Smithsonian's historical issue with deferred maintenance. Using a visual to show the Institution's physical growth between 1855 and 2016, McCarthy identified a bubble of aggressive construction throughout the 1960s that has now aged 30-40 years. The Smithsonian has not acquired the capital funding required to address these maintenance needs. There is currently \$1B in deferred maintenance across the Institution. Therefore, leadership has made a significant effort to educate influencers on the Hill as to why Smithsonian maintenance must be funded in order to reduce the backlog and address future needs. This effort has received traction in the House as the Smithsonian recently received an \$80M plus up for maintenance. McCarthy shared that, following the completion of the National Air and Space Museum Revitalization project, the Smithsonian will shift their focus to addressing the needs of the South Mall. This project will most likely require \$650M of federal funds and \$250M in private support. Leadership is also investigating purchasing an administrative headquarters building, as the Castle is not conducive for housing this sort of business. From a financial perspective, purchasing versus renting administrative space will pay for itself within 25 years. David Tolley asked whether moving administrative offices into a new building would open up additional exhibit space. McCarthy acknowledged the potential for additional exhibits but also added that an administrative building would provide swing space for employees who are impacted by revitalization efforts in the future. Chris Jones asked about the size of the Smithsonian staff, and McCarthy responded that the Smithsonian has over 7,000 employees, and 2,000 seats would go into the new building. Secretary Bunch feels that leasing is not a prudent investment for the Smithsonian.

McCarthy also spoke to improving the Smithsonian hiring process. Leadership is evaluating the federal and trust hiring processes to ensure that they are efficient and allow for the selection of top candidates. The Castle is working to empower the units with their own processing in order to meet their individual staffing needs. They are also looking to introduce more automation of workflows.

Holt thanked McCarthy for his comprehensive presentation.

Revitalization and Transformation Update - Chris Browne, Deputy Director

Chris Browne provided an update on the Revitalization and Transformation of the National Mall building. He showed members video footage of the Douglas DC-3 being relocated to the Udvar-Hazy Center. Regarding Revitalization, Browne reported that the south entrance closed October 7 and the installation of a protective construction wall will be complete by Thanksgiving. The Planetarium and retail store closed, and new staff and group entrances are now located the north side of the building near the Café. Retail moved to the former art gallery space in the east end as well as a temporary "pop-up" store in front of the Café. West end construction efforts include the removal of exterior stone, "dance floor" installation, skylight removal, expansion of mechanical rooms, and steel reinforcement. Browne emphasized that, while the construction effort lends towards being a rebuild rather than a renovation of the building, it would have been considerably more expensive to demolish the building and completely rebuild. The current process also enables at least half of the building to remain open during construction and for some large artifacts to be protected in place.

Browne announced that the Dulles Collection Center is complete and filled to 75% capacity. The project was completed Exemption 4 budget. The Board will tour the space as part of the February meeting. Ramsey Building renovations are also complete and that space is filled to 55% capacity. This is a no cost lease for the Museum and will be used to store larger artifacts during Transformation.

Regarding the National Mall building restaurant, Senior SI leadership confirmed the plan to replace rather than renovate the current structure. The Museum, Smithsonian Enterprises, and Smithsonian Facilities will work together to prepare a scope consistent with a new structure to include 700 cafeteria seats on first floor with 200 upscale dining seats on second floor. The scope of the project will align with a **Exemption 4**. Leadership is working to complete facility design during Phase I of Revitalization, and the construction of a replacement restaurant facility will take place during Phase II (2022-2025). Stofan commented that the timing of this project is key as the Museum was potentially facing closing down the restaurant space just as the east end reopened. Now the restaurant will reopen with the east end.

Browne presented the following figures related to Revitalization construction:

Contract GMP: \$477,676,650

Contract Completion Date: June 17, 2024

Percent of Contract Billed: approx. 10%

Construction Time Elapsed: approx. 15%

Project Contingency Budget: \$18,000,000 (4% of project award)

Mods Funded to Date: \$1,225,839

Remaining Contingency: \$16,774,161

Potential Exposure: 21% of contingency funds remaining

He also shared the following challenges associated with Revitalization:

Cost control

Scope reduction

Contingency

Artifact move contract

Enabling work by others

Weather

Browne reported on the Transformation of the west end of the National Mall building. The west end fabrication of prototypes will begin in November 2019 and the installation of first gallery spaces will begin in December of 2020. Regarding the Commons Space, a 35% design was resubmitted for review. The resubmission includes notable changes to the original concepts with the inclusion of a café and classrooms on the lower level. The development and implementation of the Commons Space requires close coordination with CSC, the Base Building Contractor.

Regarding the Transformation of the east end, the 35% Design Document is due at the end of November 2019.

Browne shared the following challenges associated with Transformation:

Staff support

Cost control

Category B moves and reinstallation of artifacts back into the galleries

Contractor performance

Consistency between west and east designs

Integrating Visitor Experience data into the designs

Browne shared visuals of both the Transformation budget and key milestones for the project. He noted that the museum's 50th anniversary coincides with the nation's 250th anniversary. The Smithsonian and others are already thinking about how best to mark this occasion.

Tom Haas asked whether the Museum is able to successfully implement lessons learned from the Revitalization and Transformation of the west end to the east end. Browne responded that the two-stage process has allowed the Museum to implement better quality control mechanisms and slow down the design phase of the project to the Museum's advantage. The Museum will also benefit from applying the information learned from the Visitor Experience survey.

Browne introduced Ralph Applebaum and Associates (RAA). RAA is a multidisciplinary firm specializing in the planning and design of museums, exhibits, educational environments, and visitor attractions. The company's portfolio includes many of the world's most recognizable public learning institutions in more than 50 countries including locally NMAAHC, the Holocaust Memorial Museum, and Capitol Visitor Center.

East End Design Review - Ralph Applebaum Associates

Ralph Applebaum shared that visitors are looking for emotional connections when they tour a gallery. RAA is therefore using the Visitor Experience survey data to inform elements of each transformed gallery to ensure it connects every visitor to the collection. The overarching themes of each gallery are humanized through real-life stories. RAA is also cognizant that the museum has a significant number of middle school visitors and therefore are including elements to educate and inspire that age group. Visitors have a desire to depart from a gallery with a greater understanding of societies' values and who we are as humans.

Applebaum introduced Patrick Swindell to present gallery renderings from the schematic design phase. Swindell reviewed the considerations and approaches used to design each gallery space, unique elements, and planned interactives for the *Textron How Things Fly Gallery*, *Explore the Universe Gallery*, *Moving Beyond Earth Gallery*, *Space Age Gallery*, *Barron Hilton Pioneers of Flight Gallery*, *WWI and WWII galleries*, and *Modern Military Aviation Gallery*.

Marianne Schuit provided information on the Visitor Experience survey. She gave an overview of the evaluation process and demographical information on the visitors who participated. From the survey, the Museum learned that visitors are attracted to human stories of overcoming adversity, and of historically underrepresented groups. Many visitors lack specific historical, cultural, or societal context for air and space themed narratives. Visitors are drawn to stories and ideas they perceive to have strong emotional resonance such as bravery, sacrifice, and adversity. Visitors are attracted to extreme examples of ideas or themes including the "first," the "best", and "the most challenging". Finally, visitors want to connect personally with the content but need support to do so. RAA and NASM are now working together to ensure that these elements are incorporated into the new galleries.

Ken Gazzola asked if the survey revealed a difference between what male and female visitors would like to see at the museum. Schuit responded that there is not as much a distinct gender difference as it is the visitor's background that mostly shapes their interests. Overall, visitors expressed an interest in hearing new stories and connecting to something in their own lives. Ralph Heath asked the designers to speak to what is not included in the galleries. Applebaum responded that the inclusion of technology in the galleries will allow information to be continuously updated and gaps filled. Stofan also shared that she made the decision to include a *Future of Space Flight Gallery*, *Allan and Shelley Holt Innovations Gallery*, and *Modern Military Aviation Gallery* in order to discuss previously untouched topics. She also shared that the current *Nation of Speed Gallery* is a temporary gallery so that space creates opportunities to address other themes in the future. Steve VanRoekel asked how sound will be integrated into the galleries. Swindell shared that sound will be used to create immersive environments and promote multimedia engagement in each gallery. For example, the *WWI Gallery* will include a dynamic audio 4D theater. Meredith Madden asked if virtual reality will be included in the galleries. Swindell responded that this type of technology must be implemented thoughtfully. While there are opportunities to create shared experiences, the National Mall building has too many visitors to successfully execute individual virtual reality experiences. Madden shared that Mount Vernon uses the technology well in their outdoor space. Shephard Hill asked how the Museum will balance the use of new technology with ensuring it will function properly, and Tyson Weihs further asked whether the Museum is equipped to manage the technology. Applebaum responded that they look to what technology works well in comparable museums and benefit from their lessons learned. Browne also shared that NASM leadership is aware of the need to create bandwidth by hiring experts that the Museum does not currently have.

Break

Diversity, Equity, Accessibility, and Inclusion in Museums - Laura Lott, President and CEO, American Alliance of Museums

Holt introduced Laura Lott, president and CEO of the American Alliance of Museums (AAM). Lott has served in this position since 2015 and previously served as chief operating officer.

Lott presented on trends facing museums related to diversity, equity, accessibility, and inclusion. She provided an overview of the American Alliance of Museums organization and the support that they provide to over 40,000 museum professionals, their institutions, and corporate partners serving the museum field.

Lott shared that US museums are visited 850 million times annually, are considered to be the most trustworthy institutions in the nation, and 96% of Americans across all political persuasions want federal funding for

museums to be maintained or increased. She stated that this confidence placed in museums by the public creates a significant level of responsibility. It is a challenge for museums to maintain those positive attributes among an increasingly diverse public. At an increasing rate, visitors do not see themselves represented in museums' collections, exhibits, programming, or people. AAM's data shows that museums' core audiences are 89% white, similar to the demographics of the United States in the 1970s.

Regarding museum staff, while the profession is generally 50/50 male-female, data provided by the Mellon Foundation shows that three fourths of staff identify as white/Caucasian. Lott shared that museum diversity and inclusion work has traditionally been the purview of educators who focus on visitor demographics and ensuring diversity in exhibits. Lott shared that there is a growing effort to diversify the museum field at all levels, from leadership to volunteers. Lott reported that 93% of museum directors are white, 90% of museum board members are white, and 46% of museum boards are all white. A lack of diversity has become a liability for museums. Therefore, AAM asserts that increasing diversity, equity, accessibility, and inclusion in museums is a leadership imperative because it is of strategic importance to museums. Lott shared that there is a growing body of research in the corporate sector that there are financial advantages to being a more diverse team. This applies to innovation and financial success as well as the changing nature of philanthropy. Many funders are asking for board and leadership demographics and about diversity plans. Today's philanthropists are less interested in public naming opportunities and are instead focused on how their gift will make a positive impact. A lack of diversity may also begin to affect museums' ability to receive public funding.

AAM's Museum Board Leadership report showed 77% of directors and 66% of trustees said diversifying their ranks was critical to advancing their museums; only 12% are satisfied with the advances they're making. Yet, only 24% prioritize demographics in board recruitment, only 15% have done any training, and fewer than 10% have a plan. To address this disconnect and meet museum director and board's needs, in 2019 AAM launched the Facing Change program. This program is a 3-year \$4 million initiative funded by Ford, Mellon, and Alice Walton Foundations to help museum boards better reflect the communities they serve. The program includes an 18 month training course and resources for museum boards to develop inclusion plans, a Museum Trustee Resource Center, Board matching program, and excellence in DEAI framework. Lott showed a promotional video for the program.

Blakey stated that the purpose of the National Air and Space Museum Board is to fundraise. She asked if there is a dichotomy between needing to raise funds and diversifying, and how AAM addresses this issue. Lott encouraged members to look beyond their existing networks to identify board candidates that meet both the diversity and capacity requirements. She shared that the Facing Change program includes a board-matching program to help boards with this process. Lott also encouraged that, beyond personal capacity, diverse candidates can offer social capital, partnership opportunities, and perspective. Greg McAdoo asked if there is a body of best practices to reference about increasing board diversity. Lott responded that the Museum Board Leadership report offers recommendations, and there are currently case studies being conducted in this area to assess what is effective. Karen Dahut asked how millennials participate with museums. Lott responded that data shows a decline in school fieldtrips to museums in the 2000s impacted students introduction to museums and their ongoing engagement with the institutions. She also shared that millennials look for interactive experiences where they can expand their personal brand and want to see themselves in the content.

Nominations Committee Report and Discussion - Mark Dunkerley, Chair, Nominations Committee

Nominations Committee Chair Mark Dunkerley provided the Nominations Committee report and shared that the Committee last convened on October 8. Thomas Haas, Shephard Hill, Linda Mills, David Storch, and Steve VanRoekel concluded their active board terms and are eligible for emeritus status. The Committee recommends that they be appointed to emeritus status. Dunkerley opened the floor for comments and called for a vote. The Board unanimously voted to approve Haas, Hill, Mills, Storch, and VanRoekel for emeritus status. Dunkerley acknowledged their leadership and presented each with an emeritus certificate and *Milestones of Flight* book.

Dunkerley stated that Marion Blakey and Stuart Walton completed their first three-year term and are eligible for a second three-year term. The Committee recommends Blakey and Walton for a second term. Dunkerley again opened the floor for comments and called for a vote. The Board unanimously voted to approve Blakey and Walton for a second three-year term. Tom Vice completed his board term. Vice will receive a certificate of appreciation for his service. Following these actions, the board will be down to 24 active members.

Dunkerley called the members' attention to the Gap Analysis that was prepared by Egon Zehnder. Ex. 5

Ex. 5

Dunkerley asked members to Ex. 5

Dunkerley introduced two new candidates for consideration. The first was Ex. 6. Ex. 6 is known by many members and is strongly endorsed. Additionally, Ex. 6 made a generous gift to support Transformation. Dunkerley opened the floor for comments and called for a vote. The Board unanimously voted to approve Ex. 6 nomination. Ex. 6 nomination will be presented to the Smithsonian's Board of Regents for official approval at their January meeting.

The second nomination is Ex. 6, former Ex. 6. Ex. 6 serves on several corporate boards and has an extensive network. Dunkerley opened the floor for comments and called for a vote. The Board unanimously voted to approve Ex. 6 nomination. Ex. 6 nomination will be presented to the Smithsonian's Board of Regents for official approval at their January meeting. With these two nominations, the board will be back to 26 members.

Ex. 6

Ex. 6 attended the June board dinner. Dunkerley welcomes member's thoughts on their candidacy.

Advancement Committee Report and Discussion - Marion Blakey, Chair, Advancement Committee

Advancement Committee Chair Marion Blakey provided an update on fundraising progress. The fiscal year ended on September 30, and the Museum Exemption 4. The Smithsonian achieved this year's Institution-wide fundraising goal of Exemption 4.

While Transformation remains the Museum's top priority, Advancement must also continue to raise funds for other important initiatives. In FY19, the Museum achieved a good balance of funds raised for Transformation versus other programming. This year, donors gave Ex. 6 toward Transformation and Ex. 6 for other priorities including Apollo, education initiatives, conservation, and interns. Transformation funding includes Ex. 4 generated by the Apollo coin, which was an innovative way to generate significant support. The coin is still on sale through December. In FY19, Advancement raised seven in-kind gifts valued at a total of Exemption 6. In-kind gifts are donated items or materials rather than strictly monetary support. These gifts are budget relieving for various departments in the museum and are credited to the donor based on the dollar value of the in-kind gift. For example, the museum received a new lift donated by Ex. 6, which will be used by the Collections team to move and care for artifacts, and relieves their budget of Ex. 4. In FY19, Advancement raised Ex. 6 in estate gifts. This includes five new planned gifts valued at Ex. 6, and Ex. 6 in funds from realized estate gifts. Blakey shared that, along with gifts through a will or trust, Beneficiary Designation gifts are an increasingly popular type of planned gift. Naming the museum as a beneficiary of nearly any type of financial account is an easy way to leave a philanthropic legacy. In addition to providing for family or friends, individuals have the opportunity to leave the assets or a portion of the assets in any account to NASM.

Blakey reviewed a list of all major gifts of Exemption 6 received in FY19, and also announced new gifts since the last meeting. Exemption 6 made a Exemption 6

Exemption 6. The Museum also received a new Ex. 6 gift from Exemption 6 in support of *Destination Moon*. Exemption 6. Chris Hazy was instrumental in encouraging this gift. NASM received a Ex. 6 gift from Exemption 6. Exemption 6, made a

Ex. 6 gift to support research and fieldwork. Blakey thanked Exemption 6 for his Ex. 6 gift in support of the WWII exhibit.

Blakey provided an update on the Ignite Tomorrow campaign. As of the end of September, Exemption 4

[REDACTED]

Exemption 4

[REDACTED]

Blakey provided an update on annual giving. The National Air and Space Society (NASS) and Wall of Honor provide unrestricted support to the museum. This year they set a new record, having raised over Ex. 4 from NASS memberships and the Wall of Honor, and also had the highest number of members the program has ever had, exceeding 9,500. Advancement will continue to invest in expanding this program to grow the membership. Exemption 4

[REDACTED]

Blakey shared that, while Advancement often measures their success by the numbers, another key metric is the impact of philanthropy at the museum. Stofan spoke about two powerful and privately funded programs, The Teacher Innovator Institute (TII) and the S.H.E Can STEM Summer Camp. Blakey announced that the S.H.E. Can STEM Summer Camp was sponsored by the Walton Family Foundation and, thanks to Steuart Walton's passion for inspiring the next and more diverse generation of aviation professionals the Walton Family Foundation made an additional grant to enable the camp to be expanded into Northwest Arkansas. These programs and all the education and public programs the museum offers would not be possible without private support.

In review, Blakey announced that Stofan and the Advancement team had over 400 meetings with donors and prospects this year, including a number of meetings set up by board members. There were 30 donor events this past year, including regional events hosted at the Hazy's home in LA and Dawne Hickton's home in Pittsburgh. Earlier in the month, Blakey attended a dinner for Stofan hosted by a Portrait Gallery board member in New York. 89 proposals were submitted this year, with a combined value of nearly Ex. 4 dollars and 22 trips were taken by our gift officers and Stofan specifically for donor cultivation.

Blakey stated that FY19 was a great success and congratulated Stofan, the Advancement team, and the board for their accomplishments. Looking ahead to FY20, the Museum has set a goal to secure Ex. 4. This goal is not randomly set, but is based on a pipeline of planned solicitations. Advancement is starting the year off strong with Exemption 6 in verbal commitments. There is still work to do in turning these verbal commitments into written and finalized agreements. Some of the verbal commitments include Ex. 6 from Exemption 6, to name the *Exploring the Planets* Gallery. The Kislak Family Foundation committed Ex. 6 to name the *WWII in the Air* Gallery and Exemption 6 agreed to Ex. 6, specifically to kick off fundraising for the new *Wright Brothers* Gallery. Gulfstream committed Ex. 6 and Exemption 6 verbally agreed to the same amount in support of *Destination Moon*. Funding for the 2020 Trophy Awards includes commitments from four new corporate sponsors. Blakey thanked Exemption 6 for a commitment to the *WWII* Gallery, Exemption 6 for their commitment to Transformation, and Exemption 6 for his commitment to Transformation. With these recent commitments, the Museum now has eight of the nineteen galleries named for donors. Many

great opportunities are still available. Advancement is also looking forward to key donor cultivation events in 2020. Greg McAdoo and Jamie McJunkin are generously hosting regional events in San Francisco on January 21 and 22. Later in the spring, Advancement hopes to have an event in Florida, and in the fall we will have an event held in Jackson Hole, Wyoming hosted by Rich Sugden. The Museum plans to have a presence at the 2020 South by Southwest, which takes place in mid-March. Blakey stated that she is confident it will be another great year, and that the Board can continue to contribute to Museum's success in this exciting chapter of its history.

Chris Jones stated that Exemption 4 & 5

[REDACTED]

Education Department Overview - Beth Crownover, Associate Director, Education

Beth Crownover provided an overview of the Education Department. Since starting at NASM, Crownover has worked to build upon current, high-quality initiatives to create a full complement of experiences learners can move through. She is also working with the Education team to develop a clear understanding of 'Education at NASM' that can serve as a 'north star' in future. She stated that, as NASM is both a national museum and a center for the DC community, it is incumbent upon Education to create an arc of engagement that can span a learner's life, both locally and nationally. Education is working to leverage current education initiatives to serve as the core/grounding nodes on this arc. Examples of core efforts that can be leveraged to begin to build out a PreK-Adult Arc include: Holt Scholars, STEM in 30, SHE Can Camp, Haas Observatory efforts, Explainers, and the Teacher Innovator Institute. In order to understand the full extent of initiatives that can serve as foundational elements on the arc, Education is building an inventory of NASM's programs and products. Once this essential resource created, Education will be able to conduct an analysis of what to build upon, what to re-tool, what to shutter and where the Museum can build new efforts. Additionally, Education can identify where opportunities exist to scale regionally and nationally. Crownover shared that building out a consistent arc of experiences is key as it will allow Education to create connections for learners to experiences of interest at colleague and professional organizations so that experiences aren't limited to NASM.

As a team, Education is beginning a collaborative effort to define our value creation proposition. It is essential that the Museum determines our 'why' as it relates to Education at NASM. Crownover stated that timing is key as the Museum is getting ready to kick off strategic planning efforts overall. Education began this process by identifying current resources and differentiating factors at the museum. Identified resources include world class collections, active research, expertise in creating audience-focused experiences, external relationships, personalized interactions, relevance via storytelling, financial support, and multidisciplinary connections. Differentiating factors include one of a kind objects with personal connections, research that inspires, direct industry relationships, brand recognition, being an iconic museum, SI unit network, high audience access, and no financial barrier to engage. Crownover asked for the members' input on what should be considered as Education works to define the department's value creation proposition. McAdoo encouraged Crownover to develop metrics for each of the programs. She responded that, while numbers are important, specifically the number of interactions and engagements is key. Dawne Hickton recommended driving visitors to be inspired beyond becoming a pilot or astronaut by educating them on a full range of future possibilities. Ken Gazzola agreed. Crownover stated that one approach to this is to develop programing that teaches aspects such as critical thinking skills as this can be applied anywhere in anyone's life. Jeff Knittel asked what percentage of NASM's educational resources are online. Crownover stated that there are not currently a wealth of resources online. Education is beginning conversations with outside partners to improve this.

Future State Committee Report and Discussion - Steve VanRoekel, Chair, Future State Committee

Chair of the Future State Committee Steve VanRoekel presented the Future State Committee report. VanRoekel shared that the Future State Committee established four areas of focus at the beginning of 2019. These areas of focus included building external partnerships, creating a culture of data collection, cultivating a NASM brand identity, and identifying innovative ways to make money. The Committee is now evaluating the progress made towards these goals and assessing which goals will be prioritized for this fall and winter. The Committee's focus this spring and summer was on assisting with the Apollo anniversaries by helping build a network of strategic external partnerships. The Committee successfully connected NASM with Major League Baseball teams for the Apollo at the Park project and, at the Committee's suggestion, the Museum partnered with NatGeo to unveil the first picture of the Saturn V on the Washington Monument. NASM also developed a relationship with Ex. 6, and the Museum has already begun discussing next projects with him and his team. At the next meeting, the Committee will address the goal of creating a culture of data-collection and insights-driven decision making. The discussion will also include topics such as data strategy, data inventory, and how to integrate data into special projects like Apollo 50.

VanRoekel provided a debrief on the Apollo 50 activities. He stated that Apollo 50 was an incredible and overwhelming success this summer. The goal of the Apollo at the Park program was to build national awareness around the Apollo anniversary and engage new audiences. Installing the suits at 15 MLB ballparks across the country increased overall audience exposure as the collective attendance for these parks was around 10 million throughout the summer months. Over half of the ballparks promoted the spacesuit and the anniversary, generating a significant amount of local news coverage. For example, the statue at Nationals Park made the front page of the *Washington Post Weekend* section. On a deeper level, over 5K individuals engage directly with the suits via a special content activation. Apollo at the Park also cultivated new partnerships for the Museum, not just with the MLB teams, but the 15 museums where they will be displayed. With the Race to the Moon program, the goal was to engage a new audience, mainly athletes, around the Apollo 50th anniversary. Race to the Moon challenged athletes to run 50 times the distance to the Moon, or 12.2M miles. Over 233K athletes ran over 29M miles, the highest in Strava history. The goal for Apollo 50 Go for the Moon was to engage the local DC audience around the Apollo 11 anniversary, earn national media coverage, and generate trending coverage on social media linking NASM to the program. The total in-person attendance over two nights (July 19th and 20th) was 500,000 people. This greatly surpassed the original nightly goal of 25,000. On social media, during the anniversary week the Museum received 12 times the average of social engagements (580,000 total engagements) and follower growth for each platform was 13 to 15 times the average. The Go for the Moon program was also highlighted on social media by a variety of influencers including the DC Mayor, the Senate Majority Leader, Buzz Aldrin, Adam Savage, and the Secretary of the Interior. The goal of Project Egress with Ex. 6 was to create a live and web-streamed program that would engage the maker community and Ex. 6 audience. The live stream of the build was viewed over 100,000 times on Facebook and UStream. Ex. 6 social media account posted about the Museum 115 times during the anniversary week resulting in more than a quarter of a million direct engagements (likes, comments, and shares).

VanRoekel shared the first six minutes of the Go for the Moon program with the board.

Old Business - Allan Holt

Holt reminded members that the February dinner and meeting will take place at the Udvar-Hazy Center.

2020 Board meeting dates: June 9-10; October 20-21

Upcoming events:

November 14 - NASS Flight Jacket Night with Al Worden, National Mall

December TBD - GE Aviation Lecture on Supersonic Flight, National Mall

January 21 - Reception hosted by Jamie McJunkin, San Francisco

January 22 - Reception hosted by Greg McAdoo, San Francisco

March 26 - Trophy Awards dinner, Udvar-Hazy Center

New Business - Allan Holt

Holt welcomed members to address new business. He also reminded members to complete the meeting survey.

Wrap-up - Ellen Stofan

Executive Session

Meeting adjourns

Holt adjourned the meeting at 1:00 pm.

National Air and Space Museum Board

*Present at the October 30, 2019 meeting

Board Members:	Board Members Emeritus:	
Mr. William S. Ayer*	Mr. James Albaugh	Mr. John L. Plueger
Mr. Daniel Baker*	Mr. Ronald W. Allen	Dr. Jon A. Reynolds
Ms. Marion C. Blakey*	Mrs. Anne B. Baddour	Dr. Donald B. Rice
Mr. Neil Cohen*	Mrs. Agnes M. Brown*	Dr. Richard Sugden
Ms. Karen M. Dahut*	Mr. Armando C. Chapelli, Jr.	Dr. Frederick Telling
Mr. Stanley A. Deal	Mr. Max C. Chapman, Jr.*	Mr. Charles Thornton
Mr. Scott Donnelly	Mr. Joe Clark	Ms. Patty Wagstaff
Mr. Mark B. Dunkerley*	Mr. Frank A. Daniels, Jr.	
Ms. Michele A. Evans	Mr. Edsel B. Ford, II	
Mr. Tom Gentile, III*	Mr. Stuart L. Fred*	SI/NASM Staff Members
Mr. Gary C. Kelly	Mr. Morton Fungler	Secretary Lonnie Bunch
Mr. C. Jeffrey Knittel*	Mr. Kenneth E. Gazzola*	Dr. John Davis
Mr. Thomas W. Haas*	Mr. S. Taylor Glover	Mr. Robert Spiller
Ms. Dawne S. Hickton*	Mr. James M. Guyette	Dr. Ellen R. Stofan *
Mr. Shephard W. Hill*	Mr. Randall A. Greene	Mr. Christopher U. Browne*
Mr. Allan M. Holt*	Mr. Ralph D. Heath*	Ms. Kelly Bloom*
Mr. Thomas W. Horton	Mr. David R. Hinson	Ms. Stephanie Brinley*
Mr. Christopher T. Jones*	Mr. David C. Hurley	Ms. Meg Caulk*
Ms. Meredith Siegfried Madden*	Mr. Robert James	Ms. Beth Crownover*
Mr. Gregory L. McAdoo*	Mr. Clayton M. Jones	Mr. Rick Flansburg*
Ms. Linda A. Mills*	Mr. David L. Joyce	Mr. Michael Garceau*
Ms. Eren Ozmen	Mr. Rodney R. Lewis	Ms. Laura Gleason*
Mr. H. Ross Perot, Jr.*	Mr. Steven R. Loranger	Ms. Lindsey Jackson*
Mr. David Storch*	Capt. James A. Lovell	Dr. Peter L. Jakab*
Mr. David Tolley*	Mrs. Adrienne Bevis Mars	Ms. Claire Kelly
Mr. Steve VanRoekel*	Mr. Bruce R. McCaw*	Ms. Marian Livengood
Mr. Thomas Vice	Mr. Robert A. Milton	Ms. Anne McAllister*
Mr. Steuart L. Walton	Mr. Robert J. Mittman	Ms. Jessica McNally*
Mr. Tyson Weihs*	Mr. T. Allan McArtor	Mr. Francisco Torres*
Mr. Paul Wood*	Mr. Jameson J. McJunkin	Ms. Elizabeth Wilson
	Mr. Thomas G. Morr	
	Mr. Lloyd "Fig" Newton	

	Mr. Jack J. Pelton	
	Mr. Roger D. Percy*	
	Mr. Robert W. Pittman	
	Mr. Thomas F. Pumpelly*	

**Smithsonian National Air and Space Museum Board Meeting
Wednesday, February 5, 2020
Executive Board Room
Steven F. Udvar-Hazy Center**

Tour of the Dulles Collection Center

Following welcoming remarks by Ellen Stofan and Chris Browne, members toured the Dulles Collection Center.

Meeting Called to Order - Allan Holt, Chair

Allan Holt called the meeting to order at 9:15 am. He welcomed new members Linda Hall Daschle and Mark Burns and presented each with an *Ascent* pin. As Chair of the Board, Holt participated in activities such as introducing Stofan to Kara Helander, inclusion and diversity officer of Carlyle, to identify potential diverse board candidates, participated in the January 8 Regents Advancement Committee meeting, and participated on a call with David Rowe, which resulted in a major gift in support of Transformation.

“State of the Smithsonian” - Rob Spiller, Assistant Secretary for Advancement

Rob Spiller, assistant secretary for Advancement, presented the “State of the Smithsonian” report. He provided an update on FY20 fundraising stating that the Smithsonian’s fiscal year runs from October 1 to September 30 and the Institution-wide fundraising goal for the year is Exemption 4. He shared that Exemption 4 is the second highest goal ever for the Smithsonian. With 33% of the year elapsed, the Smithsonian has raised Exemption 6 of the goal. Exemption 4

[Redacted text block]

The Smithsonian is pursuing another comprehensive campaign that will serve as an opportunity to catalyze big ideas, strengthen the brand, attract new donors, encourage donors to give at a higher rate, and set a new bar for annual fundraising. Spiller reported that, prior to the last campaign, the Smithsonian raised approximately Ex. 4 per year. The Smithsonian now raises approximately Ex. 4 per year. The installation of Secretary Bunch creates the opportunity to launch a new campaign as Bunch is a successful fundraiser. Additionally, a number of units, including NASM, currently have campaigns and an Institution-wide campaign will both benefit from and accelerate those individual efforts.

Spiller shared that the upcoming campaign [Redacted] Ex. 4 [Redacted]
[Redacted]
[Redacted]
[Redacted].

Secretary Bunch wants to establish a [Redacted] Ex. 5 [Redacted]
[Redacted]. Spiller shared that [Redacted] Ex. 5 [Redacted]
[Redacted] and Stofan agreed. Pan-Institutional campaign initiatives [Redacted] Ex. 5 [Redacted].

Spiller shared that Advancement is conducting a [REDACTED] Ex. 5 [REDACTED]. If they count from the end of the last campaign through 2026, there is a comfortable path toward raising [REDACTED] Exemption 6. The campaign goal will most likely be approximately [REDACTED] Exemption 6. The Office of Advancement will present to the Smithsonian Regents in June to seek their approval on investments to Advancement, the campaign goal, and emerging campaign themes. Spiller stated that any investment made to the Office of Advancement would [REDACTED] Ex. 5 [REDACTED].

Spiller acknowledged the important role played by board members and other volunteers, and welcomed ideas and feedback.

Marion Blakey asked for additional information on plans for the Arts and Industries building. Spiller responded that, [REDACTED] Ex. 5 [REDACTED].

“State of the Museum” - Ellen Stofan, John and Adrienne Mars Director

Ellen Stofan presented the “State of the Museum” report. Stofan announced that Meroë Park joined the Smithsonian as deputy secretary and chief operating officer. Park was the executive vice president of the Partnership for Public Service and former executive director of the Central Intelligence Agency. In her role as deputy secretary and COO, Park will oversee most of the Smithsonian’s day-to-day activities across its museums, research centers and education organizations, as well as many administrative and support functions. Stofan will meet with Park on February 13. Stofan announced that NASM received [REDACTED] Ex. 4 [REDACTED] for Revitalization in the FY20 appropriation. She also noted that, since no money was provided to cover the Federal employee 3.1% pay raise, the Museum will cover the costs by reallocating existing funds.

Stofan provided an update on her current areas of focus. Regarding Revitalization and Transformation, Stofan stated that she is pleased with the construction progress. The Museum is ahead of schedule on artifact moves but is behind on the base build timeline. The contractor has added a third shift to stay on track. Concerning DEAI planning activities, leadership received the preliminary report from Cook Ross and is now moving forward on next steps to develop an actual plan. Regarding the Strategic Plan, The Raben Group is conducting stakeholder interviews, and the Museum will receive a summary report of this outreach with an overview and key outcomes from the discussions. They have also conducted listening sessions with staff and senior leadership. The Museum expects to receive a first draft of the plan in March.

Stofan shared that Beth Crownover assessed NASM’s education processes and made a number of improvements to allow for efficiencies and long-range planning. She also drafted a value creation proposition for learning at NASM that strongly relates to the overall mission. This document will serve as the foundation for all of our education work moving forward. In collaboration with Stofan, Crownover also began efforts focused on developing an eco-system for education with other non-profit organizations.

Regarding the Master Plan of UHC, a statement of work was drafted for the RFP that will be issued to develop a master plan to enhance the visitor experience and to identify areas of improvement. The Museum will assess public areas and activities such as exhibitions, classroom spaces, retail offerings, special events, donor recognition, parking, education and public programs.

Stofan reported on her recent activities as she traveled extensively for donor and industry meetings as well as outreach opportunities. Trips included [REDACTED] Ex. 4 [REDACTED]. Stofan thanked Jamie McJunkin and Greg McAdoo for hosting two events in the San Francisco area with special guest [REDACTED] Ex. 4 [REDACTED]. Looking ahead, NASM will again have a presence at South by Southwest. Stofan will join a panel on the *Democratization of Space* hosted by Booz Allen Hamilton. She will also join a private salon dinner with the theme of “Apollo to Artemis”. Stofan thanked Karen Dahut for facilitating these arrangements. Stofan will attend the MARS conference, where Jeff Bezos gathers innovative minds in Machine learning, Automation, Robotics, and Space to share new ideas. Stofan shared that the NASM Trophy Awards will be presented on March 26 at the Udvar-Hazy Center. Dr. Charles Elachi will receive the Lifetime Achievement Award and the Hubble Space Telescope team will receive the Current Achievement Award. Stofan also announced that the awards will be named The Michael Collins Trophy after former

Museum Director and Apollo astronaut Mike Collins in recognition of his contributions to air and space history and foundational role in building America's favorite museum. In addition to others, Stofan thanked Booz Allen Hamilton, Jacobs, and Sierra Nevada for helping to sponsor the evening.

Stofan shared that much of the Museum's outreach and communication efforts focus on Revitalization and Transformation. She highlighted that the *NY Times* ranked DC the #1 place to visit in 2020 and NASM was listed as one of America's best free museums by MSN.com. The Smithsonian will announce its Open Access Initiative in February. Open Access will encourage broader public use of the Institution's digital images. NASM will participate with an initial release of over 1,200 images, many created as part of the *Air and Space Photos* project funded by the Ryna and Melvin Cohen Family Foundation. Stofan thanked Neil Cohen for his advocacy with this initiative. Additional outcomes will include over 10,000 NASM images shared, new high resolution photographs of over 2,500 objects in the collection and 100 hours of digitized public domain film from the Museum's film archives, and an enhanced website experience. Stofan shared that NASM's moon rock went back on display at the end of November. The Museum also continues to get a bump in exposure from the Apollo efforts. *Time Magazine* included "Go for the Moon" in its *Year in Review* edition and one of the astronaut statues is traveling internationally. Stofan acknowledged Allan Holt for making the statue initiative possible.

Stofan provided an update on public programs and lectures. The Museum hosted the National Air and Space Society's Engen Flight Jacket Night with Apollo astronaut Al Worden. The GE Aviation lecture focused on the Concorde and the future of supersonic flight. NASM partnered with National Museum of African American History and Culture and the National Museum of African Art for a special program at the Kennedy Center featuring George Clinton, Nona Hendryx, Vernon Reid, and Alondra Nelson. The Udvar-Hazy Center will host African American Pioneers in Aviation Day sponsored by Northrop Grumman. Tuskegee Airman and newly promoted Brigadier General Charles McGee will participate in the program. The Museum is discussing potential opportunities to grow our relationship with the Washington Nationals, including establishing an annual *Air and Space Night* at Nationals Park to commemorate the founding of the Museum. The Museum is also pitching bringing NASM programming to the ballpark in support of the Nats' existing theme-games. In collaboration with NOVA Systemic and their efforts at inspiring STEM, the Hazy Center will host "Night at the Museum," a two day VEX Robotics Competition (VRC) Signature Event. The Museum is partnering with Deloitte to host a two-day hackathon at Hazy in March. Teams of local high school students will compete to develop a web-based solution that will bring attention to the need for diversity in STEM and will allow the Museum to better educate audiences on the many STEM careers and opportunities in aerospace. The teams will rely on NASM and Deloitte staff and various subject matter experts representing the industry to develop their solutions, and solutions will be evaluated by a panel of "judges like Vint Cerf of Google and Karlie Kloss. Stofan thanked Armando Chapelli for facilitating this opportunity. Stofan [shared a video](#) of a promotional news segment.

Stofan stated that Washington will host a WWII Victory Commemoration Flyover on May 8, and the Museum is coordinating with Pete Bunce and the other Arsenal of Democracy organizers. During the fly-over, NASM will host a special viewing reception in conjunction with the National Museum of African American History and Culture. That evening, we will hold an intimate dinner for a smaller group of potential donors to the WWII gallery. For the public, the Museum will have a social media focus and an airplane spotter exercise. The following day, the Udvar-Hazy Center will host aircraft for a fly-in and family day. Education is reaching out non-profit aviation organizations who may wish to participate.

Another major theme for 2020 is Earth Optimism. In celebration of the 50th anniversary of Earth Day in 2020, the Smithsonian will host the second Earth Optimism summit. NASM will highlight the role of Earth observation for climate understanding and resilience by hosting three public lectures that will discuss the Museum's commitment to this topic. Our approach to earth science/environment will have two major elements. One is to share advances in basic science, especially as they relate to human-driven climate change. The other, in complementary fashion, is to bring our publics into conversation on the role of space and aviation technologies in the understanding of and solutions to a wide range of contemporary problems tied to climate change and human activity. NASM's Visitor Services team is collaborating with curators to develop a special docent tour that highlights several Mall building artifacts from the earth observation and climate change lens.

Stofan stated that she will continue to pursue the areas of focus that she highlighted at the beginning of the report. Additionally, the Museum is looking at the visitor experience and re-branding of the Museum. NASM plans to [REDACTED] Ex. 5 [REDACTED].

Steve VanRoekel asked if the Smithsonian is exploring fundraising opportunities such as text to give. Stofan and Spiller acknowledged that the Smithsonian's privacy policies prevent programs such as this, but the Institution is exploring options for updating the policy. Greg McAdoo asked whether the virtual museum is being taken into consideration during rebranding efforts associated with Transformation. Marc Sklar responded that the designers are working to develop materials that can be used in all spaces.

Revitalization and Transformation Update - Chris Browne, Deputy Director

Chris Browne provided an update on the Revitalization and Transformation of the National Mall building, presenting information on the progress of major project elements to date. Browne stated that the Dulles Collection Center is complete and is nearly full of artifacts. The ground floor, which stores large artifacts, is at 100% capacity, the 2nd floor, housing medium artifacts, is at 90% capacity, and 3rd floor, with small artifacts, is at 80% capacity. The Ramsey Building upgrades are essentially complete and the building is approximately 60% filled.

Regarding the Revitalization of the National Mall building (NMB), construction is 20% complete. The west half of the NMB is closed and the construction demising wall is in place. All artifacts are deinstalled from the former South lobby and the mural "back of canvas" work is ongoing. Artifact deinstallation and relocation is complete for the former *Barron Hilton Pioneers of Flight* gallery and, with the exception of the Fokker T-2 which will be done by the end of January, all planes are deinstalled and have been relocated. A performance mock-up of the North vestibule is under construction at a testing facility in York, PA. Construction of a large temporary roof enclosure is scheduled to be completed mid - January so that the removal and replacement of the skylights can be done in any type of weather. Browne welcomed members to view pictures of the construction progress on the Museum's "Change is in the Air" Flickr page.

Browne provided an update on the Museum's work with Smithsonian Enterprises (SE). SE is finalizing a Request for Proposals for the planetarium dome design and installation, to be issued in January 2020. The footprint of the Museum Store is now expanded in order to maximize revenue. Regarding the NMB restaurant, Smithsonian leadership made the decision to replace the existing building. Exemption 5 [REDACTED] Ann Beha Architects was selected to design the restaurant. A design scope of work has been developed and a RFP issued. SE is proposing interim use of the Launch Pad for café and food service while the restaurant is closed (Jan 2022- Jan 2025). A concept for this temporary space should be available in early February, as SE has toured the space with potential service providers. SE is to propose an ultimate use (post 2025) of the Launch Pad to maximize revenue generation, which may include simulators and/or other activities. Turning to the restaurant at the Udvar-Hazy Center, Browne shared that McDonald's is closing in July and Shake Shack has been selected to go into the space.

Browne presented the following figures related to Revitalization construction:

Contract GMP: \$478.5M

Contract NTP: September 2018

Contract Completion Date: June 2024

Percent of Contract Billed: Approximately 20%

Construction Time Elapsed: Approximately 22%

Project Contingency Budget: \$18,000,000 (4% of project award)

Mods Funded to Date: \$2.76M

Remaining Contingency: \$15.24M

Potential Exposure: 30% of contingency funds remaining

Browne also listed the following challenges associated with Revitalization: schedule; artifact move contract; cost control; and contingency.

Browne provided an update on the Transformation of the National Mall building. In the west end, the fabrication contract for the West End Galleries is 11% complete. Design and Production Incorporated (D&P), the exhibit fabricator, will start fabrication after final approval of the prototypes are presented. Regarding the Commons space, the Commons team is working with PGAV Destination to establish an Interim 65%

submittal to help ensure the details and documentation is satisfactory prior to the final 65% submittal. The interim submittal is scheduled for January 2020. A mockup of the terrazzo flooring with final inlay details and colors is planned for February. Regarding the east end, the 35% design submittal of the East End Galleries was received and is under review.

Browne listed the following challenges associated with Transformation: staff support; reinstallation of artifacts back into the galleries; contractor performance in several instances; cost control; and integrating visitor experience data into the designs.

Browne provided a visual of the Transformation budget comparing actuals, original spend plan, and current spend plan. Browne also shared a simplified visual summary of the major Revitalization and Transformation milestones. He noted the museum's 50th anniversary coincides with the nation's 250th. The Smithsonian and others are already thinking about how to mark this occasion.

Chris Jones asked if [REDACTED] Ex. 5 [REDACTED]. Browne responded that, [REDACTED] Ex. 5 [REDACTED]. Shephard Hill asked if the Museum plans to test and mitigate the noise of the terrazzo flooring. Browne shared that the building will have a number of acoustical panels as well as baffles in the skylights to absorb sound. Meredith Madden suggested offering healthy alternatives to Shake Shack at the Udvar-Hazy Center. Browne shared that Shake Shack is working with Restaurant Associates to provide a grab and go option for healthy non-menu items. VanRoekel suggested organizing a food truck pavilion at the Udvar-Hazy Center. Browne shared that leadership has encouraged Smithsonian Enterprises to bring food trucks to UHC during the transition period between McDonald's and Shake Shack.

Break

NASM Strategic Plan - Stephanie Brinley, Assistant Director for Business Operations and Technology and Haley Griffin and Shannon Trudge, The Raben Group

Stephanie Brinley reported on the development of NASM's new strategic plan. Brinley shared that this is a timely undertaking as Stofan is now established as the director and the Museum is rebranding. The strategic plan development process will help the Museum look both internally and externally and ask the question "What is the National Air and Space Museum." NASM is partnering with The Raben Group, a communications and public policy organization based in Washington, DC to create the document. Brinley invited Haley Griffin and Shannon Trudge to share an overview of the strategic plan development process.

Trudge shared the goals for NASM's strategic plan development process. She stated that the upcoming strategic plan will serve as NASM's "North Star," guiding organization-wide decision making, investment, and resource allocation decisions, in alignment with the broader Smithsonian Institution's priorities. It will reinforce NASM's identity as both a history and science museum across its physical locations and virtual platforms. The plan will also reintroduce NASM post Revitalization and Transformation to its core audiences and the public. Finally, it will address necessary investments in preparation for reunification of NASM staff at the National Mall building and help prepare staff for their "new normal." Trudge reviewed data collection and environmental assessment methods. The Raben Group started their work with NASM by participating in the October 2019 NASM Senior Leadership Forum. To facilitate the environmental assessment and collection of qualitative and quantitative data, The Raben Group conducted nine interviews with members of the NASM leadership team as well as ten interviews with strategic partners including Smithsonian Institution representatives, Smithsonian museum heads, and NASM Board members Allan Holt, Tyson Weihs, and Marion Blakey. They participated in three listening sessions with NASM workforce.

Griffin presented key findings and themes to date. The Museum's current strengths include a strong sense of shared responsibility. She stated that staff are deeply invested in NASM's mission and take seriously their responsibility to preserve its artifacts and stories. They are committed to ensuring an outstanding visitor experience and protecting the Museum's reputation as a world class museum. She also shared that the Museum has a strong brand. NASM's staff, docents, and curation/exhibition experts operate at a caliber that sustains NASM as one of the most visited museums in America and the world. Griffin stated that an area of opportunity is strengthening the Museum's ability to tell the story of future innovation and space exploration. A core question for NASM is how it stays relevant across time, demographics, and generations. When NASM reintroduces itself to the public post Revitalization and Transformation, it will lead with its

identity as a cutting-edge science museum. Another area of opportunity is storytelling. NASM has a responsibility to lead the industry by taking a bold approach to storytelling and curation, authentically and accurately sharing complicated and morally fraught historical events, in line with the direction set by Secretary Bunch. Focusing on education, in addition to generating original research, NASM will continue to prioritize and grow its K-12 education focusing on diversifying the field of STEM and sparking learning experiences across multiple learning/presentation styles. The Museum will have a renewed focus on inclusive storytelling via diverse faces, stories, artifacts, and perspectives, in addition to global language accessibility in delivery of information. Finally, to pursue opportunities associated with digital engagement, NASM will invest in and use technology to improve alignment between its two locations through increased digitization of the museum’s catalogue, continued virtual learning opportunities, and visitor follow-up.

Griffin identified areas for further collaboration and alignment at NASM. She shared that, consistent across the interviews and focus groups, staff recognized the different audiences and visitor experiences at both public locations. They expressed a need to codify the unique identity and function of each NASM location, while creating a cohesive, overarching narrative for NASM internally and externally. There also needs to be a focus on creating a “shared NASM experience” for staff regardless of their location and establish a unified organizational culture in preparation for reunification. The Raben Group recommends amplifying virtual connections between locations to create a more unified/singular visitor experience. They also recommend embracing each location’s strengths to create an individual purpose. The National Mall building is the most visited museum in the U.S. housing iconic artifacts and showcasing opportunities and events designed to educate and entertain visitors of all ages and backgrounds from across the world. It is a destination museum and once-in-a-lifetime experience. The Udvar Hazy Center is primarily as a local destination with repeat visitors. The Raben Group recommends that the focus should not solely be on getting more visitors to the Udvar-Hazy Center from the National Mall building due to unrealistic travel, time, and logistical constraints. The Udvar-Hazy Center can therefore serve as a programmatic space, innovation hub and accelerator for deepened engagement and educational experiences. It can also serve as a private space and/or have rotating exhibits. The Garber Center will serve as a location for collections processing, exhibits production, storage, preservation of artifacts and responsible collections management.

Regarding internal development and culture, staff members expressed the need for internal reflection on work culture and environment. They desire to level-set and find their “new normal” and “standard operating procedures” post Revitalization and Transformation. Investing in staff, people, resources, space, and additional capacity will address the need for additional growth and leadership opportunities. It will expand the Museum’s capacity to sustain the NASM workforce, physical facilities, infrastructure, and operations. A goal is to clarify and increase internal collaboration across NASM departments and locations to aid efficient planning, decision-making processes, and project execution.

Griffin shared The Raben Group’s upcoming deadlines and deliverables. On February 5, The Raben Group will facilitate a 4th listening session with cross-certified NASM docents. In late February, a strategic planning survey will be distributed amongst NASM workforce and leadership with the goal of testing draft strategic plan language, gathering feedback from NASM staff and board on strategic plan sections, and gain additional insights. On March 6, a first draft will be submitted for NASM leadership’s review. March 6-24, NASM leadership will review and offer feedback on the first draft. On March 31, The Raben Group will submit a final draft of the strategic plan based on final feedback.

Griffin raised the following questions to the board members:

Exemption 5

Nominations Committee Report and Discussion - Mark Dunkerley, Chair, Nominations Committee

Nominations Committee Chair Mark Dunkerley provided the Nominations Committee report. Dunkerley welcomed new board members Mark Burns and Linda Hall Daschle, and stated that the board now has 26 active members. At their recent meeting, the Board of Regents approved emeritus status for Thomas Haas, Shephard Hill, Linda Mills, David Storch, and Steve VanRoekel.

Dunkerley shared that the Nominations Committee convened on January 15 to reviewed potential nominees. The Committee recommended Ex. 6 and Ex. 6 for membership. Ex. 6, attended the October board dinner and several members know Ex. 6 well. Ex. 6 is a major leader in the industry Exemption 6. After opening the floor for comments, Dunkerley asked for a motion and vote. The Board unanimously voted to approve Ex. 6 nomination. Ex. 6 is a partner at Ex. 6. Exemption 6

Dunkerley asked for a motion and vote. The Board unanimously voted to approve Ex. 6 nomination. Ex. 6 nominations will be presented to the Smithsonian’s Board of Regents for official approval at their April 6 meeting. Assuming Ex. 6 are approved, the board will have 28 members.

Dunkerley stated that several potential candidates attended the February board dinner. Guests included:

- Exemption 6
-
-

Dunkerley welcomed members to share thoughts on their board candidacies.

Dunkerley stated that, in October 2020, the board will have six members eligible for emeritus status and, therefore, the Board must increase recruiting efforts over the next six months. The Nominations Committee has been tasked with increasing the candidate pool, and Dunkerley invited members to nominate worthy candidates. He emphasized that the Committee continues to look for diverse candidates.

Advancement Committee Report and Discussion - Marion Blakey, Chair, Advancement Committee

Advancement Committee Chair Marion Blakey provided an update on fundraising progress. For FY20, the Museum has a goal of raising Exemption 4. Donors already committed Exemption 4

Blakey stated that, of the Exemption 6

Blakey highlighted several noteworthy gifts received since the October board meeting. The Kislak Family Foundation made a Ex. 6 gift for the naming of the *World War II in the Air* gallery in honor of Jay I. Kislak. The Ex. 6 made a Ex. 6 gift also in support of the *World War II in the Air* gallery. Advancement has set a goal of raising Ex. 6 for the *WWII* gallery and, with the Kislak and Ex. 6 gifts and support from several board members, they have raised Exemption 6. A Ex. 6 gift from Exemption 6 will support the *WWI* gallery.

Blakey announced that Ex. 6 will support the conservation of the mural “A Cosmic View” by Robert McCall. The artist created the mural for the opening of the Museum in 1976 to celebrate the recent landing of humans on the Moon and all the space exploration anticipated in our future. The mural must be carefully removed and treated while that section of the building undergoes renovation. Ex. 6 presented Blakey with a check, and she thanked Ex. 6 for his amazing and inspirational generosity.

Exemption 4

Regarding annual giving, Blakey stated that the National Air and Space Society (NASS) and Wall of Honor provide unrestricted support to the Museum. Blakey announced that NASS has reached a record high number of members with currently over 9,700 members. Exemption 4

Blakey provided an update on fundraising to support Transformation. Exemption 4

Referencing a chart showing a comparison of the largest units at the Smithsonian and their funds raised in FY20 Q1, Blakey stated the National Museum of African American History and Culture (NMAAHC) and NASM consistently lead the pack. Since Secretary Lonnie Bunch’s appointment to the Castle and subsequent book tour, NMAAHC has seen an amazing explosion of gifts. A few big gifts in the pipeline may help NASM take back the lead in the next quarter.

Exemption 6

Blakey reported on the success of the Apollo 11 50th Anniversary Coin. Sales of the Mint’s Apollo 11 50th Anniversary Coin began on January 24 of last year and concluded December 31. Exemption 4 was generated by sales during Q1 of FY19 for the benefit of the *Destination Moon* exhibition. In total, over 600,000 coins were sold and NASM will receive Exemption 4 from this program.

In addition to acknowledging the Advancement events that Stofan detailed in her report, Blakey shared that, on April 8, the Advancement team will facilitate a Chicago Fly-In at the Hazy Center hosted by Smithsonian Regent John McCarter and Smithsonian National Board member Dennis Keller. An important donor event will be the WWII Flyover on May 8. Future events in the planning phase include a potential event in Houston, which Stuart Fred, Tyson Weihs, and Daniel Baker are helping to organize.

Future State Committee Report and Discussion - Steve VanRoekel, Chair, Future State Committee
Chair of the Future State Committee Steve VanRoekel presented the Future State Committee report. VanRoekel shared that Future State Committee members participated in a survey in order to best identify and leverage committee members’ expertise in the coming year. Survey responses showed that data collection and analysis remains of key interest to Committee members. Creating a culture of data collection was one of the goals identified at the beginning of 2019, and both the Committee and staff are interested in improving the use of data in decision making at the museum. Knowing that data collection is a key focus, Committee members have been invited to serve on a data working group. These individuals will serve as advisors to staff who are working to strength the museum’s data literacy. Four committee members have volunteered for this effort, and the group will launch this month. Finally, the Committee remains interested in helping the museum build an experience that incorporates storytelling and flow through space.

VanRoekel shared that, at the next committee meeting, members will discuss how NASM can build momentum ahead of exhibit re-openings to spread the word and create nation-wide “activations” about the new NASM. The NASM team will present ideas for the Committee’s reaction with the intention that the members can maximize the ideas through their connections and partners. In June, the Committee intends to focus on the NASM rebranding effort. In October, members will participate in a data-focused meeting.

Old Business - Allan Holt

2020 Board meeting dates: June 9-10; October 20-21

Upcoming events:

- February 11 - Exploring Space lecture with Mark Cheung, NMB
- March 18 - Exploring Space lecture with Michael Werner, NMB
- March 26 - Trophy Awards dinner, Udvar-Hazy Center
- April 23 - NASS Apollo 13 screening, Udvar-Hazy Center
- April 24 - Exploring Space lecture with Wendy Freedman, NMB
- May 8&9 - WWII/Arsenal of Democracy activities
- May 14 - Exploring Space lecture with Shepherd Doeleman, NMB
- May 27 - Lindbergh Lecture with Virgin Galactic, NMB

New Business - Allan Holt

Holt stated that he will be working with Stofan on succession planning for the Board as his term and that of the committee chairs concludes after the October meeting. Also in the coming months, Advancement will be introducing a new board web portal. Holt welcomed members to address new business. He also reminded members to complete the meeting survey.

Wrap-up - Ellen Stofan

Stofan stated that she will continue to pursue the following areas of focus:

- R&T
- DEAI Plan
- Strategic Plan
- Education Plan
- Master Plan of UHC
- Visitor Experience and Re-branding

Executive Session

Meeting adjourns

Holt adjourned the meeting at 1:05 pm.

National Air and Space Museum Board
 *Present at the February 5, 2020 meeting

Board Members:		
Mr. William S. Ayer	Mr. Max C. Chapman, Jr.	Mr. John L. Plueger
Mr. Daniel Baker*	Mr. Joe Clark	Dr. Jon A. Reynolds
Ms. Marion C. Blakey*	Mr. Frank A. Daniels, Jr.	Dr. Donald B. Rice
Mr. Mark L. Burns*	Mr. Edsel B. Ford, II	Dr. Richard Sugden
Mr. Neil Cohen	Mr. Stuart L. Fred	Mr. David Storch
Ms. Linda Hall Daschle*	Mr. Morton Fungler	Dr. Frederick Telling*
Ms. Karen M. Dahut*	Mr. Kenneth E. Gazzola*	Mr. Charles Thornton
Mr. Stanley A. Deal	Mr. S. Taylor Glover	Mr. Steve VanRoekel*
Mr. Scott Donnelly*	Mr. James M. Guyette	Ms. Patty Wagstaff
Mr. Mark B. Dunkerley*	Mr. Randall A. Greene	
Ms. Michele A. Evans	Mr. Thomas W. Haas*	
Mr. Tom Gentile, III*	Mr. Ralph D. Heath	SI/NASM Staff Members
Mr. Gary C. Kelly	Mr. Shephard W. Hill*	Secretary Lonnie Bunch
Mr. C. Jeffrey Knittel	Mr. David R. Hinson	Dr. John Davis
Ms. Dawne S. Hickton*	Mr. David C. Hurley	Mr. Robert Spiller*
Mr. Allan M. Holt*	Mr. Robert James	Dr. Ellen R. Stofan *
Mr. Thomas W. Horton	Mr. Clayton M. Jones	Mr. Christopher U. Browne*
Dr. Christopher T. Jones*	Mr. David L. Joyce	Ms. Kelly Bloom*
Ms. Meredith Siegfried Madden*	Mr. Rodney R. Lewis	Ms. Stephanie Brinley*
Mr. Gregory L. McAdoo*	Mr. Steven R. Loranger	Ms. Meg Caulk*
Ms. Eren Ozmen*	Capt. James A. Lovell	Ms. Beth Crownover*
Mr. H. Ross Perot, Jr.	Mrs. Adrienne Bevis Mars	Ms. Joanne Flores*
Mr. David Tolley	Mr. Bruce R. McCaw*	Mr. Rick Flansburg*
Mr. Steuart L. Walton	Ms. Linda A. Mills	Mr. Michael Garceau*
Mr. Tyson Weihs*	Mr. Robert A. Milton	Ms. Laura Gleason*
Mr. Paul Wood	Mr. Robert J. Mittman	Ms. Lindsey Jackson*
	Mr. T. Allan McArtor	Dr. Peter L. Jakab*
	Mr. Jameson J. McJunkin	Ms. Marian Livengood*
	Mr. Thomas G. Morr	Ms. Anne McAllister*
Board Members Emeritus:		
Mr. James Albaugh	Mr. Lloyd "Fig" Newton	Ms. Jessica McNally*
Mr. Ronald W. Allen	Mr. Jack J. Pelton	Mr. Francisco Torres*
Mrs. Anne B. Baddour	Mr. Roger D. Percy*	Ms. Elizabeth Wilson*
Mrs. Agnes M. Brown*	Mr. Robert W. Pittman	
Mr. Armando C. Chapelli, Jr.*	Mr. Thomas F. Pumpelly	

Smithsonian's National Air and Space Museum Board Meeting
Wednesday, June 10, 2020
Virtual Meeting

Meeting Called to Order - Allan Holt, Chair

Allan Holt called the meeting to order at 9:00 am. He welcomed Lonnie Bunch, secretary, and Rob Spiller, assistant secretary for Advancement, and new Board Members Roger Krone and Jim Murray to the meeting. Holt acknowledged that Emeritus Board Member and longtime Museum friend [Ex. 6] passed away. [Ex. 6] was an aviation visionary, a true innovator and entrepreneur, and a dear friend to many board members. He is widely recognized as a pioneer in fuel-saving and performance-enhancing technology of blended winglets.

"State of the Smithsonian" - Lonnie Bunch, Secretary, Smithsonian Institution

Lonnie Bunch presented the "State of the Smithsonian" report. Bunch thanked the Board and Ellen Stofan for their leadership during this uncertain time. He acknowledged that this dual pandemic of a virus and racism is very challenging for many. The Smithsonian needs to come together as an institution to help this country through this time. The Smithsonian should demonstrate that it is of value. First and foremost, the Smithsonian wants to protect staff and collections. The Institution also wants to reach beyond the walls of the museums to help the country find healing and hope.

The pandemic forced the Smithsonian to close its buildings, but leadership is now beginning to work toward reopening. The New Normal Committee, led by Ellen Stofan, and the Reopening Committee, led by Rich Wright are developing recommendations for processes to do so. The Reopening Committee is analyzing the operational aspects of the reopening and is thinking very carefully about the fact that 93% of Smithsonian staff are teleworking. They are looking at the challenges that we face and are ensuring that all decisions are led by science. Bunch stated that he sees the Smithsonian moving toward Phase I and will continue to use a phased approach for reopening. Reopening the Udvar-Hazy Center and Zoo are the first steps forward and he hopes that, between early July and end of August, the entire Smithsonian can reopen.

Bunch stated that, even after a vaccine, the Smithsonian will never be the same. The New Normal Committee is challenging the Smithsonian to be nimble as we become the 21st century institution we want to be. The Smithsonian must call into question the very basic assumptions of museums and cultural institutions. He shared that museums pride themselves on bringing people together over artifacts or programs, but people may not be comfortable with that format now. The Smithsonian is assessing how virtual spaces can be used to build a new community both in terms of staff and outreach. The New Normal is an opportunity to rethink operational strategies. The Committee is asking whether there are new or different revenue possibilities. Studies suggest that 25% of the public will come back right away while another 25% will come back in the first eight weeks if there is not a spike. The other 50% will not visit a museum before a vaccine. These numbers require the Smithsonian to rethink revenue generation. Bunch noted that more Americans than ever before are comfortable getting their content virtually. He has encouraged the Institution to find the right tension between traditional means and virtual and to work to better understand our audience. The reality is that the needs of the audience have changed because of this virus, so for the Smithsonian to be able to serve them requires us to spend even more time understanding them.

The Smithsonian wants to be a place that helps the nation at a difficult time. Our job is to define reality and give hope through our resources, scholarship, collections, and programs. Bunch shared that the Smithsonian received a gift from Bank of America to create an initiative that looks at "race, community, and our shared future." The Smithsonian has the expertise to lead these conversations. Bunch thanked the members for their support of NASM and stated that the Institution will continue to look to their leadership and philanthropic support.

Bunch reported [Exemption 5]

[REDACTED] However, the Secretary is optimistic about the way the Smithsonian has responded. Staff are being nimble, crossing siloes, and coming

together as an Institution in part due to leaders like Stofan. Our job is to help the country realize that, yes, the Smithsonian looks back, but we also look to today and tomorrow.

Stofan asked Bunch if [REDACTED] Ex. 5. Bunch responded that [REDACTED] Ex. 5

[REDACTED]

[REDACTED]. Tom Gentile asked [REDACTED] Ex. 5

[REDACTED] Bunch noted [REDACTED] Ex. 5

[REDACTED]. Bunch shared that [REDACTED] Ex. 5

[REDACTED]

[REDACTED]. Chris Jones asked why [REDACTED] Ex. 5. Bunch shared that [REDACTED] Ex. 5

[REDACTED].

“State of the Museum” - Ellen Stofan, John and Adrienne Mars Director

Ellen Stofan presented the “State of the Museum” report. She thanked the members for participating in the virtual meeting and for their support. Stofan shared that the Udvar-Hazy Center and the National Zoo will lead the Smithsonian in reopening to the public this summer. The first wave of about 30% of NASM staff will return to the building on June 15. These will be employees who are not telework capable, and/or who have essential roles in preparing the museum for the new way of operating. Stofan stated that the Museum’s priority is the health of staff and visitors, and leadership will not proceed unless certain safeguards are in place. The Smithsonian is basing the reopening strategy on two separate plans, [Guidelines for Opening Up America Again](#), the White House’s and CDC’s three-phased approach based on public health and scientific indicators, and [Public Health Principles for a Phased Reopening During COVID-19: Guidance for Governors](#), published by the Johns Hopkins Center for Health Security. The NASM FY20 Operational Budget is around \$12M and this does not account for Transformation costs or the federal portion of the budget. Shutting down the museum for 12 weeks is expected to result in a loss of just over \$2M in revenue from Smithsonian Enterprises activities. With the expected additional restrictions after reopening and reduced visitorship, NASM could lose an additional \$2M in revenue in FY20. These significant reductions are expected to last through FY21 or until a vaccine can be developed, with likely losses of \$7 million. NASM is in a better place than other museums but the next two years will be very difficult from a fiscal perspective. The Museum will need to enact austerity measures, such as delayed hiring or shrinking some areas. Transformation and a pivot to digital are NASM’s two highest priorities; everything else will be examined carefully. The Finance team will be working with each department to identify budget areas for possible reduction this fiscal year and next. Stofan shared that there was a Smithsonian-wide call for “shovel-ready” projects that might be considered for the next stimulus bill. Several NASM projects are on the list for consideration: Revitalization contingency; NMB restaurant; UHC roof drains and lighting; and DCC Module 2, as well as hangar and road infrastructure. There is no assurance that Congress will support these projects but NASM is hopeful.

Stofan reported that, under Chris Browne’s leadership, NASM has established two internal committees that will address staff return and public opening. The return of staff will proceed in waves in accordance with the Secretary’s goal to move from “safe at home” to “safe at work.” Those staff that can continue to telework will be encouraged to do so. Those who commute via public transportation will be a concern so NASM is looking into all available workspaces at Hazy. Stofan anticipates that the Museum will reopen to the public mid-to-late summer with health and safety safeguards and crowd-reduction measures in place. July 1 continues to be the date for the suspension of all travel and events. The hosting of rental events has been delayed until September 1. The Smithsonian is encouraged that in some recent surveys, both domestic and international, respondents report that museums are one of the places they are more likely to feel comfortable returning.

Stofan was asked by Secretary Bunch to chair a “New Normal Committee” that is working on what it means to be the Smithsonian once the Institution reopens. These times call for the museums to take bold measures to be strategic, envision a different world, help people feel safe, and show why the Smithsonian

is valued. This is an opportunity to adapt and improve the Smithsonian so that it becomes stronger. The committee - with 15 members from across the Institution - has been divided into four subcommittees, each taking on aspects to get us to this goal:

- Big Ideas (which will inform the goals of the other three)
- The Evolution of Onsite and Digital
- How We Work
- How We Operate Profitably and Flexibly

The group has been soliciting thoughts on the New Normal from outside of the Smithsonian as well as working with the Smithsonian Organization and Audience Research to seek input from within the Smithsonian. The Committee will deliver recommendations by August 1 to Secretary Bunch and the Smithsonian leadership team. These recommendations will provide a framework so that the museums and research units can develop specific plans going forward.

NASM continues to work during this time with The Raben Group on the Strategic Plan and Cook Ross on the DEAI Plan. Both will be completed early in the summer. Ex. 5

Stofan reported that the call for digital resources and programming was immediate as the pandemic forced the closure of schools. Audiences also wanted entertainment and enrichment. NASM's Education team rose to the challenge and within a week launched Air and Space Anywhere and the K-12 Learning Resources portal. Other museums like the San Diego Air and Space Museum and the Oakland Aviation Museum have requested use of NASM's content to fill gaps in their offerings. The focus on digital resources will remain one well after this crisis has passed. NASM's ability to meet our mission to inspire the next generation through digital outreach cannot be understated. The Museum must create a digital strategy that can be implemented in alignment with the Museum's Strategic Plan.

Stofan shared that, prior to the building closure, the Museum held the first lecture of the 2020 Exploring Space series with Mark Cheung, senior staff physicist at the Lockheed Martin Advanced Technology Center. Since the closure, the Museum hosted the first completely virtual Exploring Space lecture. It featured Sheperd Doeleman, founding director of the Event Horizon Telescope Collaboration, as he discussed how his team accomplished the historic achievement of imaging a black hole. Earth Optimism was also moved to a digital platform. While NASM was forced to cancel some planned lectures, Stofan spoke during a session entitled "Our Small Blue Dot." Education organized a slate of weekly professional development webinars with the Explainers and the virtual platform has allowed the Museum to continue with topical programs like the SpaceX crewed launch.

Stofan announced that the Museum will not hold the 2020 Collins Trophy event on September 30. NASM considered hosting something in the virtual space on that date but decided it was best to cancel the event and present the awards in March of 2021. Stofan thanked Booz Allen Hamilton, Jacobs, and Sierra Nevada for helping to sponsor the evening.

Stofan shared that given the opportunities that the Udvar-Hazy Center allows for social distancing, the Museum believes it will appeal to visitors after reopening. NASM's Communications team will be making it a key element of marketing efforts. Efforts will be focused on local and regional audiences as there will likely be a reduction in tourism for some time. Studies reveal that people are willing to drive 329 miles for a road trip so Communications is concentrating marketing efforts in that radius.

Stofan provided an update on the Master Plan of the Udvar-Hazy Center. The RFP was issued to develop a master plan to enhance the visitor experience and to identify areas of improvement at UHC. Leadership has received two proposals. The Plan will look at public areas and activities such as exhibitions, classroom spaces, retail offerings, special events, donor recognition, parking, education, and public programs. Changes will include redesigning the public locker layout to allow for suitcases and an eating area for school groups.

A significant facilities project is underway to fix the UHC roof. The project involves replacing select areas of the exterior building envelope and installing an overlay on the existing barrel roof of the Boeing Aviation Hangar. The Museum is taking advantage of the building closure to get some of the work in high traffic areas done. Other updates include that the Museum will be taking over management of the parking operations from Smithsonian Enterprises. Staff will be hired to lead these efforts under the Business Operations Department. This transition of management will preserve revenue flow that goes solely to the museum, an annual net of approximately Ex. 4. Leadership will have more control to address outstanding system performance and risk issues, as well as control system maintenance and upgrades. Customer service will now be connected to the overall visitor experience.

David Tolley asked if NASM staff or any of their immediate family have been directly affected by COVID. He also asked how the Board can support those staff members. Ex. 6

[Redacted]

Revitalization and Transformation Update - Chris Browne, Deputy Director

Chris Browne provided an update on the Revitalization and Transformation of the National Mall building, presenting information on the progress of major project elements to date.

Regarding the progress of the Revitalization of the National Mall building, the first exterior stone was placed on May 7. Clark Smoot Consigli (CSC) continues construction work despite COVID-19 and construction is about 34% complete. Browne reported that efforts to maintain a safe work environment during the pandemic include reducing staffing by 20% overall, mandatory face masks for all contractors, and physical distancing where possible. Browne stated that the Dulles Collections Center and the Ramsey Building are at capacity for artifact storage.

Browne presented the following figures related to Revitalization construction:

- Contract GMP: \$478.5M
- Contract NTP: September 2018
- Contract Completion Date: September 2024
- Percent of Contract Billed: Approximately 32.8%
- Construction Time Elapsed: Approximately 34%
- Project Contingency Budget: \$18,000,000 (4% of Project Award)
- Mods Submitted to Date: \$12.0M
- Remaining Contingency: \$6M

Browne highlighted ongoing working in the *American by Air* gallery and the completed dance floor. He also showed pictures of construction near the Independence Avenue entrance, including the escalator pit and stairwell into the Launch Pad, and installation of the F1 engine into the *Destination Moon* gallery.

Browne listed the following challenges associated with Revitalization: COVID impacts, schedule, material deliveries, unresolved design issues, artifact reinstallation, and contingency.

Regarding the progress of the Transformation of the National Mall building, Browne reported that the West End fabrication project is 17.5% complete. Installation of the first gallery spaces is scheduled to start in December 2020. The 35% technical submittal for the East End design was resubmitted and is currently under review. The Commons project 65% design submittal was reviewed. The Museum is currently working with PGAV to do corrections in the design/build contract documents.

Browne listed the following challenges associated with Revitalization: COVID-19 subcontractor impacts, artifact restoration schedule, reinstallation of artifacts back into the galleries, material deliveries, cost control, and integrating Visitor Experience data into the designs.

Browne provided a visual of the Transformation budget comparing actuals, original spend plan, and current spend plan. He stated that outflows are based on the updated Expenditure Plan and that the Museum has Exemption 4

[REDACTED] Browne outlined the following:

- Exemption 4 [REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

Browne provided an update on the Museum’s work with Smithsonian Enterprises. He announced that the planetarium dome design and installation contract was awarded to Astro-Tec. Regarding the restaurant at the National Mall building, the MOU was finalized with Smithsonian Enterprises. An RFP for an operator has been issued and selection committee formed. The award is expected in August and will include operation of restaurant, west terrace, and Launch Pad food service. Browne announced that AnnBeha Architects was selected for the facility design and the kick-off meeting for the project will be held in April. A complete facility design will be received during Phase 1 of Revitalization (2020-2022) while the construction of a replacement restaurant facility will be completed during Phase 2 (2022-2025).

Browne shared a simplified visual summary of the major Revitalization and Transformation milestones. He noted the museum’s 50th anniversary coincides with the nation’s 250th. The Smithsonian and others are already thinking about how to mark this occasion.

State of Philanthropy - Rob Spiller, Assistant Secretary for Advancement, Smithsonian

Rob Spiller, assistant secretary for Advancement, provided the “State of Philanthropy” report. Spiller stated that there is some good news amidst the dual pandemic of COVID and racial justice. Many donors are maintaining or increasing/accelerating gifts to organizations that they care about. The Smithsonian and NASM have engaged constituencies around the need for philanthropic support. Spiller shared that membership across the Smithsonian has held firm. Relating to larger gifts, Advancement did see a pause in giving at the beginning of the pandemic but there has recently been an uptick. Spiller shared that Ex. 4 [REDACTED]. However, there are some gift opportunities and big ideas emerging that will be compelling to donors, including racial justice and global sustainability. There has been an uptick in estate gift discussions which often translate into direct gifts. Advancement is also pursuing a broad-based effort for online fundraising. He thanked Steve VanRoekel for his guidance in this area. Spiller shared that the Institutional fundraising goal for FY20 is Exemption 4 [REDACTED].

Spiller stated that the Institution will continue to evaluate their approach to fundraising in the current economy. He acknowledged that airlines are currently one of the most challenged sectors. The federal debt is a challenge as it could lead to a decrease in federal support and this will result in more pressure being placed on philanthropy.

Advancement must learn how to have gift conversations virtually and to do so on an ongoing basis. Advancement needs to tell the Smithsonian’s philanthropic story in a way that is even more compelling to donors around education, impact, and access. Spiller encouraged that Ex. 4 [REDACTED]. Advancement must also continue to raise support for core areas. Advancement is still planning a capital campaign for 2022. The narrative will focus on Ex. 4 [REDACTED].

Advancement Committee Report and Discussion - Marion Blakey, Chair, Advancement Committee

Advancement Committee Chair Marion Blakey provided an update on fundraising progress. For FY20, NASM’s fundraising goal is Exemption 4 [REDACTED]
[REDACTED]
[REDACTED]

Blakey provided an update on the Ignite Tomorrow campaign and NASM’s progress toward the Exemption 6 Transformation goal. As of the end of April, Exemption 6 [REDACTED]
[REDACTED]
[REDACTED]

Blakey reported on FY20 fundraising. She stated that, of the Ex. 4 raised this year, the largest portion of these gifts are for Transformation. The Ex. 4 raised for non-Transformation supports other important initiatives including internships, conservation, and education programs. Notable gifts since the last board meeting include a Exemption 6 from the Ex. 6 to support the *One World Connected* exhibition and a new lecture series. Exemption 6 Exemption 6 made a Exemption 6 commitment to support the future *Wright Brothers* gallery. Exemption 6 was a lead donor to the original *Wright Brothers* gallery, and Blakey thanked him for his continued generosity. Blakey also thanked Exemption 6 for their generous gifts. She acknowledged Exemption 6 for his gift to support the expansion of digital resources and Exemption 6 for facilitating important pro-bono work from Booz Allen Hamilton also in support of expanding digital outreach capabilities. Major gifts have also been received from Exemption 6

Regarding annual giving, the National Air and Space Society (NASS) and the Wall of Honor provide unrestricted support to the Museum. Exemption 6

Blakey reported that several pledge payments have been deferred or canceled. Several donor-funded programs have been cancelled, postponed, or restructured which has required Advancement to go back to the donors and request that funds be diverted or shifted to support next year’s program. Blakey provided the following examples:

- SHE Can Summer Camp: The third year of the camp and the inaugural pilot camp in Bentonville were both cancelled this summer.
- Teacher Innovator Institute: This summer’s professional development intensive for educators was cancelled. While elements of the program will be offered virtually, the operating budget for this year has been cut in half so unused funds will be diverted to next summer’s program.
- Explainers Program: With the program suspended and the final pledge payment not needed, NASM is decreasing the amount of the original pledge.
- Several family day and lecture programs are postponed until next year. When possible, lectures will take place virtually but there are components of sponsorships, such as dinners, that cannot be fulfilled.

Original projections pre-COVID indicated the potential to raise Exemption 4

When the financial implications of the pandemic were first realized, the Advancement team reached out to individual and corporate donors who had pledge payments due. Most of these payments are being fulfilled while a handful are being deferred. Deferred payments for Transformation do have a direct impact since the Museum is paying bills to support the project. Exemption 6

There is also positive news to share as some donors are fulfilling their pledges in advance and are helping the Museum in a time of need. Exemption 6 For donors who have the financial ability to do this, in addition to making new commitments, this is

the best way donors can help right now. Exemption 6

Blakey shared further impacts of COVID-19 on the Museum. Events all over the country have been cancelled or postponed over the last few months, and NASM's are no exception. These events are opportunities for cultivating donor relationships which then impacts planned solicitations and gift discussions. The Museum has also lost revenue from onsite donations. With the buildings closed, the Museum is not benefiting from donation boxes or gifts made during gift-shop purchases. Exemption 4

Blakey reported on the impacts of the pandemic on philanthropy. Due to COVID-19, Advancement is in a new fundraising environment that presents challenges, but also provides the team with unique opportunities. Challenges include that many of the Museum's donors have experienced unforeseen financial losses. The team has been sensitive in interactions with these donors. A challenge specific to NASM is that philanthropy from the aerospace industry is largely on hold. Corporate giving from this industry is typically a huge source of support for the Museum, and the industry is facing unprecedented hardship which will likely continue for some time. Social services, healthcare organizations, and cultural institutions are fundraising with a heightened sense of urgency to combat the economic and healthcare crisis caused by the pandemic, which has increased competition for charitable dollars. Exemption 6

The CARES Act has temporarily waived required minimum distributions from IRA accounts, which will reduce IRA rollover gifts. This has been a popular form of giving and does impact many of our donors. The Museum's normal business practices have been halted: on-site meetings, programs, and events have been suspended and gift officers are not traveling for donor meetings or fundraising events. It remains to be seen when Stofan and the team will resume face-to-face meetings, particularly with supporters who may fall into high-risk groups.

Blakey shared that there are also opportunities that are unique to the situation. NASM has a strong case for support. The Museum and the Smithsonian are providing digital content at a time when it is more important than ever as millions of families are stuck at home. Our core mission to educate continues. On the corporate side, the defense industry remains strong so there is an opportunity to engage some of those companies. Many donors have more time to engage in online content and are willing to meet over virtual meeting platforms such as Zoom. This has enabled the team to re-engage supporters from across the country who normally are not able to visit Washington. The team is also finding that donors are willing to have more in-depth conversations about their charitable giving. The team is focused on growing gifts from Donor Advised Funds as these types of grants are not affected by the economic downturn and market volatility in the way that outright gifts of assets or cash are. The CARES Act has increased the charitable deduction for cash gifts from 60% to 100% of Adjusted Gross Income for CY2020. This serves as an opportunity to work with donors who are looking to take advantage of the increased deduction to discuss new outright gifts and increased payments towards existing pledges.

Blakey noted that it is hard to know when the crisis will ease, but Advancement cannot wait for that to happen to continue fundraising. A balance of sensitivity and strategy will be key as the Museum establishes a "new normal." Advancement's focus for the remainder of this year includes continued stewardship of existing donors. Despite being closed, the Museum continues to serve the country with digital outreach and education activities and support ensures that NASM can sustain this important work beyond the current crisis. The team is continuing with NASS solicitations and resuming major gift conversations that had started or were planned. Finally, Advancement will have to start planning for FY21, taking into consideration the pipeline which will guide our strategic goal setting for the next year. Initial pipeline projections indicate that next year will be quite strong.

Blakey welcomed questions. Ken Gazzola asked if the Institution knows how many members are donors also. Laura Gleason shared that NASM has 9,000 NASS members and that is the pipeline for major gifts. Advancement is constantly screening members and, in numerous cases, NASM has converted NASS members to major donors. NASM recently promoted Marian Livengood who is specifically focused on cultivating that pool of potential donors.

Break

Nominations Committee Report and Discussion - Mark Dunkerley, Chair, Nominations Committee

Nominations Committee Chair Mark Dunkerley provided the Nominations Committee report. Dunkerley welcomed new Board Members Roger Krone and Jim Murray. Their nominations were officially approved by the Regents on April 6. With the addition of Krone and Murray, the board has 28 active members. Dunkerley announced that Eren Ozmen will be stepping off the board. He thanked Ozmen for her service.

Due to this meeting being virtual, the Nominations Committee sent their recommended nominations to the Board for a vote in advance of the meeting. Dunkerley announced that the Board approved five nominations. The newly approved members include [REDACTED] Ex. 6

[REDACTED]. These five nominations will be presented to the Smithsonian's Board of Regents for official approval at their August 11 meeting. With these nominations, the board will have 32 members. Dunkerley noted that, at the October meeting, seven members will be eligible for emeritus status so membership will dip back to 25. Between now and October, the Committee would like to add another three to five board candidates.

A Post-COVID NASM - Beth Crownover, Broh-Kahn Weil Director of Education

Beth Crownover provided a report on current efforts to enhance digital engagement at the National Air and Space Museum. Crownover stated that the Museum recognized early on that digital channels would not only allow us to remain a part of our audiences' lives during closure, but that adopting digital as a primary strategy will lead to greater and deeper engagement with our content. Interaction and engagement cannot be limited to onsite visitors. Crownover stated that NASM is the place people look to for inspiration and to explore future possibilities. Intentionally expanding digital efforts opens a myriad of possibilities that can only strengthen NASM's ability to inspire.

Upon closure in Mid-March, an intra-departmental team comprised of individuals from the Communications and Education Departments collaborated to create an online portal to house NASM's digital resources in a readily available, streamlined, and more intuitive manner. This was a herculean effort over a seven-day period that not only produced 'Air and Space Anywhere' and 'K-12 Learning Resources,' but also resulted in a fundamental shift in our workflow overall. Communications and Education are now collaboratively developing a holistic digital engagement strategy. The tactical portion of which is grounded in a four-part process of create, market, deliver, and track. This approach will establish an enhanced engagement cycle that begins with digital interactions that then lead into onsite visits to our locations and continues with further digital interactions. The cycle of engagement never 'goes dormant' and will therefor strengthen the Arc of Engagement.

Crownover stated that successful collaborations begin with a shared vision and strategy to serve as the foundational element. She provided a graphic that showed the internal content development cycle and how it correlates with the audience engagement cycle. She shared that, in addition to establishing foundational tools to guide the work, the departments created ongoing routines to support the desire to create a cohesive and transparent culture. Staff are now participating in monthly tag-ups and monthly digital program planning sessions for Education and Communications. They are also hosting an Idea Hopper to invite ideas from stakeholders at NASM and beyond. The teams are incorporating debriefs and leveraging data to help inform future decisions.

Crownover stated that, at the October board meeting, she reported on efforts to create an Arc of Engagement that begins with PreK learners and spans through to lifelong learners. NASM's shift to a more holistic strategy, coupled with an expanded level of digital engagement, allows Education to 'connect the dots' on the arc. Developing opportunities for digital engagement during the pandemic has led to new nodes being placed on the arc. The arc now includes learning resources for diverse learners offered through both NASM's website and Learning Labs. The Date Night node includes engagement opportunities such as AirSpace: Movie Club, lecture pivots, and specialty programs like Space Songs. While programs such as Story Time, Explainers, and TII were once limited to onsite visitors, digital components are now allowing the programs to reach visitors beyond the walls of the museum. The Museum is organically evolving to adopt a more holistic approach to digital engagement by grouping efforts like STEM in 30, EZ Science, Flights of Fancy, Date Night, and Family Days by thematic ideas to help connect learners to various offerings. Crownover was pleased to share that the digital elements are becoming as robust as the onsite elements, allowing Education to continue to explore and strengthen how we create a solely digital NASM experience.

Crownover reported that there are two elements that are essential to achieving the Museum's vision and goals for outreach in the digital space. The Museum must fill two manager level positions on both the Digital/Web and Education teams. These managers will collaborate to move forward the strategy with their respective teams and provide leadership with real-time feedback so that the Museum can shift and change at critical moments.

The Museum must also gather feedback from both current and potential audiences to inform initial phases work, including the launch of a new NASM web experience and establishment of sustainable data gathering routines. The Museum is working toward hiring an external contractor to build a new online experience. Crownover candidly shared her wish list for expanding digital engagement at NASM. Integrating AI would enable the Museum to offer tailored explorations and better digital asset management and access. Education is exploring gaming as a method for attracting people into learning experiences. The team is also seeking to establish mobile push communication capabilities to sustain engagement with visitors.

Future State Committee Report and Discussion - Steve VanRoekel, Chair, Future State Committee

Chair of the Future State Committee Steve VanRoekel presented the Future State Committee report. He shared that the Future State Data Ad Hoc Working Group, formed after the last board meeting, is meeting bi-weekly to establish a coordinated internal process for data analysis. The group is specifically looking at the new digital engagement portals as a first area of focus. Representatives from NASM Education, Communications, and Exhibits are working closely with Paul Donato and Roger Percy to take an inventory of available data and perform initial analysis with the goal of establishing a cycle of development where data tracking consistently leads to iteration on offerings.

For the two new portals, “Air and Space Anywhere” and “K-12 Resources,” the team is looking at data from pre-existing and new sources. They are looking at Google Analytics for website visitation trends, page views, and referrers, and tracking data about live stream views and engagement from our various social platforms like YouTube and Facebook. The Committee is also running two new user surveys on the NASM website specifically to gather audience information on the portals’ user satisfaction and interest. To date, there have been over 450 responses across the two surveys and Paul Donato has assisted the team in conducting an initial analysis. Survey questions include preferences of content format and topics as well as overall satisfaction. Both surveys indicate that videos are the most popular format. Users are also interested in virtual tours and other educational activities. The team is particularly interested in diving deeper into this data and examining clusters among the responses. For instance, those who cited videos as a format most of interest are most interested in the topics of space, life science, and physical sciences. The team will continue its analysis of these clusters and segments as it will not only inform what type of content the Museum should produce, but how to market and group the content on the website.

From this initial analysis the team has generated a few insights that will affect the Phase 2 iterations of the resource portals. First, while it was known that videos are of significant interest to the public when creating the Air and Space Anywhere and K-12 portals, it is now noted that video content greatly outweighs all other types of digital content. While NASM will continue to produce new video content, the Museum is making a concerted effort to produce more types of content including virtual tours and activities. NASM educators are creating 15-20 new learning lab activities to supplement content already on the portals. Second, Google Analytics demonstrated that Facebook ads resulted in significant traffic. NASM is going to continue to use social ads to refer users to the portals, and experiment with A/B testing. Ads will target parents as the summer approaches. Next, the team noticed that live stream programming has been successful, but live stream programming on sequential days did not perform as well. NASM intends to continue a consistent but paced schedule for live stream programs going forward. Finally, one idea generated from the Future State Working Group is to engage educators within our network in focus group activities around the new portals. NASM has enlisted six of our Teacher Innovator Institute teachers to become social media influencers promoting the portals as well as participate in a consistent focus group. NASM is looking to engage social media influencers more broadly as the marketing of these portals continues, including popular science education YouTubers.

The Data Working Group will continue to work with the NASM staff through the summer and will provide an update at the October board meeting.

Old Business - Allan Holt

Holt announced that Chief Curator Peter Jakab will be retiring at the end of August after 37 years with the Museum. Jakab will continue to serve the Institution in a part time advisory capacity as a senior curator for the subjects of the Wright brothers and Early Flight, Smithsonian Channel responsibilities, assisting Advancement with donor cultivation, and international partnerships. The Arsenal of Democracy WWII Commemorative Fly-over is still scheduled for September 25. The Museum is holding on finalizing related plans.

New Business - Allan Holt

Holt announced the 2021 Board meeting dates: February 9-10, June 15-16, and October 26-27. He also shared that the launch of a new board web portal has been delayed. Holt, along with Stofan and Dunkerley, have been working on succession planning for the Board, and will present to the Board a recommended slate of officers for 2021 at the October meeting.

Wrap-up - Ellen Stofan

Executive Session

Meeting adjourns

Holt adjourned the meeting at 1:05 pm.

National Air and Space Museum Board

*Present at the June 10, 2020 meeting

Board Members:		
Mr. William S. Ayer*	Mr. Max C. Chapman, Jr.	Mr. John L. Plueger
Mr. Daniel Baker*	Mr. Frank A. Daniels, Jr.	Dr. Jon A. Reynolds
Ms. Marion C. Blakey*	Mr. Edsel B. Ford, II	Dr. Donald B. Rice
Mr. Mark L. Burns*	Mr. Stuart L. Fred*	Dr. Richard Sugden
Mr. Neil Cohen*	Mr. Morton FUNGER	Mr. David Storch
Ms. Linda Hall Daschle*	Mr. Kenneth E. Gazzola*	Dr. Frederick Telling*
Ms. Karen M. Dahut*	Mr. S. Taylor Glover*	Mr. Charles Thornton
Mr. Stanley A. Deal *	Mr. James M. Guyette*	Mr. Steve VanRoekel*
Mr. Scott Donnelly*	Mr. Randall A. Greene	Ms. Patty Wagstaff
Mr. Mark B. Dunkerley*	Mr. Thomas W. Haas*	
Ms. Michele A. Evans	Mr. Ralph D. Heath	
Mr. Tom Gentile, III*	Mr. Shephard W. Hill	SI/NASM Staff Members
Mr. Gary C. Kelly	Mr. David R. Hinson	Secretary Lonnie Bunch*
Mr. C. Jeffrey Knittel*	Mr. David C. Hurley	Mr. Robert Spiller*
Ms. Dawne S. Hickton	Mr. Robert James	Dr. Ellen R. Stofan*
Mr. Allan M. Holt*	Mr. Clayton M. Jones	Mr. Christopher U. Browne*
Mr. Thomas W. Horton	Mr. David L. Joyce	Ms. Kelly Bloom*
Dr. Christopher T. Jones*	Mr. Rodney R. Lewis	Ms. Stephanie Brinley*
Mr. Roger A. Krone*	Mr. Steven R. Loranger*	Ms. Meg Caulk*
Ms. Meredith Siegfried Madden*	Capt. James A. Lovell	Ms. Beth Crownover*
Mr. Gregory L. McAdoo*	Mrs. Adrienne Bevis Mars	Mr. Rick Flansburg*
Mr. James C. Murray*	Mr. Bruce R. McCaw*	Mr. Michael Garceau*
Ms. Eren Ozmen*	Ms. Linda A. Mills*	Ms. Laura Gleason*
Mr. H. Ross Perot, Jr.*	Mr. Robert A. Milton	Ms. Lindsey Jackson*
Mr. David Tolley*	Mr. Robert J. Mittman	Dr. Peter L. Jakab*
Mr. Steuart L. Walton*	Mr. T. Allan McArtor*	Ms. Marian Livengood*

Mr. Tyson Weihs*	Mr. Jameson J. McJunkin*	Ms. Anne McAllister*
Mr. Paul Wood*	Mr. Thomas G. Morr*	Ms. Jessica McNally*
Board Members Emeritus:	Mr. Lloyd "Fig" Newton	Mr. Francisco Torres*
Mr. James Albaugh	Mr. Jack J. Pelton	Ms. Elizabeth Wilson*
Mr. Ronald W. Allen	Mr. Roger D. Percy*	
Mrs. Anne B. Baddour	Mr. Robert W. Pittman	
Mrs. Agnes M. Brown*	Mr. Thomas F. Pumpelly*	
Mr. Armando C. Chapelli, Jr.		

Attachment A: Zoom Chat Transcript

09:22:06 From Ellen Stofan: [REDACTED] Ex. 5 [REDACTED]?

09:23:39 From Tom Gentile: [REDACTED] Ex. 5 [REDACTED]

09:24:24 From Chris Jones: [REDACTED] Ex. 5 [REDACTED]?

09:24:39 From David Tolley: Have any of the NASM staff or any of their immediate family been directly affected by COVID? What if anything can we as a board be doing to support those members of the staff?

09:25:43 From Ellen Stofan: I can answer David's question in my remarks!

09:59:52 From Chris Jones: Ellen, given t [REDACTED] Ex. 5 [REDACTED], have we thought about [REDACTED] Ex. 5 [REDACTED]?

10:03:06 From Steven VanRoekel: Would be awesome to make available - at a low, but profitable cost - plastic space helmets for kids to wear as "COVID masks" at UHC while they visit? Current gift shop helmets with added fabric neck gaiter (which would be the actual "mask") would be easy to bundle and sell. Would be newsworthy and show leadership. :-)

10:09:54 From Rob Spiller: [REDACTED] Ex. 5 [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

10:11:46 From Chris Jones: Thanks for the response and info.

10:12:55 From Ellen Stofan: Chris, our online fundraising [REDACTED] Ex. 4 [REDACTED].

10:13:30 From Chris Jones: Thanks, Ellen!

10:14:05 From Ellen Stofan: I am talking with Smithsonian Enterprises on [REDACTED] Ex. 5 [REDACTED]

10:14:42 From Laura Gleason: We have also started [REDACTED] Ex. 4 [REDACTED]
[REDACTED]
[REDACTED]!

10:15:57 From Chris Jones: Thanks, Laura!

10:19:08 From Tyson Weihs: Will we need to have masks to give away to avoid turning away visitors that show up and perhaps forgot?

10:19:32 From Ellen Stofan: Yes- I think the idea is to give away the disposable masks and then sell branded masks.

10:20:27 From Ellen Stofan: A bigger concern I have is with visitors showing up without tickets but we will cope- NMAAHC has lots of experience. But it involves our staff getting de-escalation training.

10:53:08 From Elizabeth Wilson: We're actually over 10,500 NASS members now. Air & Space magazine has about 150,000 subscribers.

10:54:50 From Tyson Weihs: The membership program [redacted] Ex. 5 [redacted]?

11:04:20 From Elizabeth Wilson: As we continue to scale up in the number of members, we're planning to launch a monthly giving program (which authorizes monthly credit card transactions). The Smithsonian write large [redacted] Ex. 5 [redacted]

11:04:59 From Daniel Baker: [redacted] Ex. 4 [redacted]
[redacted]
[redacted]

11:10:24 From Elizabeth Wilson: [redacted] Ex. 4 [redacted]
[redacted]
[redacted]

11:15:19 From Daniel Baker: Got it. [redacted] Ex. 5 [redacted]
[redacted]
[redacted]

11:17:19 From Tyson Weihs: Thought: "resources for parents (who are trying to educate their children with schedules)", "SI Online Summer Camp".

11:23:05 From Elizabeth Wilson: Thanks, Daniel. Happy to further discuss that option. [redacted] Ex. 5 [redacted]
[redacted]
[redacted]

11:27:26 From Stuart Fred: That's a great point for grandparents as well wanting some form of education or content when summer activities are limited..."Online Summer Camp Experience" is great.

11:28:19 From Tyson Weihs: [redacted] Ex. 5 [redacted]
[redacted]

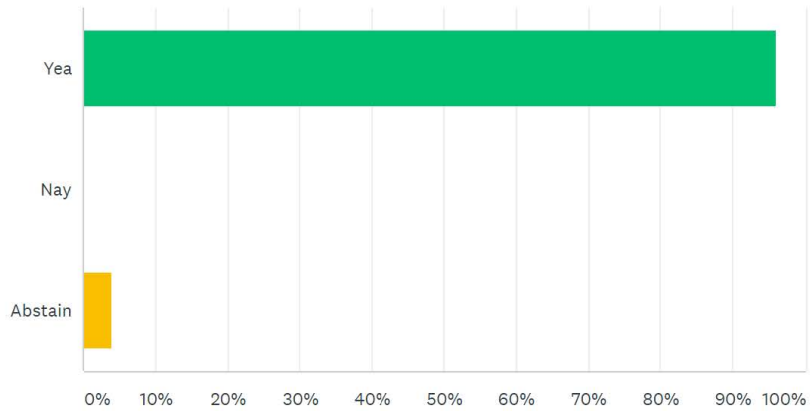
11:29:32 From Chris Jones: Given the large numbers of excellent docents we have, and that some of them are in the more vulnerable pandemic group and may not feel safe returning to the museum in the near term, are we repurposing them for videos, online chat, etc...?

11:51:28 From Mark Dunkerley: Chris, with regard to the schedule, I assume [redacted] Ex. 5 [redacted]
[redacted]

Attachment B: Nominee Vote

Vote to approve **Ex. 6** nomination to the National Air and Space Museum Board.

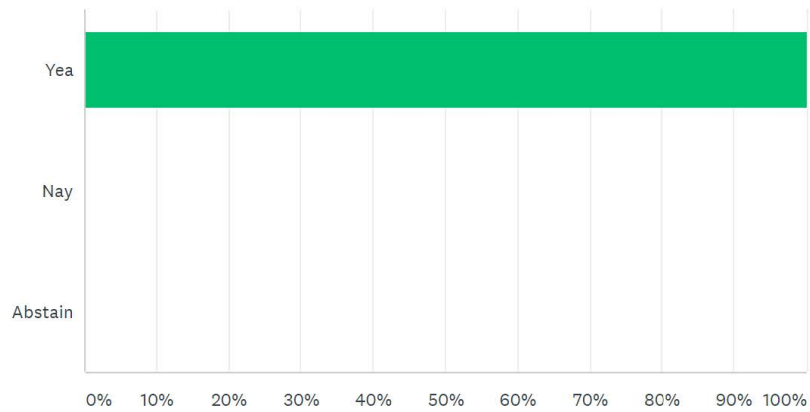
Answered: 25 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ Yea	96.00% 24
▼ Nay	0.00% 0
▼ Abstain	4.00% 1
Total Respondents: 25	

Vote to approve **Ex. 6** nomination to the National Air and Space Museum Board.

Answered: 25 Skipped: 0



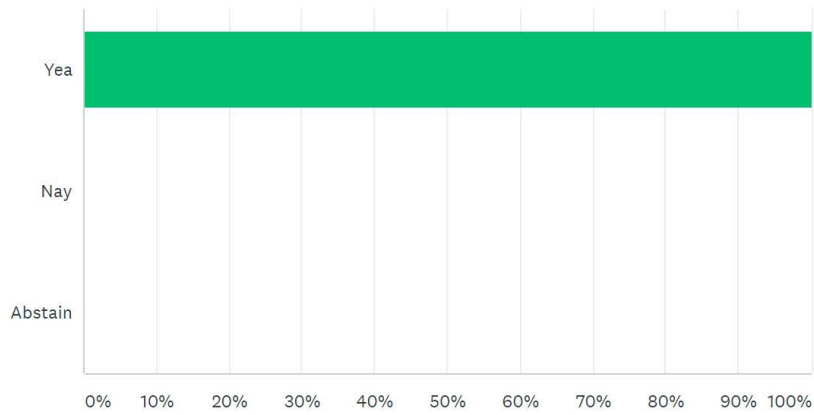
ANSWER CHOICES	RESPONSES
▼ Yea	100.00% 25
▼ Nay	0.00% 0
▼ Abstain	0.00% 0
Total Respondents: 25	

Vote to approve

Ex. 6

nomination to the National Air and Space Museum Board.

Answered: 25 Skipped: 0



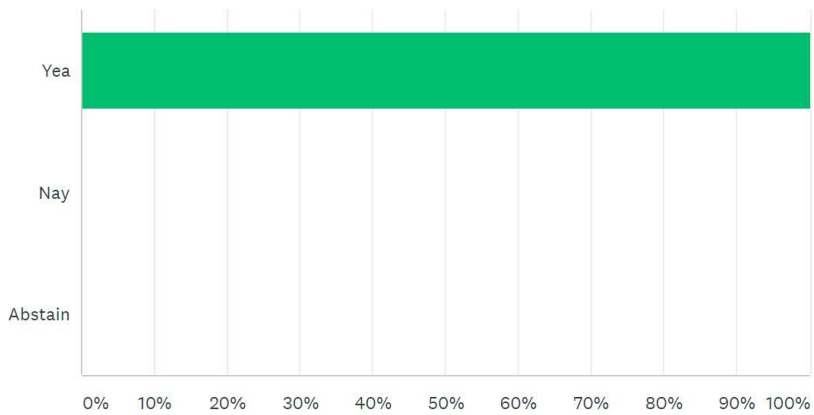
ANSWER CHOICES	RESPONSES
▼ Yea	100.00% 25
▼ Nay	0.00% 0
▼ Abstain	0.00% 0
Total Respondents: 25	

Vote to approve

Ex. 6

nomination to the National Air and Space Museum Board.

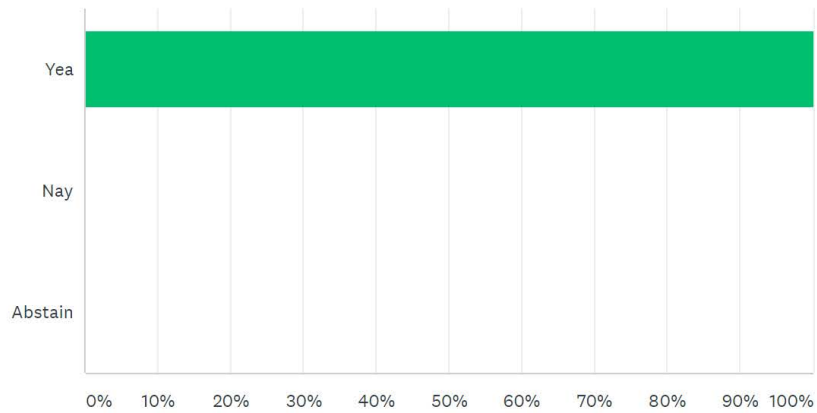
Answered: 25 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ Yea	100.00% 25
▼ Nay	0.00% 0
▼ Abstain	0.00% 0
Total Respondents: 25	

Vote to approve **Ex. 6** nomination to the National Air and Space Museum Board.

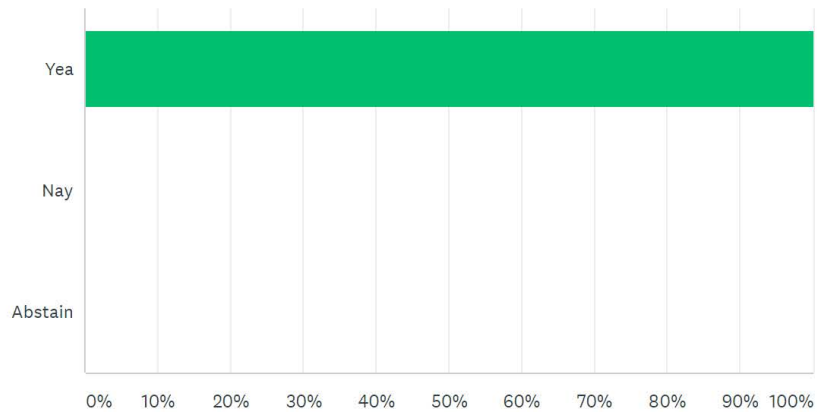
Answered: 25 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ Yea	100.00% 25
▼ Nay	0.00% 0
▼ Abstain	0.00% 0
Total Respondents: 25	

Vote to approve **Ex. 6** nomination to the National Air and Space Museum Board.

Answered: 25 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ Yea	100.00% 25
▼ Nay	0.00% 0
▼ Abstain	0.00% 0
Total Respondents: 25	

**Smithsonian's National Air and Space Museum Board Meeting
Wednesday, October 21, 2020
Virtual Meeting**

Meeting Called to Order - Allan Holt, Chair

Allan Holt called the meeting to order at 10:00 am. He welcomed Meroë Park, deputy secretary and chief operating officer, and Amy Chen, chief investment officer for the Smithsonian, and new board members Tom Bartelmo, Janet Kavandi, Blake Larson, David Rowe, and Michael Weir to the meeting.

“State of the Smithsonian” - Meroë Park, Deputy Secretary and Chief Operating Officer, Smithsonian
Meroë Park, deputy secretary and chief operating officer of the Smithsonian Institution, presented the “State of the Smithsonian” report. Addressing COVID-related challenges, Park shared that the Smithsonian successfully pivoted to largely a telework status. This shift enabled the Smithsonian to continue with much of the work and retain most of the workforce for a longer period than expected. The Smithsonian’s ability to work remotely has been a real silver lining and is an example of how nimble the Institution can be.

Park acknowledged Ellen Stofan’s participation on the New Normal Committee and shared that the Committee challenged the Institution to think differently about what the Smithsonian will be after the pandemic. The Committee recently delivered their report to Secretary Lonnie Bunch.

Park shared that the Institution has accelerated the virtual Smithsonian objective. Virtual efforts will enable the units to continue to serve constituencies that cannot visit Washington, DC. The Institution’s vision to make content available around the world has been a success. Virtual programs have also been a success on the education side, especially for parents who find themselves in a new role as educators. Great work is underway on the transition to a digital space.

Park reported good news on the resource side as the Institution is sustained by a strong federal base. She shared that the advantage of being attached to the federal government is that the Smithsonian has a sustained funding source that helps in difficult times. The Institution has a lot of support from the Hill and others to continue our work. However, the Smithsonian’s Trust side has been hit hard as the closed museums do not allow the Institution to bring in the normal revenue streams. Park projects Ex. 5. As a result, Smithsonian Leadership took steps to reduce the impact of lost revenue sources. Expenditure reductions include salary reductions at the senior level and hiring freezes. She reported that Smithsonian Enterprises laid off approximately 200 employees. The Smithsonian is working to be as efficient as possible and is Ex. 5.

Park spoke on reopening efforts. She shared that a handful of units, including the Udvar-Hazy Center, are open. The Smithsonian learned a lot from the reopening of these large spaces and their retail operations but is pausing on other reopening efforts while reevaluating staffing needs. Leadership is pleased to continue to receive positive feedback from the public on the reopening.

To date, the Institution is not aware of any COVID cases that resulted from the public reopening. The Institution implemented a timed ticket system to manage crowd control and expectations for visitors. The timed ticket system has been a positive learning experience for the units.

Despite the many challenges that the Smithsonian faces, Park remains optimistic. She believes that the Smithsonian can serve as an effective national convener on topics of interest to the public during these difficult times. Not only can the Institution contribute their expertise and thoughtful historical context, but Secretary Bunch is positioned to help on several issues. Park shared that the Institution will be doing work in communities around race and those efforts will be a way for the Smithsonian to have a positive impact on the country.

Regarding education, the Smithsonian learned that there is a desperate need for content and the Institution is working on how to best get content to students and teachers. These efforts resulted in the development of the Learning Lab for educators to access a portal to find curated content to combine in ways that work for them.

Holt asked Park how the Museum is doing on the education front from an overall standpoint. Ex. 5
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted].

Meredith Siegfried Madden asked for Park's top priorities for the next five years. Park shared that Ex. 5
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted]
[Redacted].

Karen Dahut asked how the Museum's philanthropic efforts have changed because of COVID. Park responded that Ex. 5
[Redacted]
[Redacted]
[Redacted]. The Smithsonian expects to have a greater understanding of the philanthropic landscape in a year from now.

"State of the Museum" - Ellen Stofan, John and Adrienne Mars Director

Ellen Stofan presented the "State of the Museum" report. She thanked the members for participating in the virtual meeting and for their support. Stofan stated that her presentation will focus on Revitalization and Transformation, re-opening facilities, budget challenges, DEAI plan and strategic plan implementations, and Udvar-Hazy Center planning.

Stofan shared that the Museum opened the Udvar-Hazy Center with great success and has welcomed over 60,000 visitors since re-opening. The Smithsonian is demonstrating how good workplace controls and staff compliance with face covering, distancing, and hygiene guidance is effective. Exemption 6
[Redacted]

[Redacted] The Museum is undertaking a mask assessment study in collaboration with the National Zoo and the Smithsonian's Public Health Committee. The goal of the study is to improve masking compliance amongst visitors by comparing rates of compliance before and after several different types of interventions (e.g. signage, video, interpersonal). The virtual volunteer program continues to be a highlight and duplicated across the Smithsonian. Stations with docents on monitors have now been added at key artifacts. As is typical once school starts, UHC is seeing low visitor numbers during the week but the weekends are staying consistently around 1,200/1,300 visitors. The Museum can distribute up to 2,000 passes daily. A donate "button" was added to the pass registration process on September 9 and has raised Ex. 4. The store is open Ex. 4. Comparing sales to last year, Ex. 4. Ex. 4.

Regarding the re-opening of the National Mall building, a re-opening plan was submitted to Smithsonian Leadership but a re-opening date will not be announced for some time. The Mall building will not open until Smithsonian's Phase 3. Due to construction, the maximum capacity will be very low - only 250 people at any given time. When the building does reopen, it will be open five days per week which is in line with what other Mall units are doing. As with the Udvar-Hazy Center, there will be no retail, interactives, tours, or programming when the building first re-opens. The museum store and restaurant will re-open in later stages and these limitations will greatly impact the visitor experience.

Stofan provided an update on the Smithsonian's New Normal Committee. The New Normal Committee submitted their report to Secretary Bunch and Deputy Secretary Park. The Committee is now awaiting feedback, and the public report will be made available after they meet with Secretary Bunch. Stofan shared that their recommendations centered on the Big Ideas. The Committee also discussed financial sustainability including ecommerce, memberships, and rethinking special events. The Committee agrees that digital should be a priority and the Institution needs a Head of Audience Engagement. The Committee also discussed how to better integrate education into the DNA of the Institution. Stofan asked Meg Caulk and Beth Crownover to lead a small team to consider New Normal revenue generating opportunities at NASM.

Stofan reported that NASM is facing budget challenges which are not insignificant. Regarding NASM's 2020 budget, Ex. 4 and experienced drop-offs in travel, programming, and special events. Additionally, the Summer Intern Program was reduced to virtual participation and labor vacancy rates remained around 20% all year. To address these challenges, Ex. 4 Directorates did a good job at projecting needs within their budget limits, and travel and training was managed centrally for all non-program requests. Leadership is taking time to research all options for how to address what will become an up to Ex. 4 budget shortfall in the Director's Discretionary Fund by 2024. This fund is the source of a majority of NASM's Trust-funded labor positions. Ex. 4 Federal staff will not be affected and, due to the way some positions are funded, there will be a perception that these measures have not been applied equitably. Performance awards for 2020 will be limited, a hiring freeze remains in effect, and the Museum is taking a hard look at existing positions and will be making difficult choices. Smithsonian Enterprises had to make significant layoffs of both retail and other staff, as well as pay cuts. Ex. 4 . At the June board meeting, Stofan reported that NASM submitted several "shovel-ready" projects that might be considered for the next stimulus bill. There is no update on any stimulus requests, especially the infrastructure bill, and there likely will not be movement until after the election. The Castle informed Stofan that the Museum Ex. 4 .

Board members received the Strategic and DEAI Plans. Accomplishing what is set forth in these plans is vital to truly transforming the Museum. The goals of NASM's Strategic Plan support the following priorities:

- Priority 1 - Reimagining how we share relevant stories from our Nation's aerospace collection that educate the world and inspire future innovators and explorers
- Priority 2 - Share our Nation's aeronautical and space treasures and stories beyond the walls of the museum
- Priority 3 - Design a visitor-centered and visitor-informed experience
- Priority 4 - Achieve global recognition as a leader in museum practice

Stofan and staff are committed to better reflecting the diversity of the Museum's global audience and becoming more inclusive, both in the stories shared and how NASM operates as an organization. However, the Museum lacked the organizing strategy, commitment of resources, and specific goals and measures to ensure success. This Plan aims to provide that. The Plan reflects strategic objectives and steps for leadership, culture, talent, and marketplace to take place over the next 18 months. These objectives were derived from feedback garnered through individual, group, and large-scale interactions, including a planning charrette. NASM's vision to embed DEAI initiatives into our Museum includes:

- Leadership: Ensure leadership commitment to diversity, equity, accessibility, and inclusion
- Culture: Cultivate and support an inclusive environment

- Talent: Reduce and mitigate employee biases in the organization and work to diversify our staff
- Marketplace: Reflect and deepen DEAI in the National Air and Space Museum brand

Stofan shared that digital education efforts continue. For this year's Engen Flight Jacket Night, Brigadier General Charles McGee took part in a conversation about life, challenges, and airplanes. Stofan moderated this discussion that also included Lonnie Bunch. Since the Arsenal of Democracy flyover had to be cancelled due to weather, the Museum's program was re-broadcast as part of the Arsenal's event streaming.

NASM also worked to launch online reservable programming. Teachers will now find unique opportunities for students to engage with NASM's content. Each reservable experience is standards-aligned and provides a suite of materials surrounding the content area aimed at engaging students through:

- Content deep-dives ready for instructional use
- Hands-on experiences that include adaptations for completion at home
- Artifact immersions that connect our collection to content
- Virtual games and activities that extend the content for students

For early childhood learners, teachers can reserve the Flights of Fancy Story Time experience which includes a read-aloud with a museum educator, a video chat about an image or other museum resource related to the topic, and a craft activity led by a museum educator. Education will continue the programs rolled out earlier in the year, including live chats and *STEM in 30*, and will debut new content every Thursday at 1:00 pm. Education, Communications, and the Future State Committee worked with Booz Allen Hamilton on a pro bono project. This project is focused on generating recommendations for increased digital engagement, specifically how to best capture and record data from virtual events in a data dashboard. Stofan thanked Karen Dahut for connecting the Museum with Booz Allen Hamilton for this project.

The Museum transitioned the 2020 Collins Trophy event to a primarily virtual one. It will take place on March 18 with a small audience on-site, if possible, to celebrate the honorees and the award presentation will be broadcast. In the fall, the Museum aims to award the 2021 Trophies with a traditional dinner. Sponsors will be acknowledged at both events next year. Stofan thanked Booz Allen Hamilton, Jacobs, Leidos and Sierra Nevada for their support.

Stofan reminded the Board that the Museum issued an RFP to look at the public areas and activities such as exhibitions, classroom spaces, retail offerings, special events, donor recognition, parking, education and public programs at the Udvar-Hazy Center. The Museum determined the best course of action for engaging visitors at the Udvar-Hazy Center is to postpone the research and evaluations until early 2021. This will allow a period of approximately 6-8 months to monitor public visitation numbers at the UHC so that the Museum can ensure maximum visitor engagement for the evaluation research. Historically, NASM can point to the springtime for an uptick in visitation and, as the Museum closely monitors guidance from public health experts, it is anticipated that a spring 2021 timeline for audience research would provide a larger visitor sample. The roof project is going well. The center section opened in August which allowed for a slight increase in attendance capacity.

Revitalization and Transformation Update - Chris Browne, Deputy Director

Chris Browne provided an update on the Revitalization and Transformation of the National Mall building, presenting information on the progress of major project elements to date.

Browne offered his condolences following a fatal accident at the National Mall building. Clark Smoot Consigli's (CSC) work in the area was suspended during the initial investigation. CSC made several safety updates due to this fatality:

- An additional safety manager is now onsite for equipment safety
- An additional superintendent is also being added to the project
- Grief counsellors have been made available

Browne provided a visual detailing the overall progress made in the various areas of the Revitalization project. Browne also reviewed the construction phases in the zones and the West End reopening schedule. He noted that the project is reaching a crescendo and that the NASM team is extremely busy. It has been acknowledged that, due to delays caused by COVID, the January completion date for the flip of the West end

will not be achieved. Browne explained that, once Clark completes the Revitalization portion of the project, the Museum must then go in and execute the Transformation portion. Leadership analyzed the various completion timelines for each gallery and determined that it would not be wise to reopen the West end if there are only a few galleries open to visitors. The Museum desires to unveil the transformed galleries and welcome the public back to a space that is worthy of the caliber of the project. While a public announcement has not been made, this will likely require the National Mall building to close to visitors for some period of time. He stated that April 2022 is the earliest possible opening of the West end.

Regarding the progress of the Revitalization of the National Mall building, Browne reported that the exterior stone placement is now complete on West Wall facade. The West temporary roof enclosure deinstall is now taking place. There have been Ex. 4 (total value) of change orders which the Museum is watching very closely due to limited contingency funds. After having an average of 450 workers (22% reduction) on site daily due to COVID precautions, construction is 41% complete.

Browne showed pictures of current work being done in the *America by Air* gallery, including the installation of terrazzo flooring. The “dance floor” will be removed later in the fall once the skylights are installed.

Browne listed the following challenges associated with Revitalization: COVID impacts, schedule, material deliveries, artifact installation, and contingency. Browne noted specifically that an increase in time needed to reinstall the artifacts will impact the schedule.

Regarding progress with the Transformation of the National Mall building, the West End fabrication project is 31% complete. The Museum is pleased with the contractor’s work in this space. He showed an example of a case that is currently being constructed. Browne listed the following challenges associated with Transformation: Schedule impact due to COVID-19, potential delays in overseas casework deliveries, construction material availability, reinstallation of artifacts back into the galleries, cost control, and reassessment of interactive designs.

Beyond the Transformation of the galleries, Browne reported that planning for the Launch Pad area with a classroom, spaces for families, and café is underway. He shared that the museum store and planetarium will be rebuilt. The IMAX theater will not reopen with the West end. The Museum is working to replace the restaurant and install an astronomy park on the East end. Browne noted that the closure of revenue generating activities in the National Mall building greatly impacts the Museum’s budget.

Stuart Fred asked about the contract obligations to NASM. Exemption 5 [REDACTED]

[REDACTED] Tom Morr noted that the HVAC is important for protecting artifacts but that the airborne transmission of COVID is also a critical problem. He asked if the new HVAC will meet HEPA standards. Browne responded that the HVAC system was one of the main catalysts for this entire project, so the Museum feels confident that what is being installed will meet the highest standard. Rick Flansburg added that NASM is upgrading the environmental systems to what is state-of-the-art for museums. The systems and filters installed through this project will not only provide great conditions for the collection but will also provide filtering in the COVID sense as well. Holt noted that the NASM Board is an advisory board and not a governance board. He shared that, while Stofan and Browne are responsible for running the Museum, the Smithsonian oversees the Revitalization portion of the project.

State of Endowments - Amy Chen, Chief Investment Officer, Smithsonian

Amy Chen, chief investment officer, presented the “State of Endowment” report. Chen provided a brief overview of the governance, leadership, and management of the Smithsonian Endowment. She also reviewed the Endowment’s strategy and performance.

Chen shared that the first endowment was established with James Smithson’s bequest of \$508,000 which represented 1/66 of the US Treasury. Today, thanks to generous donors, the Smithsonian Endowment consists

Ex. 4. This enables the Endowment to employ broad asset class diversification while maintaining an acceptable level of risk. Private contributions, business income, and perpetual funding from the Endowment serves to build the Smithsonian's financial foundation. Ex. 4. The Endowment supports director and curatorial positions, fellowships, and programs that are at the heart of the Smithsonian's mission.

Chen stated that the investment objective for the Smithsonian Endowment is to generate sufficient returns over the long-term to provide stable and growing payouts with an acceptable level of risk, using external, independent managers. The Regents approve a payout every year which is calculated based on the average market value over the prior five years. The goal is to Ex. 4. Chen shared that the primary barriers include an investment climate that has moved to a lower returning investment period and increased volatility in virtually all asset classes. She shared that management challenges include Ex. 4.

Exemption 4

[Redacted]

Chen stated that the critical component contributing to investment success is a strong governance structure. The Investment Committee became a standing Regents committee in 2008. It is the Committee's responsibility to achieve the long-term objectives by setting the policy portfolio and asset allocation. Committee membership is composed of three members from the Board of Regents while five are non-Regent members. All members are investment specialists with institutional investment experience.

Chen provided information on the work of the Smithsonian's Office of Investments. Ex. 4

[Redacted]

Chen referenced a table showing the value of the Smithsonian's Office of Investments. Ex. 4

[Redacted]

Advancement Committee Report and Discussion - Marion Blakey, Chair, Advancement Committee
Advancement Committee Chair Marion Blakey provided an update on fundraising progress. Blakey stated that the fiscal year ended September 30. For FY20, NASM's fundraising goal was Ex. 4. Pre-COVID, the Museum was on target to exceed the Ex. 4 goal, but several commitments have been pushed to FY21. By the end of the fiscal year, the Museum secured Exemption 4. Blakey provided an update on the Ignite Tomorrow campaign and NASM's progress toward the Ex. 4 Transformation goal. The Museum has secured Exemption 4.

[Redacted]

Blakey reported on FY20 fundraising. She stated that, of the Exemption 4 raised this year, the largest portion of these gifts are for Transformation which remains the top priority. The Exemption 4 raised for non-transformation supports other important initiatives including internships, conservation, and education programs.

Blakey shared a list of major gifts of Exemption 4 received in FY20. She thanked the board members who facilitated or directly provided key gifts to NASM. She acknowledged Exemption 6 for their generosity.

Blakey reported that the FY20 Smithsonian-wide fundraising goal was Ex. 4. The Institution achieved Ex. 4 in funds secured. Exemption 4

Blakey announced that the National Air and Space Society and Wall of Honor had another record year raising the most revenue ever achieved. The team exceeded this year's Ex. 4 goal and raised Ex. 4. The National Air and Space Society and Wall of Honor provide unrestricted support to the Museum which is more important than ever as the Museum does not have the revenue streams that were relied on in the past.

Regarding donor engagement, Blakey reported that digital engagement is a priority for the whole Museum and that includes Advancement. Advancement has remained connected with donors by offering exclusive donor webinars, such as the virtual tour of the Revitalization construction zone led by Chris Browne. The National Air and Space Society also went virtual with membership events and had a very successful Flight Jacket Night with Brigadier General Charles McGee. Members have also enjoyed exclusive Q&A opportunities with speakers prior to virtual public programs. Advancement collaborated with Visitor Services to turn the typical VIP donor tours into a new "Experts on Demand" program. Experts on Demand allows for VIP one-on-one time with a NASM Docent over Zoom, exploring a topic that aligns with the guest's interests. Despite all this year has brought, the Advancement team remains busy.

In review of FY20, Blakey shared that Ex. 4. She reminded members that the Advancement team is relatively small with 14 staff (4 of which are frontline fundraisers) so they are working hard. There were Ex. 4. 48 proposals were submitted this year, Exemption 4. Between January and March, six trips were taken by gift officers and Stofan specifically for donor cultivation.

Blakey announced that the fundraising goal for FY21 is Ex. 4. This goal was set based on Ex. 4. The Museum is starting the year strong and already has Exemption 4 in verbal agreements. There is still work to do in turning these verbal commitments into written and finalized agreements, but it is a great way to start the year. With these recent commitments, the Museum now has 8 of the 19 galleries named for donors. Blakey reminded members that great naming opportunities remain. Blakey stated that she is confident that FY21 will be even better than FY20, and that the board can continue to contribute to the Museum's success in this exciting chapter of its history. While it is hard to know when the crisis will ease, the team must continue fundraising. A balance of sensitivity and strategy will be key as we establish a "new normal".

Exemption 5

Break

Nominations Committee Report and Discussion - Mark Dunkerley, Chair, Nominations Committee
Nominations Committee Chair Mark Dunkerley provided the Nominations Committee report. He welcomed new board members Tom Bartelmo, Janet Kavandi, Blake Larson, David Rowe, and Michael Weir. Their nominations were officially approved by the Regents on August 11. These members all attended a virtual

orientation last month. Dunkerley stated that [Ex. 6] withdrew his nomination and asked to be reconsider in 2021. Given the virtual format, the Nominations Committee will call for an electronic vote for current members following the meeting on the actions presented.

Dunkerley shared that the Nominations Committee proposed the following slate of officers for 2021-2022. He thanked the slate for agreeing to serve an additional one-year term which the Nominations Committee fully supports. To return as chair in 2022, Dunkerley will go emeritus after the October meeting, and Scott Donnelly will serve as vice chair and chair of the Nominations Committee in 2021. Pending the Board's approval, the new slate of officers will be:

- Allan Holt, Chair
- Scott Donnelly, Vice Chair and Chair of the Nominations Committee
- Marion Blakey, Chair of the Advancement Committee
- Steve VanRoekel, Chair of the Future State Committee

The Nominations Committee reviewed members eligible for emeritus status who are completing their second three-year term. These include Neil Cohen, Meredith Siegfried Madden, Greg McAdoo, Ross Perot, Jr., David Tolley, and Paul Wood. Each of the members confirmed their interest in continuing as emeritus members. The Nominations Committee recommended to the full board that all are offered emeritus status.

The Committee also discussed two board members who completed their first three-year term and whether they should be asked to serve another term. These include Bill Ayer and Daniel Baker. There was consensus that both should be offered a second term. Daniel Baker confirmed that he would like to continue to serve. Regrettably, Bill Ayer indicated that, while he has enjoyed serving on the board the past three years and remains committed to our mission, he is going to step down and not renew for a 2nd term. Dunkerley encouraged members to think of potential board candidates that would provide additional representation in the Seattle area.

The Nominations Committee also reviewed prospective board candidates and recommended the following nominees:

- [Ex. 6] previously served two three-year terms and has been an emeritus member for nearly one year. The bylaws stipulate that a member may return to the Board as an active member once they have gone emeritus for one year. [Exemption 6]
- [Ex. 6] serves as CEO [Ex. 6]. Stofan and Linda Daschle met with [Ex. 6] in July and a follow-up meeting is scheduled with [Ex. 6], Dunkerley, Holt, and Stofan at the Hazy Center October 23. He is deemed to be a worthy candidate, [Exemption 6]. Linda Daschle confirmed that he is quite enthusiastic about joining the board.
- [Ex. 6] serves as CEO of [Ex. 6]. Many on the board know [Ex. 6] and support his nomination. Scott Donnelly confirmed he understands the expectations and would be honored to serve on the board. [Exemption 6]

Assuming the NASM Board approves the three nominations, the candidates will be presented to the Smithsonian's Board of Regents for official approval at their February 1 meeting. If approved, the candidates will officially join the board in February. Assuming all three nominations move forward, with seven members going emeritus and Bill Ayer stepping down, the board will have 27 active members.

***Perseverance* Rover - An Example of NASM Research and Public Outreach though Mars Day - John Grant, Geologist, Center for Earth and Planetary Studies and Jean DeStefano, Assistant Director, Education**

John Grant provided an overview of his work with the *Perseverance* rover. Grant shared that another rover will be sent to Mars in 2020 and will make the next step towards understanding whether there was ever life on Mars. The rover is a twin to *Curiosity* but will carry different instruments and cache samples for possible later pickup and return to Earth. The goal of the mission is to look for evidence of biosignatures, which is evidence of past or present life. Grant is co-leading the landing site selection for this mission and the team has narrowed the search down to eight final candidate sites. These sites occur in a range of terrains, but all are thought to possess evidence of past water and habitable conditions. It is known that Mars is cold and dry, but evidence is preserved on the surface in the form of ancient channels and valleys that suggests conditions were once more Earth-like and that water flowed and ponded on the surface. As such, the possibility of life on Mars is intriguing, and has contributed to the planet being the focus of long-term exploration. Although

Mars is relatively smaller than the Earth, with about 40% of the mass, it has approximately the same land area as above sea level on Earth. Grant stated that there is a lot to explore. Mars has sedimentary rocks whose layers preserve evidence of the conditions and environments when they were deposited and formed. Coupled with Mars proximity to the Earth, which affords opportunities to launch missions approximately every 26 months, Mars represents an attractive and relatively accessible target for exploring whether we are alone in the Universe. Work with the Mars exploration and *Perseverance* rovers is making strides towards answering that question.

Jean DeStefano thanked Grant for his presentation, and shared that her presentation will focus on NASM's public outreach through Mars Day. Mars Day is an annual program offered in the summer at the Museum. It began in 1996 on the 20th Anniversary of the *Viking* landing and was spearheaded by the Center for Earth and Planetary Sciences (CEPS) with support from Education. It is a day that has family activities as well as CEPS scientists on the museum floor at information stations engaging directly with the public with the latest news and science of Mars. It is a great day-long mix of science and activities to engage our visitors.

As summer neared this year, the team realized that Mars Day 2020 would need to pivot away from the tradition day-long in-museum event. They knew an engaging program could not just be a day of virtual presentations strung together. Mars Day became a multi-day event with programs offered through different approaches on a variety of platforms. To be as efficient as possible with this heavy lift, the team aimed to incorporate as many existing materials as possible and tie them into the Mars theme. They also worked to offer Mars Day content that reached different audiences.

The virtual Mars Day took place Thursday, July 16 - Saturday, July 18, 2020. The event had a base on the Museum's website, but engaged participants through a mix of live programming, recorded programming with timed releases, short on-demand recordings, and activities on social media and other platforms. The team utilized timed premiers of *What's New in Aerospace* and *EZ Science* to focus on rovers and the technological advances of *Perseverance*. Since the topic of humans going to Mars was previously covered by Explainers at Discovery Stations in the museum, the team created new, short videos by filming the Explainers talking about Space Suits and Air Pressure to provide the content virtually. Another video featured a student reporter interviewing the Director of Launch Services at NASA. The team wanted to address social, historical, and diversity issues, so they piloted 3-5 minute videos focused on various topics titled "Launch a Conversation." Families were encouraged to watch the videos and have their own conversations. Quizzes flowed throughout the three days on Facebook, Twitter, and Instagram. With the goal of getting families away from the computer, the team created a home version of GooseChase. GooseChase is a phone app that facilitates scavenger hunts and activity challenges. The Museum hosted a live, timed game on the Saturday and Sunday of Mars Day. GooseChase also emphasized contributions from diverse people in advances on Mars. A CEPS intern created a story map allowing participants to tour the geography of Mars and learn quick facts on Mars and *Perseverance*. To reach young adults and provide live interactions with CEPS scientists, the team arranged for an Instagram Takeover with live mini-talks under the *AirSpace* programming brand. The takeover included science, but also music, cultural exploration, and even drink mixology.

With a minimal budget for the program, the team utilized economical social media ads to get a wide reach to potential audiences. DeStefano reported that, for a first-time virtual event of this type, the team successfully produced a variety of presentations across multiple platforms. The team identified areas for improvement, expansion, and reduction. DeStefano shared that there were 32,000 views across the Mars Day videos on YouTube and 25,000 views on Facebook with over 2,000 engaged in the Facebook content. The Museum gained over 70 subscribers to the YouTube channel and 1,000 new followers on Facebook. The Instagram Takeover yielded a total of 20,000 assumed views across 11 programs and 100 teams participated in GooseChase.

Overall, the team is pleased with the mixed, themed programming used for Mars Day 2020. It planted seeds for other engaging programming to be applied to the Museum's virtual family days and Air & Scare. The Mars Day programming also produced evergreen material that will live on the Museum's website and other platforms like YouTube. DeStefano welcomed the board members to visit the Mars Day website to explore the content.

Future State Committee Report and Discussion - Steve VanRoekel, Chair, Future State Committee
Chair of the Future State Committee Steve VanRoekel presented the Future State Committee report. He provided an update on the work of the Data Working Group in coordination with the NASM Digital, Communications, and Education teams.

While challenging to pivot all the Museum’s programming online seven months ago, the Museum’s closure due to the pandemic presented an incredible opportunity to focus on digital data and analytics ahead of the Museum’s reopening. It also allowed the Museum to fine tune reporting structures and processes. Since there was no in-person programming through this period, it provided an unprecedented opportunity to focus exclusively on digital, allowing the NASM team in conjunction with the Future State Data Ad Hoc Working Group to be singularly focused on digital metrics and establishing baselines. The NASM team embraced this opportunity - the museum has not only pivoted nearly all planned programs to a digital platform, but has added dozens of programs and digital content to continue to engage audiences. VanRoekel shared multiple examples of digital programs produced by the Museum in past six months:

Teacher Professional Development - STEM in 30 hosted a Facebook live for teachers about digital learning. It featured real teachers (from the Museum’s Teacher Innovator Institute) discussing how they use NASM’s resources in their virtual classrooms. Special guest Mike Massimino shared what it was like communicating with students from space.

Space Songs YouTube Live Event - NASM produced a special virtual concert event featuring artists who have been inspired by space. The event was hosted by Adam Savage and drew thousands of live viewers and tens of thousands of views post-event.

Facebook Live Q&As - Every Thursday throughout the spring and summer, NASM Education hosted a Q&A with special guests on Facebook.

Audio Programs - The *AirSpace* podcast launched its third season this July with a special re-brand, social media, and newsletter. The *AirSpace* team also launched a special audio project called *Voyages To Mars* which features readings of classic sci-fi set to music by DJ Kid Koala.

One of the key areas the Data Working Group has consulted on these last few months was the refinement of the Museum’s digital Key Performance Indicators and digital baselines. This process allows the NASM team to effectively track performance of digital content and programs - and this information will be critical in understanding progress and how the Museum can continue to iterate for increased engagement. VanRoekel provided a snapshot of the new reporting system - quarterly, an interdepartmental team will review KPIs and share with leadership in a consolidated report. In addition to a consolidation of metrics, this report will also have a narrative of highlights, trends, and overall impact of iterative progress. This is an important step for the Museum as it represents a consolidated and united interdepartmental effort.

NASM is also undergoing an audience segmentation of website visitors. This process will help the Museum understand why people are visiting the website, who they are, and enables the team to restructure the website to better suit visitor’s needs. The NASM digital team is currently in the middle of this audience segmentation process with a hired contractor who specializes in museum digital experiences.

VanRoekel shared that the Museum has employed a range of marketing techniques to advertise digital programs - from social ads, national digital ads, and ongoing media outreach. Communications and Education worked together to create monthly theme ads that promote the new programming related to that month’s theme. VanRoekel provided an example of September’s theme of commemorating World War II. NASM received media coverage for its digital initiatives including a *New York Times* article that featured NASM and the *Air and Space Anywhere* activities prominently.

Most importantly, the Data Working Group and NASM team is concerned with how NASM can maintain the data reporting and implement modifications that will continue to grow and improve digital experiences. Due to limited staffing, capacity building remains an area of focus for the Working Group. The team wants to ensure that the progress made is sustainable. A large part of sustaining momentum is culture change. Metrics will be reported quarterly in an interdepartmental report, and the NASM Digital team has built a brand-new dashboard that can be accessed daily by all employees on NASM’s intranet page.

Jones asked if the Smithsonian is tracking or marketing to virtual visitors the same as in-person visitors. VanRoekel responded that most of the efforts started after COVID so the Museum has not had the opportunity to track in-person visitors in the same way. The Museum is learning a lot about best practices for tracking in-person visitors during this time. VanRoekel shared that he is looking forward to trying to drive virtual to in-person visitors. Stofan commented that tracking visitors

Ex. 5

Old Business - Allan Holt

Holt shared that staff hoped to have the new board web portal operational by the October meeting, but Smithsonian contracting challenges have delayed this. It is still on track to happen, in fact other SI units plan to use the same vendor for their boards.

New Business - Allan Holt

Holt announced that, due to continuing uncertainties, the February 10 meeting will be held virtually, and the dinner is canceled. The remaining meeting dates for 2021 are June 15-16 and October 26-27.

Wrap-up - Ellen Stofan

Stofan stated that delays in the Revitalization and Transformation work that may result in a temporary closure of the museum are likely due to the original timeline. Stofan's challenge to staff and to SI Facilities is to keep closures to a minimum. The goal is to open the West end in a state that is worthy of the excitement visitors have shown. Opening a small or diminished West end could result in negative publicity. Stofan also congratulated the NASM staff on excelling during this time despite COVID. She thanked members for attending the meeting

Executive Session

Meeting adjourns

Holt adjourned the meeting at 1:02 pm.

National Air and Space Museum Board

*Present at the October 21, 2020 meeting

Board Members:		
Mr. William S. Ayer	Mr. Max C. Chapman, Jr.	Dr. Frederick Telling*
Mr. Daniel Baker*	Mr. Frank A. Daniels, Jr.	Mr. Charles Thornton
Mr. Thomas Bartelmo*	Mr. Edsel B. Ford, II	Mr. Steve VanRoekel*
Ms. Marion C. Blakey*	Mr. Stuart L. Fred*	Ms. Patty Wagstaff
Mr. Mark L. Burns*	Mr. Morton Fungler	
Mr. Neil Cohen*	Mr. Kenneth E. Gazzola*	SI/NASM Staff Members
Ms. Karen M. Dahut*	Mr. S. Taylor Glover*	Dr. Ellen R. Stofan*
Ms. Linda Hall Daschle*	Mr. James M. Guyette	Mr. Christopher U. Browne*
Mr. Stanley A. Deal	Mr. Randall A. Greene	Ms. Kelly Bloom*
Mr. Scott Donnelly*	Mr. Thomas W. Haas	Ms. Stephanie Brinley*
Mr. Mark B. Dunkerley*	Mr. Ralph D. Heath*	Ms. Meg Caulk*
Ms. Michele A. Evans*	Mr. Shephard W. Hill	Ms. Beth Crownover*
Mr. Tom Gentile, III	Mr. David R. Hinson	Mr. Rick Flansburg*
Ms. Dawne S. Hickton*	Mr. David C. Hurley	Mr. Michael Garceau*
Mr. Allan M. Holt*	Mr. Robert James	Ms. Lindsey Jackson*
Mr. Thomas W. Horton*	Mr. Clayton M. Jones	Ms. Marian Livengood*
Dr. Christopher T. Jones*	Mr. David L. Joyce	Ms. Anne McAllister*
Dr. Janet Kavandi*	Mr. Rodney R. Lewis	Ms. Jessica McNally*
Mr. Gary C. Kelly*	Mr. Steven R. Loranger*	Mr. Francisco Torres*

Mr. C. Jeffrey Knittel*	Capt. James A. Lovell	Ms. Elizabeth Wilson*
Mr. Roger A. Krone*	Mrs. Adrienne Bevis Mars	
Mr. Blake Larson*	Mr. Bruce R. McCaw*	
Ms. Meredith Siegfried Madden*	Ms. Linda A. Mills*	
Mr. Gregory L. McAdoo*	Mr. Robert A. Milton	
Mr. James C. Murray*	Mr. Robert J. Mittman	
Mr. H. Ross Perot, Jr.*	Mr. T. Allan McArtor*	
Mr. David Rowe*	Mr. Jameson J. McJunkin	
Mr. David Tolley*	Mr. Thomas G. Morr*	
Mr. Steuart L. Walton*	Mr. Lloyd "Fig" Newton	
Mr. Tyson Weihs*	Mr. Jack J. Pelton	
Dr. Michael Weir*	Mr. Roger D. Percy*	
Mr. Paul Wood*	Mr. Robert W. Pittman	
	Mr. John L. Plueger	
Board Members Emeritus:		
Mr. James Albaugh	Mr. Thomas F. Pumpelly*	
Mr. Ronald W. Allen	Dr. Jon A. Reynolds	
Mrs. Anne B. Baddour	Dr. Donald B. Rice	
Mrs. Agnes M. Brown*	Dr. Richard Sugden*	
Mr. Armando C. Chapelli, Jr.	Mr. David Storch	

From Meredith Siegfried Madden to Everyone: 10:24 AM - Meroe, what are your top priorities for the next 5 years? ok...3

From Karen Dahut to Everyone: 10:24 AM - Hi Meroe - I am wondering how the Museum's philanthropic efforts have changed as a result of Covid.

From Daniel Baker to Everyone: 10:51 AM - (No need to respond at this time) I am enthused by the concept of permanent e-ticketing for admission and all the related opportunities for engagement, donation, analytics, etc. It would be terrific to explore that more in the future.

From Ellen Stofan to Everyone: 10:55 AM - Daniel- agree.

Ex. 5

From Blake Larson to Everyone: 10:58 AM - I agree. Maybe it will come up in R&T, but with the facility shutdowns of so many places, there have been some projects that have been able to be accelerated and overall schedule and cost improved by elimination of the complexity of working around ongoing operations. I just wondered if there were any such opportunity here for the facility on the Mall? May not fit with funding profile or other factors, so appreciate your patience with outlier ideas!

From Stuart Fred to Everyone: 11:07 AM - Chris what are the contract obligations to NASM as to general condition extensions for Clark and who is responsible if a delay is put in place by NASM....Is there insurance available ...Did the AIA agreement take into consideration a National crisis as to ie: Covid or the like where NASM is not responsible to fund?

From Tom Morr to Everyone: 11:11 AM - HVAC is important to protecting the artifacts so I am sure you have a substantial system. Airborne transition of Covid is a critical problem. Have you looked at the HVAC filtering capacity. How close is the system to HEPA standards?

From Stuart Fred to Everyone: 11:11 AM - Understood so is there a liquidated damage clause if they cannot complete not withstanding issues NASM is not responsible for?

From Meredith Siegfried Madden to Everyone: 11:29 AM - That was a great presentation - Endowment update. Thanks for adding that to the agenda Allan and Ellen. Great job Amy.

From Chris Jones to Everyone: 11:31 AM - Question for Amy -

Ex. 5

From Blake Larson to Everyone: 12:07 PM - While the slate of recommendations is very strong, I was just wondering if in the context of the prior discussion about implementation of the DEA & I plan,

Ex. 5

From Ellen Stofan to Everyone: 12:14 PM - Blake- great question.

Ex. 5

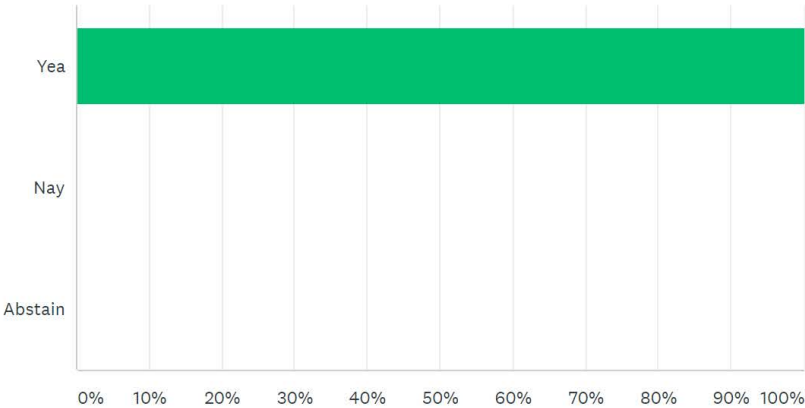
. Would greatly appreciate any help you can have with this!

From Chris Jones to Everyone: 12:31 PM - Steve and Ellen, is the Smithsonian tracking/marketing virtual visitors the same as in-person visitors?

From Stuart Fred to Everyone: 12:44 PM - Alan I think more clarity needs to be had with the closure and legal financial issues impacting opening and cost impacts as to the contractor

Vote to approve the following Slate of Officers for 2021: Allan Holt, Chair of the Board
 Scott Donnelly, Vice Chair and Chair of the Nominations Committee
 Marion Blakey, Chair of the Advancement Committee
 Steve VanRoekel, Chair of the Future State Committee

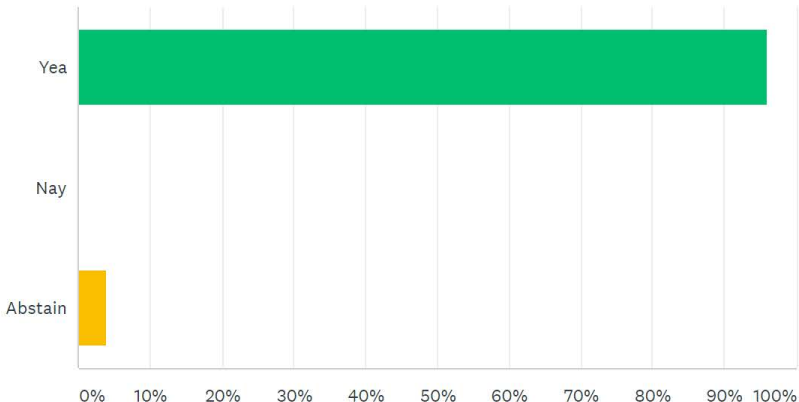
Answered: 25 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ Yea	100.00% 25
▼ Nay	0.00% 0
▼ Abstain	0.00% 0
Total Respondents: 25	

Vote to approve emeritus status for Neil Cohen, Mark Dunkerley, Meredith Siegfried Madden, Greg McAdoo, Ross Perot, Jr., David Tolley, and Paul Wood to the National Air and Space Museum Board.

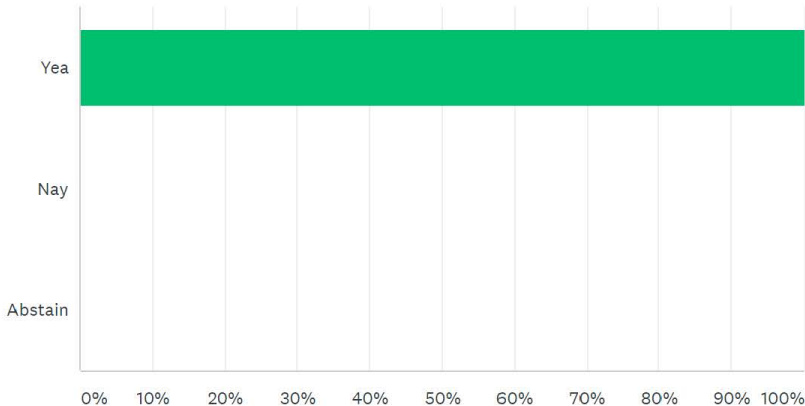
Answered: 25 Skipped: 0



ANSWER CHOICES	RESPONSES
Yea	96.00% 24
Nay	0.00% 0
Abstain	4.00% 1
Total Respondents: 25	

Vote to approve Daniel Baker's nomination for a second term to the National Air and Space Museum Board.

Answered: 25 Skipped: 0



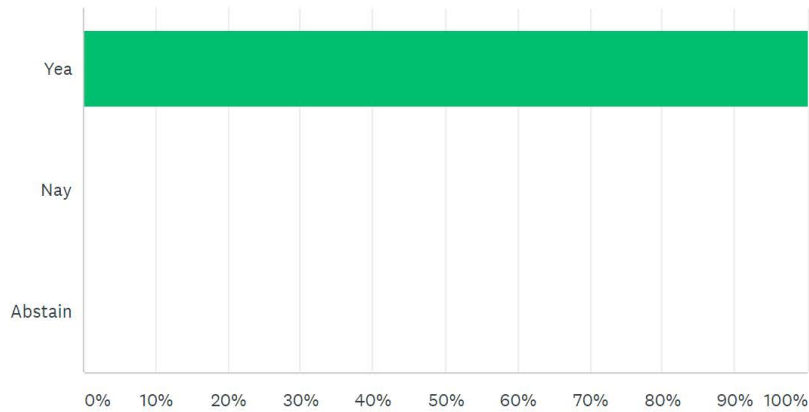
ANSWER CHOICES	RESPONSES
Yea	100.00% 25
Nay	0.00% 0
Abstain	0.00% 0
Total Respondents: 25	

Vote to approve
Museum Board.

Ex. 6

nomination to the National Air and Space

Answered: 25 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ Yea	100.00% 25
▼ Nay	0.00% 0
▼ Abstain	0.00% 0

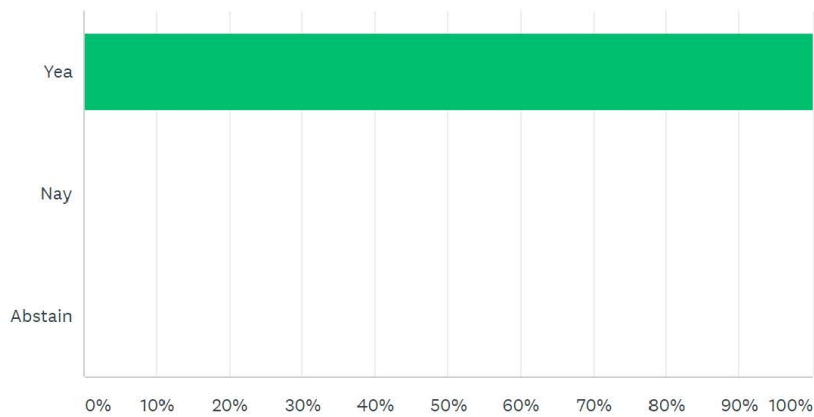
Total Respondents: 25

Vote to approve
Museum Board.

Ex. 6

nomination to the National Air and Space

Answered: 25 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ Yea	100.00% 25
▼ Nay	0.00% 0
▼ Abstain	0.00% 0

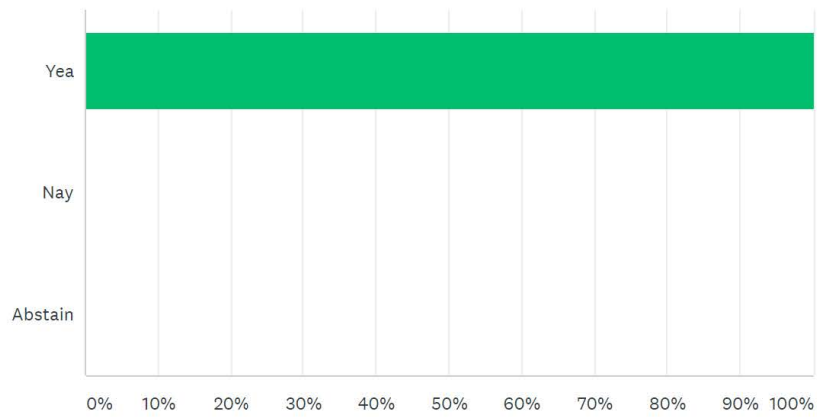
Total Respondents: 25

Vote to approve
Museum Board.

Ex. 6

nomination to the National Air and Space

Answered: 25 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ Yea	100.00% 25
▼ Nay	0.00% 0
▼ Abstain	0.00% 0
Total Respondents: 25	

Smithsonian's National Air and Space Museum Board Meeting
Wednesday, February 10, 2021
Virtual Meeting

Meeting Called to Order - Allan Holt, Chair

Allan Holt called the meeting to order at 10:00 am. Holt welcomed guest Carol LeBlanc, president of Smithsonian Enterprises, and new Board Members Matt Desch and Greg Hayes to their first meeting. He thanked Tom Haas for returning to current member status. Holt noted the unfortunate passing of [Exemption 6]. Thanks to a generous gift from [Exemption 6] and a matching gift from [Exemption 6], the Museum will add Evans' name to the Wall of Honor.

"State of the Museum" - Ellen Stofan, John and Adrienne Mars Director

Ellen Stofan presented the "State of the Museum" report. She thanked Chris Browne for leading the Museum during her leave of absence. She introduced Jeremy Kinney in his new role as associate director for Research and Curatorial Affairs and announced that Kevin Gover will be the permanent under secretary for Museums and Culture. Roger Brissenden is stepping away from his role as acting under secretary for Science and Research and is leaving the Smithsonian Institution. The Institution will conduct an internal search for his replacement.

Stofan announced that the Museum tentatively scheduled Innovations in Flight for August 21. It will likely be one of the Institution's first large-scale public events since the pandemic began. The Education team has developed monthly themes and upcoming themes include the *Perseverance* landing and the 60th anniversary of Alan Shephard suborbital flight. This advance planning allows NASM to leverage the themes for revenue generation. NASM will also offer a *Perseverance* merchandise opportunity. Smithsonian Enterprises recently ran a successful limited-time, print-on-demand, online "store" around the panda naming at the Zoo. The www.MarsRoverMerch.com site goes live tomorrow and sales go through February 21.

Stofan stated that she will address her top areas of focus. Regarding Revitalization and Transformation, Chris Browne will speak to delays due to COVID 19 and the resulting adjusted schedule. Regarding re-opening the facilities and the new normal, the Museum will strive to maintain a high level of digital engagement once staff returns to their on-site responsibilities. Stofan will speak to revenue generation and staffing decisions as they relate to budgeting challenges. Regarding Udvar-Hazy Center planning, Stofan reported that the roof work and parking lot maintenance have gone well but that she looks forward to pursuing master planning and audience research work as soon as COVID protocols allow. Stofan announced that the brand strategy initiative is a new focus. The Museum has not had a brand effort since opening the Mall building in 1976. The work on this new brand will align with the rebuild of the Museum's website and the West end gallery openings. The contract deliverables include:

- [Exemption 5]

The brand strategy will provide a cohesive identity, offer consistent and emotionally resonant messages, and work within the Smithsonian voice. The Museum will share more at a future board meeting and plans to involve board members in the development process.

Stofan invited Chris Browne to provide a further update on the State of the Museum. Browne stated that, while the Udvar-Hazy Center was open to visitors, the Museum safely welcomed over 100,000 visitors and raised [Exemption 4] in donations through the ETix pass system. Meroë Park has gathered a team that includes Meg Caulk to evaluate longer-term ticketing needs and a CRM system. Browne shared that, while Smithsonian facilities are currently closed to the public, there are still a limited number of staff on site. The Smithsonian saw an increase in COVID cases in December, which corresponded with community conditions in the region. Of the cases reported, approximately 70% were attributed to either contractors or teleworkers. Two NASM

employees reported positive cases at Hazy in December. In response, targeted cleaning, contact tracing, and staff notifications were completed. While some staff were precautionarily quarantined as primary contacts, no employees subsequently tested positive. Since March 2020, the Institution has had 201 cases representing 3.1% of the workforce. During contact tracing, SI Occupational Health identified less than 10 cases which they believe are related to workplace transmissions with the majority being community acquired. The Task Force has confirmed the Smithsonian will open with a phased approach that starts with the Zoo and Hazy again. The Museum is targeting mid-to-late March for planning purposes but that is not confirmed or publicly announced. Special events are prohibited through June so that further effects revenue.

Current conditions have not prevented the collection of significant artifacts. In November, NASM welcomed the Blue Angels' F/A-18C Hornet into the national collection. This is the first "Blue Angels" aircraft and the first F-18 the Museum has acquired. The aircraft has flown with the Blue Angels since 2015 and before that, was flown by eight US Navy squadrons over the course of three decades. The arrival of the aircraft at the Udvar-Hazy Center generated significant engagement on social media and was covered by all local news stations as well as affiliates in Norfolk and North Carolina.

Browne shared that online education and programming efforts continue with great success. In December, the Education team presented a Live Chat from the ISS with Victor Glover. This program has nearly 200,000 combined views on Facebook and YouTube; in addition, it had 5000+ live views, and 5000+ comments across both platforms. Over 450 unique questions were submitted by students from across the country and around the world in advance of the broadcast. This program is part of a larger initiative between the Smithsonian's National Air and Space Museum and the National Museum of African American History and Culture to document Victor Glover's historic trip to the ISS. In January, the AirSpace podcast collaborated with PBS NOVA's new podcast NOVA Now to swap content. AirSpace released NOVA's episode on satellites and NOVA released AirSpace's episode on planetary protection. The goal of this content swap is to broaden the reach of both podcasts by building awareness of each show. The Teacher Innovation Institute (TII) continues to inform NASM Education experiences and interventions. A combined team of NASM Educators and external evaluators asked the 90 TII participants to talk about triumphs and challenges in their practice during the COVID-19 pandemic. To share the results more broadly with the informal education community, a "highlights" report was created detailing trends among cohorts. This report has been widely shared via Informal Science and was also recently highlighted by the National Science Teachers Association. The Museum is in the soft launch phase of *My Flight, My Space*. This new interactive portal makes online learning with the museum accessible to all. With features including customizable lessons and rewards for meeting learning goals, this platform employs best practices for visitors with autism. NASM will be working with Smithsonian Access to gather user feedback on this new experience, with plans for a larger, more public launch in May or June. Browne thanked the Hilton Foundation for allowing Education to reroute endowed funds to this effort. At the beginning of the month, Education introduced the Observing the Sky Virtual Planetarium Show. Students are able to journey with Museum Educators to explore Earth's sky and discover how patterns and motions of the Solar System affect our everyday lives. Board members and their families will receive an invitation to participate in a private planetarium show.

Revitalization and Transformation Update - Chris Browne, Deputy Director

Chris Browne provided an update on the Revitalization and Transformation of the National Mall building, presenting information on the progress of major project elements to date. He shared the following key project milestones:

- Mid-2021 - Start of Phase 2 Deinstall
- Summer 2021 - Parking Level Moves
- Early 2022 - Third Floor Staff Moves
- April 2022 - Transition from Phase 1 to Phase 2

Browne reported that the recently passed 2021 Appropriations bill included the final \$55M installment of the original ^{Exemption 6} NASM project. Based on the project risk assessment, Smithsonian Facilities will request an **Exemption 5**. He shared that Phase 1 Construction Substantial Completion slipped from January 21, 2022 to April 20, 2022, a total of 89 calendar days. Construction is approximately 40% complete. The Museum awarded the Phase 1 artifact re-installation contract which encompasses 1,409 artifacts. The Museum anticipates that the first artifacts will be moved back into the National Mall building in late February 2021. Several artifacts that were previously on display at the Udvar-Hazy Center, including the Cessna 180, Huff-Deland and Lear Jet, have been deinstalled in

preparation. Phase 2 construction Notice to Proceed is expected in June 2021 with construction starting in April 2022 and substantial completion now expected in September 2024.

Browne showed pictures and provided updates on project highlights. He shared that significant progress has been made in the *America by Air* Gallery. Efforts in the *Nation of Speed* Gallery include the hanging of a frame for a projection screen in the ceiling. Browne reported that Zones 1 and 2 of the skylight installation are complete. Completion of this work is a key step in preparation for the removal of the Temporary Roof Enclosure.

Browne listed the following challenges associated with Revitalization: Schedule impact due to COVID 19; artifact reinstallation and contingency costs; and flip issues.

Regarding progress with the Transformation of the National Mall building, joint occupancy for *Nation of Speed* Gallery and *Early Flight* Gallery started in December. In a notable milestone, on February 11 the NASM team will begin to install the first Transformation artifacts into the Mall building: the Turner *Meteor*, *Nemesis*, and Mark 4. Artifacts on loan from the National Museum of American History are scheduled to begin installation in May. Browne reported that the West end fabrication project is 41% completed. Artifact conservation activities are being slowed down by COVID 19 preventative measures and impacts of slowdowns are being assessed. The East end team received the 65% Design Cost Estimate and the project is over the allocated budget. Budget mitigation options were developed by the team and reviewed by leadership. The Museum is working on the Statement of Work for the East end fabrication contract which will be advertised in a few months. The Commons fabrication contract was awarded and the project kickoff was December 14. Browne shared that Jerrie Mock's *Spirit of Columbus* is slated for display in the *Thomas W. Haas We all Fly* Gallery. He also announced that Roscoe Turner's *Meteor* aircraft was delivered by NASM crew into *Nation of Speed* Gallery on February 8.

Browne presented an overview of the steps required to install galleries at NASM. To take a gallery from black box to fully installed, NASM staff and contractors must:

- Install ceiling items: cables and strong backs for hanging artifacts, AV mounts, lighting fixtures
- Level the floor and paint the walls
- Hang large artifacts from ceiling
- Install artifacts or exhibitry that reside high on the walls
- Install flooring
- Install exhibits and large artifacts on the floor
- Install cases and interactives
- Install artifacts in cases
- Complete finishing touches
- The entire Revitalization and Transformation process culminates with being able to share the gallery with visitors

Browne listed the following challenges associated with Transformation: Schedule impact due to COVID 19; potential delays in overseas casework deliveries; construction material availability; reinstallation of artifacts back into the galleries; and cost control.

Browne reported that the Phase 1 Retail "multi-site" fit out, which includes the Museum Store and satellite shops, kiosks, Planetarium ticket booth and lobby, was awarded to Clark/Smoot/Consigli. The Launch Pad Café is scheduled to open to the public in concert with the Phase 1 reopening. Browne announced that an operating vendor has been confirmed. The 100% design documents are under review. The Planetarium dome contract was awarded to Astrotec. Browne reported that the East end restaurant design is suspended pending budget review and confirmation.

The Udvar-Hazy Center roofing project is still underway. Since the project began in April, construction has moved further north, allowing covers on most aircraft to be removed. This project is scheduled to be complete around May 2022. The parking lot repaving project has also continued and is in its second phase. New seating arrangements, which occupy the space the old lockers held, now serve as a rest area for visitors. New lockers are installed, including a larger option for visitors who stop over from Dulles with luggage. In the future, the new seating area will also serve as a space for groups to eat outside food. Pre-construction

meetings and demo have begun for the Shake Shack installation at the Udvar-Hazy Center. Substantial completion is scheduled for April 2021.

“State of Smithsonian Enterprises” - Carol LeBlanc, President, Smithsonian Enterprises

Carol LeBlanc, president of Smithsonian Enterprises, presented on the State of Smithsonian Enterprises (SE). LeBlanc stated that SE is one of the major areas of revenue within the Smithsonian and is also a brand-building arm. They provide unrestricted funds. There are three main types of funds with varying requirements for spending: federal, gifts/grants, and unrestricted. Unrestricted revenue is key as the museums can spend the support at their discretion. SE reaches over 130M people through print, digital, and television content. Under normal circumstances, SE has over 500 employees. There are 11 lines of business that fall under SE including: stores, theaters, restaurants, SI magazine, *Air&Space* magazine, Smithsonian Channel, and the travel business. SE typically generates approximately Ex. 4 in unrestricted income. Funds are shared between individual museums and the Smithsonian’s Central Trust. In FY20, SE generated Ex. 4.

LeBlanc presented on the impacts of COVID 19 on Smithsonian Enterprises. She shared that the best way to speak to it is to focus on the FY20 actuals vs. the initial budget. Impact on revenue traditionally earned through the stores, restaurants, and theaters was significant as SE’s portfolio is heavily weighted to Mall-based businesses. She shared that Exemption 5. Another significant drain was the closure of the travel business as SE typically facilitates one departure a day. COVID required that all travelers be brought home and refunds issued for forward booked trips. LeBlanc noted that there are bright spots as readers renewed their subscriptions to the Smithsonian magazines. Readers either decided they wanted a print product or that supporting the Smithsonian was important. She noted that the renewal numbers are of interest given that print is no longer a growing industry. There was also increased interest in the Smithsonian Channel as people stayed home and watched TV.

Focusing on non-business bright spots, SE continues to work with NASM on Revitalization. SE is developing a new e-commerce plan that will enable them to generate revenue off-Mall that is more integrated with the museums. With COVID, there was a record-breaking 108M visitors to SI mag.com. LeBlanc shared that the ViacomCBS merger is also a great opportunity for SE. SE continues to evaluate new business opportunities.

Looking ahead, LeBlanc stated that SE set the FY21 budgets and is anticipating Exemption 5. She noted that Udvar-Hazy Center parking transitioned back to NASM so that will also impact SE’s earnings.

LeBlanc stated that the relationship between Smithsonian Enterprises and the National Air and Space Museum is very important. While SE considers themselves to be a big revenue stream historically, SE employees also serve as visitor touchpoints throughout the Museum and is a brand extension. To put this in context, in FY13 the National Mall building was 48% of retail operating income for SE. NASM is one of SE’s biggest partners generating about Ex. 4 annually. In FY17, SE increased operating income to Ex. 4. She noted that the decline in NASM’s contributing percentage is due to the opening of the National Museum of African American History and Culture. NASM’s Revitalization and Transformation project is at the forefront of SE’s priorities. LeBlanc also shared that *Air&Space* Magazine has been published for 34 years, reaching approximately 1.4M people per issue. With the launch of the Smithsonian Channel, SE has collaborated on 41 Mission Critical programs with NASM.

LeBlanc reported that, through their operations on the Mall, SE earned Exemption 4

LeBlanc shared that, throughout COVID, SE has focused on building out e-commerce. They facilitated a successful panda naming pop-up shop that attracted over Ex. 4 in donations. Ex. 4 of the people who bought merchandise also donated. With NASM’s Mars *Perseverance* rover pop-up shop, SE improved the merchandise

offerings and worked with the Smithsonian Channel to build up the initiative. SE is rethinking [redacted] Exemption 5

Steuart Walton shared that [redacted]

Exemption 5

Exemption 5

Exemption 5

He encouraged SE to

[redacted] . LeBlanc thanked Walton and shared that SE

Steve VanRoekel asked if SE has considered monetizing online channels, such as YouTube, and engaging online personalities to cross-promote. LeBlanc stated that SE [redacted] Exemption 5

Linda Daschle asked if SE has explored artifact auctions. LeBlanc responded that [redacted]

Exemption 5

The New Normal Report - Carol LeBlanc and Ellen Stofan

Stofan shared that, at the beginning of the pandemic, Secretary Lonnie Bunch asked her to lead a New Normal team that would evaluate how to best position the Smithsonian moving forward. Stofan introduced LeBlanc who was a member of the team.

Stofan asked LeBlanc for her perspective on why it was important for the Smithsonian to create the New Normal team. LeBlanc shared that, with the pandemic, the Smithsonian was facing both an immediate and long-term crisis. Leadership was evaluating how the pandemic would impact the Institution going forward. The New Normal team identified opportunities for collaboration across the Institution during this unique time. Stofan added that, in addition to the pandemic, the George Floyd protests, and events of January 6th resulted in the Institution evaluating the Smithsonian's role as a national institution and international brand. The New Normal team considered the impacts of both in-person and digital experiences offered by the Smithsonian. Stofan noted that the cross-functional and multidisciplinary makeup of the team allowed them to move forward in strength with a "One Smithsonian" mindset.

LeBlanc shared that the team contemplated the expression "culture eats strategy." The Smithsonian is a trusted organization that has survived for many years with a delicate balance between federal and trust. Yet, she acknowledged that [redacted] Exemption 5

Exemption 5

[redacted] . The New Normal team encouraged the Smithsonian [redacted]

Exemption 5

Stofan stated that museum attendance is in decline and younger generations are media savvy. While other museums funded purely by profit have already moved to a data driven strategy, the Smithsonian is behind due to the availability of federal support. The pandemic has created the opportunity for the Smithsonian to vault past that and get back into the leadership position we think the Smithsonian should be in.

LeBlanc shared that the team spent time thinking programmatically about Big Ideas. It was an evolution in thinking about the Smithsonian as an agnostic institution that simply collects and preserves to an institution that has a point of view. Stofan reported that the New Normal team discussed the following Big Ideas:

1.) Racism and Our Shared Future

- 2.) Life on a Sustainable Planet
- 3.) Innovation and a Culture of Innovation
- 4.) Healthy Communities

The Smithsonian currently has a stove piped structure. The team asked, if a digital visitor wanted to explore the content of the entire Institution, how would they go about that. The Smithsonian must pull content from across the Institution to provide visitors with the richest and deepest experience possible. Stofan noted that the fourth Big Idea was “Healthy Communities.” While the Institution does some health research, it has a greater power to provide education. They propose using the power of artifacts to help inform the American public. She shared the The Race and Community initiative has just begun. A Ex. 4 gift from Ex. 4 enabled the Institution to produce a website and town halls across the US. The next Big Idea that will be pursued is “Life on a Sustainable Planet.” The Smithsonian is evaluating how research conducted by the National Air and Space Museum, Smithsonian Tropical Research Institute, the Conservation Biology Institute, and the Smithsonian Environmental Research Center can be strategically coordinated and integrated.

LeBlanc stated that, historically, the Smithsonian is the world’s largest museum and research complex. The New Normal put a spotlight on the need to have a point of view beyond the brick and mortar museums. The New Normal team is looking into how customers want to consume the Smithsonian’s offerings and make that as easy as possible. Closures due to the pandemic revealed that the Institution was not positioned to strategically take advantage of technologically.

Richard Sugden stated that he Exemption 5 responded that Exemption 5 Stofan Exemption 5. The effort is about improving and going beyond what the Institution has traditionally done in order to better engage with future generations.

Stan Deal suggested that, on the theme of racial equality, Bessie Coleman is a significant figure that is applicable across the Institution. Stofan agreed and shared that NASM will celebrate the 100th anniversary of Coleman earning her pilot’s license.

Tyson Weihs and Steuart Walton suggested that the Museum explore engaging with Clubhouse.

Advancement Committee Report and Discussion - Chris Jones, Vice Chair, Advancement Committee
 Advancement Committee Vice Chair Chris Jones provided an update on fundraising progress. Jones introduced Stofan who announced that the Museum received a Ex. 4 commitment from Ex. 6 name *Living in the Space Age Hall* and sponsor the Explainers program. Stofan thanked Exemption 6 CEO and Exemption 6 and his leadership team for their incredible support.

Jones stated that the new fiscal year began on October 1. NASM’s FY21 fundraising goal is Ex. 4. Despite the current climate, the Advancement team and Committee feels confident that the goal is achievable. After the first quarter, the team has raised Exemption 4 There is a strong start in verbal agreements including:

- A gift from Exemption 6 for Ex. 4 for the *Exploring the Planets* Gallery was finalized and sent to the Regents for approval at their February 1 meeting. NASM tentatively plans to announce the gift publicly in May.
- NASM submitted a \$10M unsolicited grant request to NASA.
- A Ex. 4 gift from Exemption 6 is in final negotiations.

Regarding Transformation, NASM secured Exemption 4 Transformation campaign goal through Q1. The team is also close to hitting the half-way mark in the campaign. The Museum plans to make the big splash announcement about the halfway milestone this summer.

Focusing on FY21, Ex. 4 has been raised so far this year with Ex. 4 is for Transformation and Ex. 4 for other initiatives. Significant gifts received since the October Board meeting include:

- Exemption 6 have made a combined Ex. 4 commitment in support of Transformation.
- Exemption 6 made an in-kind gift of Ex. 6 in support of the recent Hackathon.
- Exemption 6 made a Exemption 6
- Exemption 6 made a commitment of Ex. 6 in support of Transformation.
- Exemption 6 made a commitment of Ex. 6 in support of Transformation.

Exemption 6

Regarding annual giving, the Museum continues to see growth in the direct response fundraising programs, the National Air and Space Society, and the Wall of Honor. Exemption 4 Of note, more was raised online than offline for the first time ever for Q1 (Ex. 4 of revenue came in online).

Jones reminded the members that a new donation opportunity emerged with the limited reopening of the Udvar-Hazy Center last year. NASM was able to add a “Donate” button as part of the E-tix reservation process. Out of 100,000 guests welcomed during the limited reopening, Ex. 4 opted to make donations through E-tix, that added up to over Exemption 4

Jones shared that the menu of opportunities in support of Transformation includes options at all levels. He spotlighted one section of this list: The iconic NASM artifacts that come with special recognition for the associated donor. He encouraged the members or their associates to contact the Advancement team if they are interested in learning more about the opportunities.

Jones highlighted the Advancement team’s virtual engagement in Q1. A study by Joe Manok at MIT about Ivy League philanthropy during the pandemic suggests many themes echoed in Advancement’s experience: The pandemic started a major shift in how fundraisers interact with prospects. Virtual engagement is sometimes more challenging for getting brand new prospects to engage. But, it also allows the team to use time very effectively and geography is no longer a constraint. It is also sparking creativity among fundraisers, who nationwide have adjusted better than most in the field originally expected.

Nominations Committee Report and Discussion - Scott Donnelly, Chair, Nominations Committee

Nominations Committee Chair Scott Donnelly provided the Nominations Committee report. Donnelly welcomed new Board Members Matt Desch and Greg Hayes. He also thanked Tom Haas for returning as a current member.

He stated that the Nominations Committee convened on January 11. They reviewed prospective board candidates and recommended one nomination for electronic vote. Exemption 6 was subsequently approved by the current Board. He is a former Exemption 6, Exemption 6, and Exemption 6. He was highly recommended as a board candidate by Exemption 6 and Exemption 6. His name will be presented to the Smithsonian’s Board of Regents for official approval at their April 12 Regents meeting. If approved, Exemption 6 will officially join the Board in June. Assuming the Regents confirm Exemption 6 nomination and with Michele Evans’ passing, the Board will have 27 active members. The Committee will continue to review candidates that can contribute to the fundraising mission of the Board and are making sure there is an appropriate stalwart of corporations represented. The Committee will also work with Lockheed Martin to identify a replacement for Michele Evans.

Update on Commons Concept - Jeremy Kinney, Associate Director for Research and Curatorial Affairs

Commons Concept

Jeremy Kinney stated that he will provide a glimpse into what the transformed and revitalized museum of the future will be. He focused on the Commons space, which consists of the open areas of the Mall building that serve as connective spaces, both for the dedicated galleries and for the museum experience as a whole. Kinney stated that he is representing a multi-department team who are actively working with the St. Louis design firm, PGAV Destinations, to make this part of Transformation a reality.

Kinney stated that the Commons experience begins even before visitors enter the building. As they walk past Richard Lippa's sculpture, *Ad Astra* (1976) toward the building to enter the main entrance on the National Mall side, they will encounter a brand-new and architecturally vibrant vestibule. Guests will now go through security and magnetometers in this new area. The relocation of the visitor screening process provides additional security for the collection and the people inside, provides visitors shelter from the elements when there are long lines, and allows them to focus their attention and prepare for the awe-inspiring experience they will have inside the museum. The vestibule will be outfitted with a long bank of video displays hung overhead so visitors can get their bearings and plan their visit before they enter the museum. A message that welcomes visitors in multiple languages is important in this location, along with Smithsonian Enterprises information to inform the guests about amenities available during their visit.

After leaving the vestibule, visitors will enter the new *Boeing Milestones of Flight* Hall. They will see many of the same iconic artifacts with some new design elements, including a media band, a terrazzo floor, and even a stylized donation box. *Milestones* introduces a singular atmospheric experience to give a sense of the museum as a complete space that will resonate throughout the entire building. Kinney shared that the hypersonic X-15 and the Lunar Lander are returning to *Milestones*. New artifacts include the Lunar Orbiter. Kinney shared that a media band will engage visitors with light and movement and will feature seventeen very short presentations with "stories of people" that will add to the artifacts and the live broadcast of significant events like rocket launches and other programming.

Kinney stated that the terrazzo flooring found throughout the museum will withstand the high traffic of visitors and facilitates the incorporation of inlays that reinforce air and space themes. Running across *Milestones* will be a pulsar map of the solar system, inspired by the ones placed on the *Pioneer* and *Voyager* spacecraft, that has been updated to reflect the Museum's 50th anniversary in 2026. Hanging among milestone artifacts like the supersonic Bell X-1 and the privately built reusable spacecraft, SpaceShipOne, will be banners. These banners will spotlight the people behind the artifacts to tell the diverse stories of the men and women who have broken barriers in aerospace history. Visitors will be introduced to Sally Ride, Amelia Earhart, Neil Armstrong, the Wright brothers, Bessie Coleman, and Katherine Johnson. The banners are also an effort to alleviate the acoustically less forgiving terrazzo floor with sound baffling while presenting more content.

Kinney provided an overview of the Commons area of the second floor beginning in the *Barron Hilton Pioneers of Flight* Gallery. One major addition in the gallery is the relocation of the *Spirit of St Louis* from *Milestones*. This move is being made based on the conservation needs for the aircraft—skylights and fabric-covered aircraft do not go together well over the long term—but it also allows us to center the story of Charles Lindbergh and his 1927 solo, transatlantic flight from New York to Paris within the contextual framework of the 1920s and 1930s. Kinney also highlighted Amelia Earhart's transatlantic Lockheed Vega of 1932, her "Little Red Bus" and the Douglas World Cruiser, one of two aircraft that flew around the world in 1924. There will also be an update of the long running Black Wings unit.

Kinney presented on the West end and Exploration galleries. He stated that NASM adopted a new way to organize the exhibitions thematically into suites based on overarching themes. The Exploration galleries includes *One World Connected* Gallery, *Destination Moon* Gallery, and the Kenneth C. Griffin *Exploring the Planets* Gallery. He highlighted the logo of the Ninety-Nines—the International Organization of Women Pilots founded in 1929—inlaid as a compass rose in the terrazzo floor. The X-wing fighter movie prop from *Star Wars*, which Disney and Lucasfilm are loaning to the Museum, will be displayed outside the Planetarium. Further down the West Commons is Smithsonian Enterprises retail spaces as well as the venerable Ford Tri-Motor in the *America by Air* Gallery.

Jackie Cochran's record-setting Northrop T-38 will hang in the Museum's West end. It is the first time this plane will be displayed in the Mall building. A multimedia display behind the aircraft will present a series of shows on the T-38 and women in aviation overall. In addition to stories found throughout the exhibitions, this is a place to highlight women's aerospace accomplishments. Also hanging nearby will be Patty Wagstaff's Extra 260 championship aerobatic plane. For Cochran herself, this area serves as a bridge to the *Nation of Speed* Gallery where she is featured prominently for her high-speed career in aviation. This artifact is a great anchor for the West end and sponsorship of the area would be an opportunity for a donor.

Kinney transitioned to discuss the second floor of the East end which includes the Military Aviation Suite. These galleries center on World War I, World War II, and Modern Military, or post-World War II, aviation. Hanging aircraft in the Common area will serve as a “draw” for the military suite and support the content inside the galleries. Examples include the Albatros D.VA fighter and Voisin Type 8 bomber from World War I and the Douglas SBD Dauntless dive bomber outside the *Jay I. Kislak World War II in the Air Gallery*. Below the aircraft will be a Smithsonian Enterprises retail location and the “silo” of the Skylab Orbital Workshop, which has been in the Museum since 1976, but will be reinterpreted in the new *Raytheon Technologies Living in the Space Age Hall*.

From the South Lobby of *Milestones*, Kinney highlighted the escalators, the large murals, and the returning Star Trek television prop, the *Starship Enterprise*. This area will continue to be the entrance from Independence Avenue and plays a key role in the Commons experience for visitors. At the center is the location is a new Donor Sculpture, which will recognize donors who have cumulative giving to the museum of \$10 million dollars or more through a dynamic and engaging presentation of their names interspersed with images of key artifacts from the National Collection. This as a great opportunity to highlight the philanthropy and generosity of our donors while providing an entertaining experience for visitors that further reinforces the Commons concept.

Visitors heading east from *Milestones* will pass the *Textron How Things Fly Gallery*, *Explore the Universe*, *At Home in Space*, and the ground floor of *Raytheon Technologies Living in the Space Age Hall* before reaching a new digital donor wall that will recognize all donors with cumulative giving of \$100,000 dollars and above. Kinney highlighted a new stairwell and large acoustic panels that line the interior corridors of the Commons. With artifacts like the forthcoming James Webb Space Telescope Primary Mirror overhead, adjacent media screens, and a wealth of new interpretation planned for the Commons, the acoustic panels will complement the space visually with graphics and artistic elements without cluttering the look and character of the space overall.

Lastly, the Launch Pad is a brand-new public space below *Milestones* that will include a café, family care area, and suite of three education classrooms. The classrooms will enable Education to serve students and other groups in new ways. This previously underutilized basement space will allow Education to take the deep dives not possible in the galleries and offer hands on activities that deepen learners’ engagement with design and engineering concepts. This is something the Museum cannot do now, and it will be an amazing and new opportunity for both educators and visitors.

Future State Committee Report and Discussion - Steve VanRoekel, Chair, Future State Committee

Chair of the Future State Committee Steve VanRoekel presented the Future State Committee Report. He stated that exploring and developing models for deeper engagement with NASM’s new and existing audiences has always been the core purpose of the Future State Committee. Over the last five years, the Committee has furthered that mission with new technology and content, live programs, nationwide awareness campaigns, and now standardized metrics and KPI reporting. Building on that success, the Committee and NASM team will now work to further deepen the engagement of those same audiences with revenue-generating strategies that both strengthen NASM’s bottom line and provide visitors with opportunities to demonstrate their investment in the museum’s mission. Even during the pandemic shutdown, the creative approach of the Future State Committee’s programs and a new working relationship with Smithsonian Enterprises provided new opportunities for monetization of NASM’s content and brand. The Mars pop-up store serves as one early example.

Following the success of the year-long ad hoc data working group, the Committee will transition that effort into a new ad hoc group focused on developing and marketing new business opportunities. These new models of monetization will leverage the quarterly data report and build on the partnerships and digital content strategies developed through the Apollo 50 campaign, AirSpace satellite brand, and other Future State-driven projects. The Focus Group will pursue ideas that fall on the “mission side of revenue,” which showcase the unique strength of NASM’s brand, increase the institution’s ubiquity in the national conversation, and boost the museum’s signal in the minds of the public and donor base. The group will meet once per month through the end of 2021 and will assess the progress of the revenue models as part of the overall engagement framework. Board members interested in joining this work are invited to volunteer.

Chris Jones ask if the Museum has mapped out anniversaries and events for 2021 so that NASM can plan for and leverage these opportunities. Stofan responded that Beth Crownover and the Education team are working with Communications to ensure efforts are aligned.

Holt commented that the work of the Future State Committee is enhancing the NASM brand and developing revenue opportunities. When people can't visit the Museum, we have to make sure they can still be a part of the Museum and continue to view things that interest them.

Old Business - Allan Holt

Holt announced that challenges with Smithsonian contracting continue to delay the new web portal.

New Business - Allan Holt

Holt reminded members of the remaining 2021 board meeting dates: June 16; October 26-27. He stated that the Smithsonian will extend its moratorium on events through June so the Board will meet virtually on June 16. The Board hopes to return to an in-person meeting at the Hazy Center in October with a tour and dinner at the National Mall building. Holt welcomed members to raise new business.

Wrap-up - Ellen Stofan

Stofan thanked members for their attendance. She stated that the COVID situation continues to have a strong effect on the Smithsonian. She stated that NASM has been very reliant on the SE revenue, and now those unrestricted funds are no longer available due to COVID-related closures and the Revitalization and Transformation project. The team is looking at how to become less reliant on SE revenue, and that effort includes working with the Future State Committee to expand revenue opportunities. She shared that NASM has been able to avoid layoffs by targeted retirements and not replacing positions when they go empty. NASM is currently focusing on staff morale.

Executive Session

Meeting adjourns

Holt adjourned the meeting at 12:45 pm.

National Air and Space Museum Board

*Present at the February 10, 2021 meeting

Board Members:		
Mr. Daniel Baker *	Mr. Morton FUNGER	Mr. Steve VanRoekel*
Mr. Thomas Bartelmo*	Mr. Kenneth E. Gazzola*	Ms. Patty Wagstaff
Ms. Marion C. Blakey	Mr. S. Taylor Glover*	Mr. Paul Wood
Mr. Mark L. Burns*	Mr. Randall A. Greene	
Ms. Karen M. Dahut	Mr. James M. Guyette	SI/NASM Staff Members
Ms. Linda Hall Daschle*	Mr. Ralph D. Heath*	Dr. Ellen R. Stofan*
Mr. Stanley A. Deal*	Mr. Shephard W. Hill*	Mr. Christopher U. Browne*
Mr. Matthew J. Desch*	Mr. David R. Hinson	Ms. Kelly Bloom*
Mr. Scott Donnelly*	Mr. David C. Hurley	Ms. Stephanie Brinley*
Mr. Tom Gentile, III*	Mr. Robert James	Ms. Meg Caulk
Mr. Thomas W. Haas*	Mr. Clayton M. Jones	Ms. Beth Crownover*
Mr. Gregory J. Hayes*	Mr. David L. Joyce	Mr. Rick Flansburg*
Ms. Dawne S. Hickton*	Mr. Rodney R. Lewis	Mr. Michael Garceau*
Mr. Allan M. Holt*	Mr. Steven R. Loranger	Ms. Lindsey Jackson*

Mr. Thomas W. Horton*	Capt. James A. Lovell*	Dr. Jeremy Kinney*
Dr. Christopher T. Jones*	Ms. Meredith Siegfried Madden	Ms. Carol LeBlanc*
Dr. Janet Kavandi*	Mrs. Adrienne Bevis Mars	Ms. Marian Livengood*
Mr. Gary C. Kelly	Mr. Gregory L. McAdoo	Ms. Anne McAllister*
Mr. C. Jeffrey Knittel*	Mr. T. Allan McArtor	Ms. Jessica McNally*
Mr. Roger A. Krone	Mr. Bruce R. McCaw*	Mr. Francisco Torres*
Mr. Blake Larson*	Mr. Jameson J. McJunkin*	Ms. Elizabeth Wilson*
Mr. James C. Murray*	Ms. Linda A. Mills	
Mr. David Rowe*	Mr. Robert A. Milton	
Mr. Steuart L. Walton*	Mr. Robert J. Mittman	
Mr. Tyson Weihs*	Mr. Thomas G. Morr	
Dr. Michael Weir*	Mr. Lloyd "Fig" Newton	
	Mr. Jack J. Pelton	
	Mr. Roger D. Percy*	
Board Members Emeritus:		
Mr. James Albaugh	Mr. H. Ross Perot, Jr.	
Mr. Ronald W. Allen	Mr. Robert W. Pittman	
Mrs. Anne B. Baddour	Mr. John L. Plueger	
Mrs. Agnes M. Brown	Mr. Thomas F. Pumpelly	
Mr. Armando C. Chapelli, Jr.	Dr. Jon A. Reynolds	
Mr. Max C. Chapman, Jr.	Dr. Donald B. Rice	
Mr. Neil Cohen*	Mr. David Storch	
Mr. Frank A. Daniels, Jr.	Dr. Richard Sugden*	
Mr. Mark B. Dunkerley*	Dr. Frederick Telling	
Mr. Edsel B. Ford, II	Mr. Charles Thornton	
Mr. Stuart L. Fred*	Mr. David Tolley	

Attachment A: Zoom Chat Transcript

10:40:26 From Tom Gentile to Everyone: Did the NASM have to pay for the F18?

10:41:25 From Blake Larson to Everyone: Thanks again Chris for all you and the team have done!

10:59:30 From Steven VanRoekel Rockefeller Foundation to Everyone: Has SE thought about Exemption 5
[REDACTED]?

11:04:39 From Daniel Baker to Everyone: Do we have Exemption 5
[REDACTED]

11:05:42 From Daniel Baker to Everyone: I think Exemption 5
[REDACTED].

11:07:21 From Stan Deal to Everyone: I agree on the comment of Exemption 5
[REDACTED].

11:28:25 From Tyson Weihs to Everyone: We have Exemption 5
[REDACTED]

11:29:05 From Steuart Walton to Everyone: That's a good point Tyson.

11:32:42 From Daniel Baker to Everyone: Exemption 5
[REDACTED]

11:32:52 From Linda Daschle to Everyone: Thank you Exemption 6 !

11:32:59 From Stan Deal to Everyone: Big Thank you Exemption 6!

11:33:03 From Daniel Baker to Everyone: Exemption 5
[REDACTED]

11:33:27 From Blake Larson to Everyone: Thanks Ex. 6 to you and your team for this generous gift.

11:34:05 From Tom Haas to Everyone: That is Fantastic. Thank You.

11:44:06 From Kenneth Gazzola to Everyone: I would expect Exemption 5
[REDACTED]

12:16:31 From Linda Daschle to Everyone: Thanks Jeremy. Is there a place that will show live feed from satellite in outer space?

12:16:44 From Chris Jones to Everyone: Good job, Jeremy! Very exciting!

12:18:06 From Ellen Stofan to Everyone: Linda- the large screens throughout the commons provide us a way to show live feeds as well as set digital content- so we could show a launch or recent images or highlight other programming!

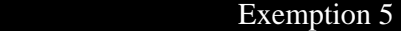
12:18:56 From Linda Daschle to Everyone: Fantastic!

12:30:13 From Rich Sugden MD to Everyone: What do you think about a Exemption 5
[REDACTED].

12:30:45 From Ellen Stofan to Everyone: GREAT idea. I am working on Exemption 5
[REDACTED]

12:31:43 From Rich Sugden MD to Everyone: Would be better email for quick notice!!

12:32:28 From Tom Haas to Everyone: Great!!

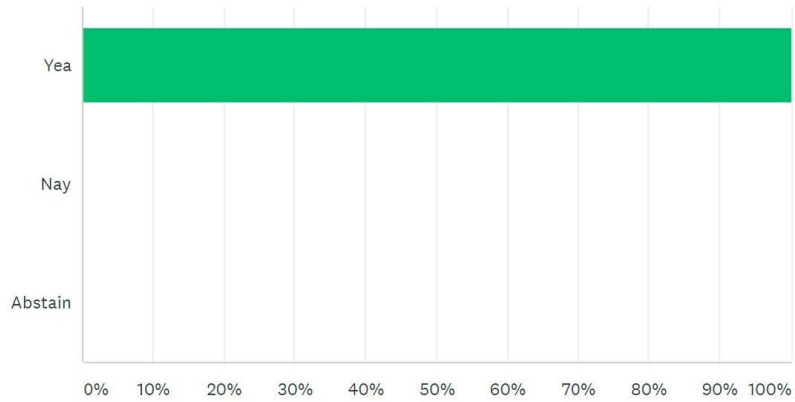
12:36:06 From Rich Sugden MD to Everyone: How about  Exemption 5

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Attachment B: February 2021 Electronic Vote

Vote to approve **Exemption 6** s nomination to the National Air and Space Museum Board.

Answered: 16 Skipped: 0



ANSWER CHOICES	RESPONSES
▼ Yea	100.00% 16
▼ Nay	0.00% 0
▼ Abstain	0.00% 0
Total Respondents: 16	