

INTELLECTUAL PROPERTY

(This section must be signed)

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Thank you for participating,

Gregory Hamilton President Aviation Week Network

Acknowledged, agreed, and submitted by

Katherine Thompson June 5th, 2023
Nominee's Signature Date

Diffillee's Signature

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Nominee's Name (please print): Katherine Thompson

Title (please print): Director, Communications

Company (please print): Northrop Grumman Systems Corporation

NOMINATION FORM

Name of Program: B-21
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Supplier Approved (if named in this nomination form)
o Date:
 Supplier Contact (name/title/organization/phone):

PLEASE REFER TO PROGRAM EXCELLENCE DIRECTIONS AS YOU COMPLETE THIS FORM.



EXECUTIVE SUMMARY: Make the Case for Excellence

Value: 10 points

Use 12 pt. Times Roman typeface.

What is the vision for this program/project? What unique characteristics and properties qualify this program for consideration?

Northrop Grumman B-21 Raider: Promoting Program and Technical Achievement while Safeguarding Program Integrity throughout the 2022 Advocacy Campaign and Unveiling Entry Category: Defense/Security; Special Projects

Northrop Grumman, in partnership with the United States Air Force and the broader Department of Defense (DoD) community, executed the first unveiling of a bomber platform in over thirty years on December 2, 2022. The B-21 Raider, the world's first sixth-generation aircraft, was revealed to the world for the first time in front of nearly 1,000 distinguished visitors (DVs) from across DoD, U.S. Congress, third party partners and advocates, members of the press, allied country leadership, 2,000 employees from Northrop Grumman and industry partners, and an online audience of more than 80 million people around the globe. This carefully curated event was the highly visible culmination of a yearlong advocacy campaign designed to strategically disseminate significant programmatic and technological achievements for the B-21 program while protecting sensitive information.

Northrop Grumman and the Air Force incorporated lessons learned from the B-2 Spirit unveiling three decades ago to inform the 2022 advocacy campaign. While facing a drastically different geopolitical environment, the B-2 remained shrouded in secrecy without any proactive public narrative to communicate the value and capability a stealth bomber could bring to the nation's defense and that of our allies. Despite the breakthrough technology and game changing capability the B-2 delivered at its unveiling, the program suffered drastic cuts in funding and quantities. Therefore, while planning to rollout the next-generation stealth bomber, Northrop Grumman and the Air Force worked in partnership to determine what information could be strategically released publicly leading up to the B-21 Raider unveiling to clearly communicate several important themes:

- The B-21's digital design, cloud based open architecture system and revolutionary data sharing approach makes the B-21 Raider agile enough to rapidly onboard new capabilities, making it a powerful deterrence tool for the modern threat and evolving threats.
- The B-21 program's acquisition approach and execution strategy, which includes stable requirements, consistent funding, active contract management, investment in early risk reduction and radical transparency between government and industry partners is setting a new standard for delivering value and program progress.
- The program incorporates decades of experience in operating and maintaining stealth aircraft to make the B-21 a daily flyer, taking sustainment into account in the design itself and utilizing COTS systems where appropriate to reduce cost and improve availability.

Northrop Grumman understood the B-21 needed a broad base of advocacy, and working in partnership with the customer, we crafted a strategic plan to convey these key messages via the careful release of information leading up to the unveiling event. In this way, the partners could protect the program as a critical element of the National Defense Strategy. **Due to the classified nature of the B-21 program, this nomination for the Special Projects category will touch on the programmatic and technical accomplishments and the value they bring to the customer through the lens of the joint advocacy campaign and its Dec. 2, 2022 unveiling crescendo.**



DIRECTIONS

- Do not exceed 10 pages in responding to the following four descriptions.
 - Allocate these 10 pages as you deem appropriate, but it is important you respond to all 4 sections.
- DO NOT REMOVE THE GUIDANCE PROVIDED FOR EACH SECTION.
- Use 12 pt. Times Roman typeface throughout.
- Include graphics and photos if appropriate; do not change margins.

VALUE CREATION

Value: 15 points

Please respond to the following prompt:

Clearly define the value of this program/project for the corporation; quantify appropriately The B-21 Raider is the world's first sixth-generation aircraft, a highly survivable long-range strike aircraft and the airborne leg of the U.S. nuclear triad. The program was conceived in 2011 with the DoD's establishment of the Long-Range Stealth Bomber (LRSB) effort. Northrop Grumman was awarded the contract and approved to proceed in 2016 with the ongoing design and build of the aircraft.

The B-21 design and development contract is a Northrop Grumman franchise program, and the U.S. Air Force intends to procure a minimum quantity of 100 aircraft. The B-21 program provides Northrop Grumman the opportunity to continue our nearly four-decade partnership with the Air Force designing, building and maintaining advanced long-range bombers, highlight our leadership as an aircraft prime and showcase myriad differentiators. As the only company to have designed, developed, built, delivered, sustained and modernized a stealth bomber, we are building on past success and best practices to build the next generation stealth aircraft using agile software development and cloud-based, open mission systems architecture, advanced manufacturing, and digital engineering tools to help mitigate production risk on the B-21 program and enable modern sustainment practices.

The B-21 unveiling and advocacy campaign enabled Northrop Grumman to demonstrate value and key differentiators in several ways, including:

- Customer Intimacy: The campaign and unveiling event provided an opportunity to work closely with the DoD's customer to develop mutual objectives and themes, outline a plan for a high-profile event around a classified aircraft and chart the requisite approvals to execute. Northrop Grumman designed an event with a tone of understated elegance to let the aircraft and program progress remain paramount. The parties established a Steering Committee comprised of Northrop Grumman and Air Force personnel to drive timely decision making or escalation and ensure integrated execution.
- **Demonstration of Capabilities:** Northrop Grumman highlighted the digital design tools used to develop the B-21, its open architecture system and the value these characteristics will deliver for future technology insertion through the 2022 advocacy campaign and PR (public relations) efforts. Carefully curated news releases provided insight into the B-21 Raider's classified development and allowed stakeholders to understand the aircraft in a secure yet informational way. The culminating unveiling event provided the company an opportunity to demonstrate its decades of expertise in designing and delivering advanced military aircraft via the B-21 Raider itself and the broader Aeronautics portfolio of aircraft and set a new precedent for new product unveilings of this scale.
- Engagement with Key Stakeholders: The unveiling event created a once-in-a-generation platform for Northrop Grumman to engage key stakeholders at the highest levels of government to strengthen our advocacy, build relationships and increase support for the B-21 Raider program. More than 1,000 senior government, DoD and elected officials attended the unveiling event, plus cohorts of student interns, Northrop Grumman program employees, media, tier one suppliers and more.
- **Brand Visibility:** The overarching advocacy campaign successfully spread key messages about Northrop Grumman and the B-21 to a variety of critical audiences including customer stakeholders,



congressional leaders and decision makers, the B-21 workforce and industry media. The unveiling event itself generated significant media coverage, including over 9,600 articles mentioning Northrop Grumman and the B-21 Raider, including bringing a traditionally A&D (aerospace and defense) story into the mainstream consciousness. Social engagement around the event skyrocketed, with over five million impressions and a follower increase of 18.6K across company social platforms.

> Clearly define the value of this program/project to your customer

Amidst a DoD reveal / conceal strategy overhaul, an increasingly volatile global security environment and mounting pressures on the B-21 program itself to perform, Northrop Grumman, in very close partnership with the U.S. Air Force, led the effort to reveal the highly classified B-21 Raider to the world. Northrop Grumman's commitment to the customer in its execution of the event was meeting all 'no-fail' security requirements, minimal impact to program schedule and the integration of a wide range of DoD stakeholders into the strategy and messaging development.

The B-21 Raider will form the backbone of the future U.S. bomber force, and deliver a new era of capability and flexibility through advanced integration of data, sensors and weapons. Capable of delivering both conventional and nuclear payloads, the B-21 will be one of the most effective aircraft in the sky, with the ability to use a broad mix of stand-off and direct attack munitions.

The continued success of the B-21 Raider program is dependent upon the understanding and support of U.S. leadership and the defense community. Showcasing its successful design and development at the unveiling event provided the Air Force with the opportunity to build awareness and excitement around its successful acquisition approach and development of groundbreaking technologies, including:

- Migration of B-21 ground systems data to a cloud-based digital infrastructure that will result in a more maintainable and sustainable aircraft with lower-cost infrastructure;
- The ability to seamlessly incorporate new technology capabilities and weapons through agile software upgrades and built-in hardware flexibility; and
- Enhanced stealth performance coupled with improved maintenance methods to support sustained, long-term operations for the U.S. Air Force.

The B-21 Raider advocacy campaign presented both Northrop Grumman and the Air Force with the ability to share the importance of the aircraft and the value of long-range penetrating strike capabilities, especially within a highly dynamic environment. Jointly coordinated news releases, industry panels and media interviews allowed key stakeholders to be informed on production status and capabilities in a way that created confidence and verbal support for a high-profile acquisition program. The unveiling event capitalized a unique opportunity to showcase the B-21 and command public attention at a critical point in program history. While the B-2 Spirit was unveiled without prior knowledge sharing, the B-21 unveiling event became a monumental moment for a broad audience that developed a vested interest in the aircraft and the team delivering the system to the nation.

➤ Clearly define the value of this program/project to members of your team; quantify if possible
The unveiling event offered the first opportunity in the program's history for the family and friends of
our team members to witness the B-21, and Northop Grumman worked in partnership with the Air Force
to enable as many program employees as space would permit to attend the unveiling. Northrop
Grumman employees were acknowledged and celebrated for their dedication, collaboration and
pioneering spirit during the ceremony via remarks from Secretary of Defense Lloyd Austin, Vice
Chairman of the Joint Chiefs of Staff Admiral Christopher Grady and Northrop Grumman Chair and
CEO Kathy Warden, further strengthening employee engagement and commitment to the program. An
internal enterprise campaign leading up to the unveiling connected the broader enterprise workforce to



the B-21, demonstrating the decades of innovation, technology development and expertise that culminated in the unveiling, so the entire 90,000-person workforce felt a connection to this achievement.

Clearly define the contribution of this program/project to the greater good (society, security, etc.) A critical element of the National Defense Strategy, the B-21 Raider is pivotal to supporting our nation's strategic deterrence capability. In addition to its advanced long-range precision strike capabilities that will afford Combatant Commanders the ability to hold any target, anywhere in the world at risk, it has also been designed as the lead component of a larger family of systems that will deliver intelligence, surveillance and reconnaissance, electronic attack and multi-domain networking capabilities. In a dynamic global security environment, the B-21 will provide the flexibility and deterrence critical to the security of the U.S. and our allies.

Currently only 10 percent of our nation's bomber force is capable of penetrating advanced adversary air defenses. As our adversaries have continued investing heavily in sophisticated technologies and weapons platforms that leave them free to act maliciously or extend their reach, a new bomber is critical to deterring potential adversaries, reassuring allies, keeping our nation safe and protecting peace and prosperity around the globe.

ORGANIZATIONAL BEST PRACTICES AND TEAM LEADERSHIP

Value: 35 points

Use 12 pt. Times Roman typeface

Please respond to the following prompts:

> 15 points: Describe the innovative tools and systems used by your team, how they contributed to performance and why

As the world's first sixth-generation aircraft, the B-21 Raider has been designed and developed using innovative techniques and first of its kind systems. While details regarding the highly classified strategic bomber will remain restricted for the program's entire lifecycle, the advocacy campaign leading to the B-21 unveiling was essential to creating awareness amongst stakeholders and building support, as well as anticipation, for the aircraft. Following lessons learned from the secrecy of the B-2 Spirit, Northrop Grumman and the U.S. Air Force worked collaboratively to identify programmatic milestones and infrastructure investments available for public consumption. Major focus areas included the active contract management execution approach of the program, recognized across the stakeholder community as a best practice for future acquisition, as well as risk reduction efforts from both industry and customer to pull discovery left and reduce risk earlier in the program.

Over the course of the advocacy campaign, Northrop Grumman publicized examples of this approach to risk reduction, including an information release on successful structures testing midyear. The successful structures testing demonstrated the efficacy of the company's digital design capabilities and advanced manufacturing techniques. The Air Force publicly stated that the first B-21 test aircraft was the most production-representative aircraft than any other program at that point in its development, both structurally and in its mission systems. A Northrop Grumman news release followed the Air Force statements, collecting 11.5K views which provided insight to 50 articles across targeted media alone.

Additional efforts to publicize how B-21 is benefitting from the innovations enabled through active contract management included a strategic news release on the industry-first data rights agreement between Northrop Grumman and the Air Force which opens B-21 data access and collaboration across the program. Coupled with a planned engagement with reporters at the annual Air, Space & Cyber Conference outside of Washington D.C. and a news release providing a timeline for the B-21 unveiling date, Northrop Grumman generated over 100K newsroom views and over 100 articles from target media.



These examples and results from the advocacy campaign convey value in two veins. First, from a programmatic and technical perspective, it validates the effectiveness of Northrop Grumman's digital tools and modeling to drive program progress. Second, from an advocacy campaign perspective, it generates confidence in Northrop Grumman's ability to deliver on the program and in the Air Force's acquisition model while driving positive sentiment among the stakeholder ecosystem.

Thanks to the advocacy campaign, key stakeholders and media arrived at the December unveiling event already familiar with some of the B-21's technical abilities and program process, allowing the event to focus on the aircraft reveal and significant impact the system will have for America's warfighter and overall national deterrence.

> 10 points: Define the unique practices and process you used to develop, lead and manage people?

The scope and scale of the unveiling event required tailor made decision making, planning and execution teams and processes, and Northrop Grumman and the customer jointly undertook the establishment of coordinated committees and teams to tackle each element.

- Steering Committee: For an event of this scale, Northrop Grumman and the Air Force established a steering committee comprised of counterparts in the areas of program management, public affairs and security. This small group of leaders advised and facilitated timely guidance and approvals for all aspects of the unveiling event and essential elements of the preceding advocacy campaign, or elevated decisions to principals as appropriate. The steering committee considered myriad factors ranging from program schedule and security factors, to DV and partner invitees.
- **Security:** Our teams planned for physical event space security, programmatic integrity, cyber threats, the personal security of distinguished visitors, and all employees and personnel at Plant 42 and the surrounding area. We developed a series of CONOPS that balanced security and event imperatives, which allowed our functional teams to plan and execute.
- Northrop Grumman Core and Matrixed Planning Teams: A core team met daily for months, providing guidance to a broader execution team to execute a large-scale event. Northrop Grumman leveraged the talent and expertise across the enterprise to include brand, digital, social, production, live event and employee communications teams. Each function had a designated lead, who had responsibility for building a team of experts to plan and execute all elements of the event and ancillary activities, while retaining responsibility for traditional statements of work.
- Northrop Grumman Executive Hosts: Prior to the event, Northrop Grumman executive leaders were paired with guests to host them at the site. This enabled invitees an additional opportunity to engage with Northrop Grumman leadership and maximize time spent at the ceremony.

> 10 points: How did you leverage skills and technologies of your suppliers?

The unveiling event was the pinnacle of the campaign, demanding expertise outside Northrop Grumman's typical statement of work. For the B-21 Raider unveiling special project, Northrop Grumman partnered with live event production experts. For an event of this size and scope, the expertise of our live event partners delivered an incredible experience that aligned with all security parameters. Every detail was curated to deliver an experience that conveyed a shared sense of pride in American technological achievement among our guests and livestream viewers. The live event partners also brought technology and solutions that delivered a seamless experience, including a to-the-second event sequence that incorporated precise timing of a three-bomber flyover from Air Force Global Strike Command.



The live event partners were embedded in our planning process together with the Air Force customer and considered every security concern to produce a flawless event. This shared planning journey created a relationship of elevated trust in uncharted territory that enabled Northrop Grumman to securely unveil a classified aircraft in front of more than 1,000 DVs and livestream to more than 80 million viewers. The expertise and professionalism of Northrop Grumman's live event provider also helped build confidence from our customer and security stakeholders that we could execute a high-quality event safely and securely.

DEALING WITH PROGRAM COMPLEXITY (VOLATILITY, UNCERTAINTY, COMPLEXITY, AMBIGUITY, or VUCA)

Value: 25 points

Use 12 pt. Times Roman typeface

Please respond to the following prompts:

> 10 points: Describe UNIQUE areas of VUCA faced by your program and why. (Please avoid the issues surrounding Covid-19 pandemic, which was faced by all programs.)

Focusing on the B-21 Raider unveiling event itself, VUCA challenges included:

- Volatility: The global security environment and political climate have changed significantly since the last stealth bomber was revealed three decades ago. This created a volatile backdrop for the B-21 Raider unveiling event and appropriate narrative, which could have been influenced by international tensions or unexpected security threats. Throughout 2022, event planning considered both the current and the likely geopolitical environment at the unveiling event, and developed multiple scenarios to strike an appropriate tone for the event, one that was neither overly celebratory nor provocative.
- Uncertainty: Volatility in the global political environment drove uncertainty about execution strategy for the event. It also shifted the broader beltway narrative about America's decades long military focus on combating insurgencies toward the imperative for readiness against near-peer adversaries. The unveiling project and public release of information leading up to Dec. 2 needed to strike the right tone that provided increased transparency, demonstrated program progress and highlighted new technologies. Separately, the event setup and execution required specific weather conditions; weather in the desert in December is particularly unpredictable. The event infrastructure included 50-foot screens and lighting on scissor lifts, all of which become unstable in high winds. Temperatures this time of year can range 50 degrees or more and drop below freezing in the evening. While uncommon in the desert, rain in December is a possibility, and the event was scheduled to take place outdoors in the late afternoon and evening.
- Complexity: The most complex and dynamic element of the B-21 Raider unveiling was security. In addition to Northrop Grumman Security personnel, the team coordinated with a web of local, federal and DoD security organizations. This team provided requirements for a secure online invitation management system, which Northrop Grumman custom designed for the event. This team tackled the challenge of tier one and trade press attendance at the unveiling of a classified aircraft and developed an executable framework for the event. At the request of the U.S. Air Force, the security team worked to enable an exclusive, embargoed interview with *Time Magazine* to provide an indepth article and accompanying visuals of the program for a mainstream audience. The security teams developed plans for physical security at the event itself, managing the inspection of all equipment and personnel entering Air Force Plant 42. The event producers established a system for the escort and management of personnel to support event setup spanning several weeks through to execution and teardown of the event.
- **Ambiguity:** The dynamic nature of the invitation list and most senior-level attendees generated significant ambiguity up until the day of the event. The impacts of these changes were far-reaching, with impacts to such elements as: issuance of invitations to DVs and their support personnel; coordination with advance teams and security details; unveiling ceremony run-of-show and remarks;



physical build out and required seating; on-site parking and transportation; catering; disposition of mobile devices. Ambiguity also existed with respect to the review and approval of content for public release. We had no established program precedent for the dissemination of B-21 photos and videos unclassified channels to inform whether or how Air Force Combat Camera and Northrop Grumman could live stream the event, or how we would provide imagery to press and publish on company owned channels following the event.

> 15 points: Explain how your team responded to these challenges. What changes did you make, what were the results?

Focusing on the unveiling event itself, collaboration on the following elements provided the clarity required to plan and securely execute:

- Strategic Timing: Dec. 2 was deliberately chosen to capitalize on the presence of DoD and Congressional leadership on the West Coast for the Reagan National Defense Forum. This advantaged the presence of senior DoD officials by enabling the congressional delegation to travel via MILAIR. Dec. 2 was a voting day, and members of congress traveling to the Reagan National Defense Forum needed expedient transportation from Washington to Palmdale to Simi Valley; this close collaboration provided an efficient solution that significantly boosted attendance.
- Event Planning and Logistics: Northrop Grumman worked closely with the Air Force at every step of planning and execution. For example, the parties coordinated outreach to congressional offices, cabinet and executive branch officials, and other DVs to drive RSVPs, coordinate staffer attendance and manage expectations for the event. Careful planning and the establishment of a rapid process to approve for public release imagery of the B-21 enabled the timely issuance of content from Northrop Grumman, further driving brand association. Northrop Grumman and the Air Force published unclassified imagery of the B-21 within hours of the event.
- **Security Measures**: Often starting from scratch, Northrop Grumman and DoD security teams to establish processes and new precedents acceptable to the host of security professionals on the team. The team built a tool from scratch that met strict cyber security requirements including two-factor authentication for invites and registration; established an expedited public release review and approval process for B-21 imagery on unclassified channels for the very first time; and established a perimeter and required identification check at the entire work site 48 hours prior to the event. All this careful planning and more resulted in a successful event with zero compromises or escapes on program integrity or personnel security.
- Event Media Strategy: Northrop Grumman collaborated with the Air Force and security personnel to curate the media experience leading up to, during and after the unveiling. The teams outlined technical specifications and conditions for cameras and recording devices, prepared press packages, coordinated the release of information to coincide with the unveiling, established tours and scheduled engagement opportunities for members of the press with Northrop Grumman and subject matter experts, and provided space for reporters to write and files stories post-event. Media engagement highlights on the day of the event included a live on-site interview for CEO Kathy Warden with CNBC's Morgan Brennan, and a media roundtable with the Chief of Staff of the Air Force General C.Q. Brown, Jr., Assistant Secretary of the Air Force for Acquisition, Technology and Logistics Andrew Hunter and Northrop Grumman CEO Kathy Warden in front of the draped aircraft in the hangar hours before the event.
- **Live Event Experience Planning:** The vision for the B-21 unveiling was developed and tested over many months prior to the event, with intensive concept testing occurring days prior. The event site build was a highly orchestrated, sequential series of builds and ongoing concept testing to ensure a secure and successful event. Every weather contingency was accounted for, with a duplicate set of detailed plans to relocate the event indoors with only 48 hours' notice. Northrop Grumman needed to curate an event space for guests arriving onsite in advance of the ceremony;



the team created an immersive and secure event experience for guests by carefully controlling entry points, providing white-glove treatment and offering an "Advancing Aeronautics Expo" with military aircraft displays and an interactive augmented reality gallery. These features generated excitement and showcase additional Northrop Grumman capabilities.

METRICS

Value: 15 points

Use 12 pt. Times Roman typeface

Please respond to the following prompts, where predictive metrics indicate items that provide a view of how yesterday's actions and today's actions will affect the future timeline, cost or other requirement. Provide charts/graphs that illustrate performance to these metrics:

What are your predictive metrics?

Drawing on lessons learned from the B-2 Spirit unveiling and the downfall that came from lack of information in the public domain, B-21 advocacy campaign planning had been underway since the contract award. In 2019, Northrop Grumman and the Air Force initiated a multi-part series on the B-21 Raider with Breaking Defense. The series provided a valuable glimpse into the program by introducing subject matter experts and sharing new technical information about the B-21 design and stealth capabilities with the public. The series was a success – generating strong quantitative results (including over 100K page views and 3.3M impressions) and a positive buzz on the program with key audiences. Based in part on those experiences, Northrop Grumman and the Air Force developed an effective campaign and unveiling event to tout innovative elements of the program. Northrop Grumman closely monitored the media to measure impacts of the advocacy campaign, in addition to metrics from employee engagement efforts and logistical event efforts. To measure the impacts of the advocacy campaign and unveiling success, the B-21 Raider team established the following predictive metrics:

Earned Media Metrics, Brand Visibility: The number of articles generated from Northrop Grumman press releases and media engagements quantify the reach and impact of the advocacy campaign. The highlight of the campaign, the B-21 unveiling, involved coordinated media tours of restricted program space, embargoed interviews and content, B-21 employee media training, security measures to allow the aircraft to be photographed for the very first time and more. Media monitoring of these tactics would play an essential role in painting the picture for the overall success that of the 2022 B-21 advocacy campaign and unveiling event. Online engagement and viewership statistics, such as website visits, social media impressions, video views, and social media engagement would quantify overall reach and effectiveness of messaging preparation and brand association. Northrop Grumman promoted the unveiling live event feed leading up to the event.

Event Metrics:

- **Aircraft Readiness:** At every step of the planning process, the Steering Committee and planning teams remained laser focused on the readiness of the aircraft for the Unveiling and maintaining program schedule while planning and executing the event.
- In-Person Attendance: The number of distinguished guests, employees and media outlets attending the event shaped the detailed protocol the event team created and executed for each and every attendee to ensure a safe and enjoyable guest experience.
- **Customer Intimacy:** Office of the Secretary of Defense (OSD) and Air Force Public Affairs identified six strategic messaging objectives for the unveiling, in coordination with DoD leaders and intelligence partners, with a 1-5 rating on effectiveness of message delivery with target audiences.
- **Security:** The management of the security teams comprised of both Northrop Grumman and multiple government organization security professionals all had a pivotal role in establishing the security parameters and concept of operations for the event. The framework outlined to protect the



program informed elements of the campaign and unveiling event. Check points and reviews were orchestrated in the months leading up to the unveiling to ensure the required parameters for program protection and site security were met and protocols for an event of this nature and magnitude were established, rehearsed and executed flawlessly.

Employee Engagement: Metrics related to internal company distribution, such as engagement rates with internal B-21 content and traffic to external B-21 web pages, helps assess the impact of the event on employee morale and pride.

How did you perform against these metrics?

Earned Media Metrics, Brand Visibility: The strategic news releases coordinated with Northrop Grumman and the Air Force were a success. The May release on B-21 structures testing progress resulted in 11.5K views and 50 articles from targeted industry media. The September news release on the B-21's data sharing agreement highlighted the partnership between Northrop Grumman and the Air Force for over 20K views – adding to the over 100K views generated by the announcement of the unveiling event timeline and the hundreds of articles that resulted from this coordinated effort. Another key to the advocacy campaign was a carefully orchestrated embargoed opportunity with *Time Magazine*. This behind the scenes look at the B-21 manufacturing line put the Raider front and center for a mainstream, global audience. Lastly, earned media metrics prove the reach and impact of the December 2 unveiling. Earned media tactics for the event alone (SME interviews, news releases, new facts, live broadcast interviews and more) generated over 9,600 English-language articles mentioning Northrop Grumman and the B-21, demonstrating a successful media strategy that amplified the event's key messages and narrative. The potential total readership of these articles amounts to more than 62 billion. On top of sheer success in numbers, the sentiment of the articles trended predominantly neutral (~80%) to positive - an incredible feat considering the external environmental challenges – and featured quotes from key influencers and included prevalent themes.

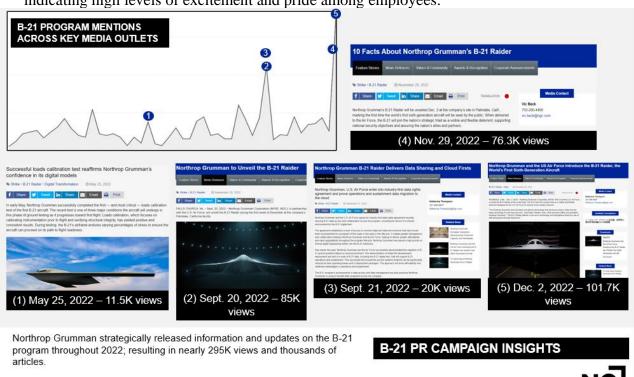
The unveiling live feed proved to be triumphant, generating more than 80 million views across various channels. Additionally, Northrop Grumman logged over 25 million views for B-21 content across corporate social platforms, the webpage and careers site. B-21 content on the Northrop Grumman web site registered nearly 800K visits on Dec. 2 alone, with approximately 10K visits to Northrop Grumman careers, proving our technology and messages connected with an engaged audience. Social media content featuring the unveiling and B-21 imagery was carefully dripped leading up to, during and after the event to build anticipation and connect with audiences. Engagement rates on all platforms (Facebook, LinkedIn, Instagram and Twitter) exceeded industry benchmarks by as much as 18% and reached almost 5 million users, and a gain of 18.6K followers.

Event Metrics:

- Aircraft Readiness: Working in partnership at the Steering Committee and across all levels of the program, Northrop Grumman produced an aircraft that met all customer requirements for the event.
- **Attendance:** The event was attended by nearly 1,000 distinguished visitors from key stakeholder groups, over 2,000 enthusiastic employees and 24 media outlets. The strong turnout indicates a high level of interest was generated leading up to the event and captured the attention of many decision makers across the government and industry space.
- Customer Intimacy: The quality performance of Northrop Grumman has continued to be recognized by the event's keynote speaker, Secretary of Defense Lloyd Austin, pointing to it as, "the exemplar of industry events and a strategic stage for DoD." Of the six strategic messaging objectives identified by OSD and Air Force Public Affairs, the event was graded as successfully achieving all six objectives with a designation of "5," being most effective, in driving supportive public action from Congress, DoD, industry and defense experts.



- Security: From a customer intimacy perspective, security was the most important consideration throughout the campaign and physical event. While this nomination cannot detail every security metric and consideration accounted for, post-event reviews have proven that from a security perspective the event was an overwhelming success. Northrop Grumman and partners met all expectations on DV security codes, including hosting the U.S. Secretary of Defense. The aircraft was revealed as discussed in front of a live audience and live streamed around the globe, with no security breaches for those on site and tuning in via the broadcast.
- **Employee Engagement:** Internal company distribution of B-21 content saw engagement rates 245% higher than quarterly averages, with over 150,000 visits to external B-21 web pages from internal channels. The top three most-read internally published articles for the year were related to the B-21 unveiling. More than 2,275 employees attended watch parties at various Northrop Grumman sites, indicating high levels of excitement and pride among employees.



How do your predictive metrics drive action toward program excellence? Please provide examples.

The advocacy campaign drove awareness of B-21 program successes, differentiators and value among broader audiences than ever before. Building on the successful model of the Breaking Defense series, Northrop Grumman and the Air Force took the next step in sharing information about the program during the 2022 campaign and unveiling, all while protecting classified information. The B-21 unveiling predictive metrics were essential in driving action toward program excellence, as they provided clear objectives for the Northrop Grumman team and its partners. The metrics served as benchmarks to measure success of the event, which encouraged the team to focus on strategic planning, execution and collaboration. While the quantitative results, stated above, speak volumes – the words from program stakeholders prove the advocacy success campaign accomplished the ultimate goal of building awareness and support of the B-21 program. Key Stakeholder Public Statements: The campaign successfully elicited its desired effect, adding more voices of support for the successful B-21 program:

• Lloyd J. Austin III, United States of Secretary of Defense on the success of the B-21 Raider unveiling event as told during his remarks at the Reagan National Defense Forum (Dec. 3, 2022): "I was in Palmdale to participate in the historic unveiling of the B-21 Raider. That's the long-range



strike stealth bomber that will soon be the backbone of the Air Force bomber fleet. The B-21 was developed over seven years by our partners at Northrop Grumman. So, it was a really proud day for Kathy [Warden]—and very well done, by the way."

- Mr. Andrew Hunter, Assistant Secretary of the Air Force for Acquisition, Technology and Logistics on B-21 program progress and outlook as quoted in a U.S. Air Force news release in September 2022: "The B-21 program is a powerful example of America's long experience with fielding advanced military technology through an innovative, adaptable and efficient defense industrial base. The Air Force made the decision early in the life of the program to make the flight test aircraft production representative, which is paying dividends as we look towards first flight."
- Sen. Mike Rounds (R-SD) on the B-21 program remaining on cost and on schedule, as stated during an interview in July 2022: "This has been a well-planned out strategy, and a very well-planed out project. Very seldom do you have a project of this size and complexity that is still on-time and budget. This project is and is one of the few you can point to."

From an event perspective, the B-21 unveiling not only drove program advocacy success, but created corporate achievements across the Northrop Grumman enterprise.

- **Brand Visibility:** To achieve high engagement in web and social channels and drive the desired advocacy and awareness among new audiences, the Northrop Grumman team developed a multichannel online strategy. This included developing new narrative and visual content, including the iconic image of the B-21 Raider under a sheath preparing to be unveiled, and using social media platforms to promote and amplify the event. The team also embedded the live-streamed event on the company website, allowing tens of millions of people from across the globe to participate via NorthropGrumman.com. Success via social media also established a direct correlation to an increase in website career interest and job applications. Northrop Grumman effectively reached a wider audience, which translated into new followers across all platforms, resulting in a dedicated group of followers knowingly interested in the B-21 Raider which continues to drive B-21 content to the top of social post performers. From an earned media perspective, the full narrative ecosystem for media coverage before, during, and after the event was highly effective. Embargoed interviews, exclusive materials and the strategic usage of program and company leaders not only shaped, but amplified key messages that support program differentiators and promote advocacy for the B-21. Northrop Grumman successfully controlled the narrative of the B-21 unveiling told via high-profile outlets like ABC's World News Tonight, Time Magazine, CNN, CNBC, the Wall Street Journal and more.
- **Employee Engagement:** The campaign and unveiling event provided the first opportunity to share more information about the program among Northrop Grumman's employee audience. Across the enterprise, decades of evolution in aeronautics, mission systems and technologies contributed in ways large and small to the B-21 Raider, and it was important to make that powerful connection among the broader workforce. Predictive metrics around employee engagement prompted Northrop Grumman to organize pre-unveiling events, giveaways and invitations to attend the unveiling in person. The B-21 unveiling predictive metrics provided clear goals and objectives guiding strategic planning and execution. By focusing on these metrics, the team ensured a secure, successful event that garnered online engagement, media coverage, employee enthusiasm and follower growth.

The B-21 public relations campaign culminating in the Dec. 2, 2022, unveiling set a new precedent for industry-customer collaboration, showcased innovative technology development on a classified aircraft while protecting program security, and drove record-breaking public engagement. Taken together, this program, campaign and unveiling event have positioned an aircraft integral to the National Defense Strategy for future success as evidenced by 2024 program funding levels, anticipated low-rate initial production contract award in 2023, and the public statements of key stakeholders advocating for the B-21 Raider.

