JANNAF
INTERAGENCY PROPULSION COMMITTEE

73rd JPM | PIB Meeting | 50th SMBS | 46th PEDCS
35th SEPS | 20th MSS | 3rd HTMAS
Joint Subcommittee Meeting

Meeting Invitation

1 - 4 June 2026 **Pittsburgh, PA**

Last Updated 4/10/26

Contents

Join Us @ JANNAF

The June 2026 JANNAF Interagency Propulsion Committee meeting will feature the **73rd JANNAF Propulsion Meeting** (JPM), **Programmatic and Industrial Base** (PIB) Meeting, **50th Structures and Mechanical Behavior** (SMBS), **46th Propellant and Explosives Development and Characterization** (PEDCS), **35th Safety and Environmental Protection** (SEPS), **20th Modeling and Simulation** (MSS), and **3rd High Temperature Material Applications** (HTMAS) Joint Subcommittee Meeting.

Program Chair:
Ms. Megan L. Rex
Naval Air Warfare Center Weapons Division
China Lake, California

Wyndham Grand Pittsburgh Downtown
Pittsburgh, Pennsylvania

Monday – Thursday
1 – 4 June 2026

MEETING SCOPE

The JANNAF Interagency Propulsion Committee coordinates fundamental research, exploratory development, and advanced developmental programs; standardizes procedures for nomenclature; promotes and facilitates the exchange of technical information; and accomplishes problem solving in the areas of joint agency interest on propulsion systems for missiles, rockets, boosters, spacecraft, satellites, and guns. JANNAF subcommittees focus their resources on technical issues of interest to the JANNAF agencies.

JANNAF Propulsion Meeting

The JANNAF Propulsion Meeting (JPM) encompasses research and applications at the systems level. It is held each year in conjunction with standing JANNAF subcommittee meetings on a rotating basis. The scope of the 73rd JPM spans seven mission areas: Tactical Propulsion; Missile Defense/Strategic Propulsion; Propulsion Systems for Space Access; Gun and Gun-Launched Propulsion; Propulsion and Energetics Test Facilities; Sensors for Propulsion Measurement Applications; and System-wide Application of Additive Manufacturing for Propulsion Applications.

200+ presentations

44 sessions

4 days

Programmatic and Industrial Base

The JANNAF Programmatic and Industrial Base (PIB) Committee was chartered by the Department of Defense and the National Aeronautics and Space Administration in 2014 as a part of JANNAF. Its focus is on providing a mechanism for DoD and NASA Programs to collaboratively identify and manage risks and issues within the propulsion industrial base, and to work together to solve them. This requires an integrated understanding of each program's plans and key decision points, and how those decisions may impact the propulsion industrial base. PIB areas of interest include integrated program plans and key decision points; industrial base assessments; risks and opportunities with respect to skills, knowledge, and experience; identification of commonality, innovative acquisition, and partnership opportunities; integrated assessments to identify rocket propulsion industrial base rationalization opportunities; special actions from senior agency, department, or Executive Office of the President leadership; and information provided to decision makers for either situational awareness or policy decisions.

Structures and Mechanical Behavior Subcommittee

The Structures and Mechanical Behavior Subcommittee (SMBS) addresses the development, application, and verification of experimental, analytical, and statistical techniques required in the preliminary or detailed structural design of solid propellant rocket motors and gun ammunition, the assessment of their structural integrity, and the prediction of their service life based on structural or chemical aging mechanisms.

Propellant and Explosives Development and Characterization Subcommittee

The scope of PEDCS comprises work and issues associated with propellants, explosives, and other energetic formulations used in the development, manufacture, performance, and operation of weapons, propulsion systems, and gas generator devices. This subcommittee covers the technology areas required to develop, manufacture, and

characterize propellants and ingredients. The manufacturing technologies of interest include mixing procedures, sampling and quality control, safety and handling practices, and the design and operation of mixing equipment. The characterization tests involve classical wet chemistry, instrumental analysis, chemical stability, compatibility, and calorimetric measurements.

Safety and Environmental Protection Subcommittee

SEPS is focused on issues related to the human health, safety and environmental impacts associated with the manufacture, storage and use of propellants, explosives and pyrotechnics. Topics address all health effects associated with energetic compounds, precursors, combustion products, and waste products as well as safety concerns present during their intentional use, demilitarization, and accidents. New and emerging areas of interest include additive manufacturing of energetic materials, nanomaterials, insensitive high explosive formulations, and brain injury due to exposure to blast and overpressure.

Modeling and Simulation Subcommittee

The 20th Modeling and Simulation Subcommittee (MSS) provides an overarching focus on M&S across all disciplines related to the JANNAF Interagency Propulsion Committee. Simulation-based acquisitions include propulsion systems for aerospace plane, hypersonic aircraft, rocket-based space-access systems, high-speed missiles, in-space propulsion systems, and gun propulsion systems. The MSS pursues this focus through Model-Based Engineering, Integrated Health Management, Simulation Credibility: Verification, Validation, and Risk, and Model Based Test and Evaluation.

High Temperature Material Applications Subcommittee

This 3rd High Temperature Material Applications Subcommittee (HTMAS) meeting selection of sessions will encompass material applications for all propulsion systems including Rocket Nozzle Technology, Hypersonic Systems, Thrust Control, and components of Strategic, Tactical, Space Launch, and other systems. The HTMAS focuses on the application of advanced, high temperature materials, including carbon-carbon, ceramic matrix, and carbon phenolic composites, CERMETs, refractory metals, structural and non-structural insulators, and other advanced materials as applied to propulsion systems and related technology developments.

MEETING SITE & HOTEL

The Wyndham Grand Pittsburgh Downtown in Pittsburgh, Pennsylvania will serve as the location for all meeting sessions as well as lodging.

JANNAF has negotiated a special discounted room rate of $138 per night plus tax (currently 14%). Those eligible for tax exemption for lodging can view guidance on the Information tab of the meeting webpage.

These discounted rooms are limited and will be held for JANNAF attendees until the reservation deadline of Friday, 8 May at 5 p.m. ET, or until they sell out—whichever comes first. Each individual is responsible for their own reservation.

DID YOU KNOW?

Using the JANNAF reservation links/ codes helps both you and JANNAF.

You receive the discounted rate for your hotel room at the meeting hotel...

...and JANNAF can meet its obligation to the hotels, avoiding penalties and keeping meeting costs down.

The JANNAF discounted room rate may be applied for stays between Sunday, 31 May and the night of Thursday, 4 June (i.e., check-out Friday, 5 June) until the reservation deadline or until rooms in the JANNAF block are sold out, whichever comes first. For those who wish to stay longer, the hotel will honor the JANNAF discounted rate for up to three days pre- and post-meeting (pending availability).

MAKING RESERVATIONS

Click on the reservation link on the Hotel tab of the meeting webpage to make your reservation. Using this link is recommended as it will give you direct access to the JANNAF discounted room block at the Wyndham Grand Pittsburgh Downtown.

For additional reservation assistance:

Call 1-888-407-9832 or 412-391-4600 and mention that you will be attending the JANNAF Meeting and are eligible for the June 2026 JANNAF Meeting discounted rate.

Need to cancel or change your reservation? Information pertaining to room reservation cancellation and early departure is on the information tab of the meeting webpage and in your reservation confirmation email.

TRANSPORTATION & PARKING

The Pittsburgh International Airport (PIT) is 17 miles/approximately 30 minutes from the hotel. The hotel does not offer airport shuttle service.

Ground transportation costs between the Pittsburgh airport and the Wyndham Grand hotel are approximately $37-$52 for a taxi or $40-$66 for a rideshare. Public transit between the airport and downtown is just $2.75 each way, with a stop 1.5 blocks from the hotel. For those driving personal vehicles or renting a car, the hotel is offering valet-only parking at $44/night. Self parking is available in several nearby garages. More information can be found on the Information tab of the meeting webpage.

SECURITY/ATTENDANCE REQUIREMENTS

The overall security classification of this meeting is UNCLASSIFIED.

Before you can register to attend sessions at this meeting, you must both:

- be a US citizen currently employed by the US Government or employed by a US Government contractor, **and**
- have an active JANNAF Account.

Questions concerning attendance eligibility should be directed to Mionna Sharp at (410) 992-7300, ext. 224, or msharp@erg.jhu.edu.

REGISTRATION

To register to attend sessions at this meeting, you must:

- create or have an active JANNAF Account (http://www.jannaf.org/create-account),
- complete the meeting registration form (login required), **and**
- submit your registration payment (see fee chart below).

Go to the Register tab on the meeting webpage for links to complete your meeting registration, and for additional information.

Registration steps may be completed as soon as permitted, but should be completed on or before Friday, 1 May at 11:59 p.m. ET to take advantage of the lowest fee. For details of what the registration fee includes, please go to the Register tab on the meeting webpage. Use the registration fee chart below to determine the amount applicable to your registration. The dates noted are based on payment being received.

PLEASE NOTE: Only attendees employed by the government are eligible for the Government registration fee. Contractors, including those who work at government facilities, must pay the Industry registration fee. This is applicable to DoE and University personnel as well.

Registration Fees

by 1 May

Last day to qualify for Early registration rate

Government	Industry	*Student
$1200	$1300	$500

by 15 May

Last day to qualify for Regular registration rate

Government	Industry	*Student
$1200	$1400	$550

16–29 May

Late registration period (available until meeting ends)

Government	Industry	*Student
$1300	$1500	$600

* To qualify for the student discount, you must be a full time student, intern, or cooperative education student, and meet eligibility requirements listed above and on the Register tab of the meeting webpage.

Accepted Payment Methods	
Credit Card (recommended)	• VISA • MasterCard • American Express Submit payment via the Payment site by 1 May to qualify for discounted rate. Online credit card payments will be charged immediately; a receipt will be emailed to you from meetings@erg.jhu.edu. To facilitate the delivery of this and other meeting-related communication, you are urged to add "@erg.jhu.edu" to the list of accepted email domains in your email client.
Government Purchase Order	Completed Government P.O.s must be received by 1 May to qualify for discounted rate or by 15 May for regular registration price. P.O.s are accepted from government only, but will not be accepted for late registration.

CANCELLATION POLICY

Email cancellations submitted on or before 1 May will receive a full refund minus an administrative fee of $75.00. Cancellations made after 1 May will not be refunded. Substitutes are welcome as long as the request for substitution is from the original attendee; attendance eligibility is appropriately met by the substitute; and the original and substitute attendee are from the same organization to facilitate transfer of registration funds. Please contact Shelley Cohen via email (scohen@erg.jhu.edu) to transfer or cancel your registration.

ON-SITE REGISTRATION CHECK-IN

The JANNAF Registration Check-in desk will be located on the Ballroom Level of the Wyndham Grand Pittsburgh Downtown. Government-issued photo identification is required upon check-in. Be sure to complete both registration steps (registration form and payment) before arriving at the Registration Check-in desk and allow extra time if you register after 15 May.

JANNAF Registration Check-in Desk Hours	
Monday	10:00 a.m. – 5:00 p.m.
Tuesday	7:00 a.m. – 5:00 p.m.
Wednesday	7:00 a.m. – 5:00 p.m.
Thursday	7:00 a.m. – 5:00 p.m.

ATTIRE

There is no official dress code for JANNAF meetings; however, business or business casual attire is suggested. When packing, keep in mind that it can be difficult to regulate the temperature in meeting rooms to everyone's liking, and any changes may not be noticeable quickly, so it is best to bring a light sweater or jacket and dress in layers.

DINING

Approximately one and one-half hours for lunch has been built into the program each full day. 3 Rivers Restaurant and Lounge will be open throughout the week. Additionally, a variety of dining options are available within a 5–10 minute walk or short drive from the hotel. A map of nearby dining options has been provided on the Information tab of the meeting webpage and will be available in the JANNAF registration area.

NETWORKING ROOM

Grand Ballroom 2 will serve as the JANNAF networking area. Light morning refreshments, a mid-morning coffee break, and light mid-afternoon refreshments will be served at the times stated in the Schedule at a Glance on pages 21–24.

ATTENDEE NETWORKING HOUR & POSTER SESSION

Kick off your evening on Wednesday, 3 June by joining us for the attendee networking hour from 5:30 – 7 p.m. to connect with other attendees in an informal and relaxed environment. The networking hour aims to encourage interaction amongst peers and forge lasting relationships between both seasoned attendees and newcomers within the community. Posters will be on display during the networking hour event. Poster presenters will be present to discuss their work with attendees during this time. Light refreshments and a bar (credit cards and cash) will be available to fuel your conversations and connections.

There is no charge for meeting attendees to participate in the networking hour—simply wear your badge for access. This is an attendee-only event.

For those wishing to continue networking after the event concludes, dining information for nearby restaurants will be available.

EARLY CAREER WORKING GROUP

There will be a meeting of the JANNAF Early Career Working Group on Monday, 1 June, from 11 a.m.– 12 p.m. in King's Garden 3 at the Wyndham Grand Pittsburgh Downtown. Arrive early at the Registration check-in desk (opening at 10 a.m. on Monday) to get your badge and then take advantage of the opportunity to meet and network with other early career attendees. There will be a primer on JANNAF as an organization, followed by discussions regarding updates, new initiatives, and actions for the group. Topics for discussion include a brief overview of the structure and historical perspectives of JANNAF, opportunities for mentorship and leadership, upcoming social events, and new award initiatives designed to highlight contributions from early career JANNAF attendees.

VIRTUAL READING ROOM

Pre-publication copies of meeting papers that are publicly releasable, DoD Distribution Statement C, or CUI/FEDCON, will be available to read in the virtual Reading Room beginning at 1:30 pm on Monday, 1 June. The virtual Reading Room can only be accessed on your own device, but will remain available 24/7 until the meeting proceedings are published in the JANNAF Digital Online Collection (JDOC) approximately 12 weeks after the meeting. Printing or reproducing Reading Room papers is prohibited.

SIDE MEETINGS

A limited number of small rooms are available for JANNAF-related side meetings. A limited number of small meeting rooms are available for JANNAF-related side meetings. Rooms must be reserved and will be assigned on a first-come, first-served basis, and audiovisual equipment will not be provided. Please contact Shelley Cohen at scohen@erg.jhu.edu to reserve a room as soon as possible. Requests may also be made on-site during the meeting if space is available.

PROGRAM CHANGES

Printed meeting programs will be distributed to attendees upon check-in on-site. The most current version of the Final Program, reflecting changes made after the program has been sent to the printer and throughout the week of the meeting, can be accessed online by scanning the QR code printed on the inside cover of the printed program and posted throughout the meeting space. Changes to the Final Program will also be posted on touchscreen monitors in the Registration Area. Attendees should regularly check for program updates. Final Programs are CUI and Distribution Statement C; they must be secured when not in your possession.

MEETING PROCEEDINGS

Proceedings from this meeting will be published by the JHU WSE Energetics Research Group. Papers and presentations will be provided complimentary to attendees of this meeting who have paid the full registration fee. Attendees will have access to these materials beginning approximately 12 weeks following the meeting via the JANNAF Digital Online Collection (JDOC) Database accessible through your JANNAF Portal Account. This benefit is not available for student attendees.

QUESTIONS

Questions concerning this program, hotel reservation issues, and/or payment of the registration fee should be directed to Shelley Cohen at (410) 992-7300, ext. 215 / scohen@erg.jhu.edu.

Questions that pertain to obtaining a JANNAF Portal Account (registration pre-requisite) should be directed to Mionna Sharp at (410) 992-7300, ext. 224 / msharp@erg.jhu.edu.

Johns Hopkins University Whiting School of Engineering Energetics Research Group (JHU WSE ERG) provides technical and administrative support to the JANNAF Interagency Propulsion Committee.

JHU WSE ERG • 10630 Little Patuxent Parkway, Suite 202 • Columbia, MD 21044-3286 • erg.jhu.edu

Upcoming Meetings

1-4 June 2026
Pittsburgh, Pennsylvania
Visit June 2026 Meeting Website

73rd JANNAF Propulsion Meeting
Programmatic and Industrial Base Meeting
50th Structures and Mechanical Behavior
46th Propellant and Explosives Development and Characterization
35th Safety and Environmental Protection
20th Modeling and Simulation
3rd High Temperature Material Applications
Joint Subcommittee Meeting

7-11 December 2026
Hampton, Virginia
Website coming soon!

Programmatic and Industrial Base Meeting
54th Combustion
42nd Airbreathing Propulsion
42nd Exhaust Plume and Signatures
36th Energetic Systems Hazards
Joint Subcommittee Meeting

Spring 2027
Location TBA

74th JANNAF Propulsion Meeting
Programmatic and Industrial Base Meeting
21st Modeling and Simulation
16th Liquid Propulsion
15th Spacecraft Propulsion
Joint Subcommittee Meeting

PROGRAM COMMITTEE MEMBERS

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DEVCOM Aviation & Missile Center
Redstone Arsenal, AL

Mr. Timothy D. Smith
NASA Glenn Research Center
Cleveland, OH

Mission Area I: Tactical Propulsion

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Mission Area II: Missile Defense/Strategic Propulsion

Dr. Robert J. Jensen
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Ms. Megan L. Rex
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Mission Area III: Propulsion Systems for Space Access

Mr. Bruce R. Askins
NASA Marshall Space Flight Center
Huntsville, AL

Mission Area IV: Gun and Gun-Launched Propulsion

Mr. Edward G. Tersine
Naval Surface Warfare Center-Indian Head Division
Indian Head, MD

Mission Area V: Propulsion and Energetics Test Facilities

Lt. Col. Michael S. Rosenof
Air Force Research Laboratory
Edwards AFB, CA

Dr. Andrew R. Demko
Naval Air Warfare Center Weapons Division
China Lake, CA

Mission Area VI: Sensors for Propulsion Measurement Applications

Dr. Gary W. Hunter
NASA Glenn Research Center
Cleveland, OH

Dr. Robert S. Okojie
NASA Glenn Research Center
Cleveland, OH

Mission Area VII: System-wide Application of Additive Manufacturing for Propulsion Applications

Mr. Edward G. Tersine
Naval Surface Warfare Center-Indian Head Division
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Dr. Christopher Grabill
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Programmatic and Industrial Base

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OUSD (A&S)
Alexandria, VA

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Mr. Ralph J. Bridge
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Mr. Derek R. DeVries
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Mission Area II: Materials Properties and Characterization

Mr. David J. Braithwaite
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Mission Area III: Structural Analysis and Design

Dr. Brian C. Liechty
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Mr. Colton B. Cevering
Northrop Grumman Corporation
Corinne, UT

Mission Area IV: Experimental Structural and Mechanical Analysis and Test Methods

Mr. Colin S. Qualters
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Mission Area V: Nondestructive Evaluation

Mr. Robert W. Pritchard
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Mission Area VI: Defect Evaluation

Mr. David M. McCutcheon
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Huntsville, AL

Mission Area VII: Processing and Characterization of Additively Manufactured Materials Joint SMBS-PEDCS Mission Area

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Mission Area I: Liquid Propellants

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Mission Area V: Solid Propellant Ingredients and Formulations

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Mission Area VI: Propellant and Explosive Surveillance and Aging

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Mission Area VII: Gun Propulsion

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DoW Explosives Safety Board
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Mr. Edward G. Tersine
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Mission Area VIII: Green Energetic Materials (GEM) Joint PEDCS-SEPS Mission Area

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Jensen Hughes
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Aberdeen Proving Ground, MD

Dr. Sara K. Pliskin
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Mission Area II: Atmospheric Dispersion Modeling and Hazards Assessment

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Space Launch Delta (SLD) 30
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Mission Area III: Instrumentation

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Mission Area IV: Environmental

VACANT

Mission Area V: Industrial Hygiene

Ms. Lindsey B. Kneten
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Mission Area VI: Range Safety and Explosives Safety

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Mission Area VIII: Demilitarization, Reclamation, and Reuse Technologies

VACANT

Mission Area IX: Review of Accidents and Incidents

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Mission Area I: Model-Based Engineering

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Mission Area II: Integrated Health Management

Mr. James T. Singleton
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Mission Area III: Simulation Credibility: Verification, Validation, and Risk

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Dr. Timothy A. Eymann
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Wright-Patterson AFB, OH

Mission Area IV: Model-Based Test and Evaluation (MBTE)

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Mr. Colin G. Perry
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Mission Area II: High Temperature Material Design, Test and Evaluation

Ms. Sarah A. Howse
NASA Marshall Space Flight Center
Huntsville, AL

Mr. Anthony T. Owens
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Mission Area III: High Temperature Material Development

Ms. Jennifer I. Richman
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Program Highlights

KEYNOTE ADDRESS

Mr. Alexander E. Woods
Director of the Joint Energetics Transition Office (JETO)
Office of the Under Secretary of Defense for Acquisition and Sustainment / Alexandria, VA

Mr. Alexander E. Woods will give the keynote presentation during the June meeting. Alexander Woods is the Director of the Joint Energetics Transition Office (JETO), where he leads the mission to coordinate acquisition strategy, technology development, and transition of game-changing energetic materials used by the Department of Defense. With a deep expertise in energetic material technology, program management, and industrial base analysis, he plays a crucial role in shaping investment strategies and national-level policy. Mr. Woods advises senior DoD leadership on revitalizing the US energetics enterprise to ensure the nation's technological superiority in propulsion and munitions. He holds a B.S. in Aeronautical & Astronautical Engineering from Purdue University.

Throughout his 18-year career, Mr. Woods has held several key positions supporting national security. As a senior advisor within the Office of the Under Secretary of Defense for Acquisition & Sustainment, he served as deputy director for the Defense Production Act Purchases office, managing investments in missiles, munitions, minerals, and other critical sectors of the defense industrial base. He led the Critical Energetic Materials Working Group from 2019-2021, and prior to that was the Navy's Senior Technologist for Propellant Actuated Devices. He has a proven track record of resolving critical supply chain disruptions, leading multi-agency working groups, and developing foundational plans to establish vital defense programs.

As the keynote presenter at the June JANNAF meeting, the title of Mr. Woods' talk is, "A Strategic Partnership: The Role of JETO and JANNAF in Shaping the Future of US Energetics." This keynote will outline JETO's energetic materials strategic plan for expanding capability, strengthening the supply chain, accelerating the adoption of advanced energetic materials, and discuss how JANNAF will play a pivotal role in shaping the future of energetics and our nation's competitive edge. The newly established Joint Energetics Transition Office (JETO) and the JANNAF community are both committed to development of advanced energetics technology, a mission that is quickly growing in importance in today's uncertain world.

All attendees are invited to participate. The Keynote Address begins at 8 a.m. on Tuesday, 2 June in Grand Ballroom 1 on the Ballroom level of the Wyndham Grand Pittsburgh Downtown. Award presentations will immediately follow the Keynote Address.

Program Highlights

SUBCOMMITTEES

JANNAF Propulsion Meeting

The JPM—gathering for the 73rd time—will host six sessions in June. Sessions will focus on Tactical Propulsion: Propellant Concepts/Combustors (2A); Current and Future Space Systems and Components, including updates on SLS (2B and 2O); a very informative day of papers on Evolving Tactical Propulsion (3A and 3N); and Propellants and Propelling charges for Solid Propellant Guns (4A part 1).

Programmatic and Industrial Base

The PIB will present a specialist session on National Space Strategies: Access, Mobility, Logistics, and Assembly (3T) on Wednesday, 3 June.

Structures and Mechanical Behavior Subcommittee

The SMBS is holding technical sessions on the topics of structural analysis and design, advanced manufacturing methods, and materials properties and characterization or propellants. In addition to the technical sessions, SMBS will be holding seven panel meetings to address topics across the solid propulsion and energetics space including structural analysis, advanced manufacturing, service life, and materials properties and characterization.

Propellant and Explosives Development and Characterization Subcommittee

The PEDCS will hold its 46th gathering, offering a comprehensive platform for knowledge exchange in propulsion and energetics. This event features a diverse program encompassing 13 technical sessions, a specialist session, and four panel meetings across nine different Mission Areas. Topics span from energetics testing, reactivity, and performance characterization (sessions 1Q, 2D and 2S); energetics synthesis, manufacturing, and development, including additive manufacturing (1T, 3D, 3Q and 4D); Liquid propellants (3F and 3S); Gun Propulsion (4A part 2); Green energetics and novel ingredients (1N and 4P); and tactical propellants and their ingredients (4C and 4Q).

Safety and Environmental Protection Subcommittee

The SEPS will have two technical sessions, including one joint session with PEDCS on liquid propellants and green energetic materials. The topics discussed within SEPS cover toxicity, demilitarization, and occupational health associated with incidents involving energetic materials.

Modeling and Simulation Subcommittee

MSS will host five sessions across four very informative days devoted to the various Mission Areas within the subcommittee. Sessions will cover aspects of Modeling and Simulation for Propulsion and Energetic Materials (1P), M&S for Test Design Data Analytics (2C), Modeling and Simulation for Aerospace Vehicle Design (2P), and Simulation Credibility and Computational Modeling and Software Tools (3C). MSS will also present a workshop concentrating on Code Credibility: Uncertainty Quantification Using Probability Boxes (3P).

High Temperature Material Applications Subcommittee

The High Temperature Material Applications Subcommittee (HTMAS) will host 11 sessions throughout the week in support of its mission areas. Session topics include carbon-carbon composites (1S); ceramic-matrix composites (4R); silicon carbide material design, test, evaluation, and development (3E and 3R); high-temperature materials applications modeling and simulation (2E); and high-temperature material evaluation (4E). Additionally, HTMAS will hold a two-part specialist session Wednesday (3B and 3O) on high temperature seal technology for the hypersonic environment.

POSTER SESSION

Both Early Career and General Posters will be on display during the Attendee Networking Hour on Wednesday, 3 June. Poster presenters will be available to discuss their work with attendees during the poster session from 5:30 to 7 p.m. Posters will also be available for viewing on Thursday, 4 June in the Registration area between 7 a.m. and 12 p.m. The list of posters can be found on page 60.

TECHNICAL PROGRAM

This year's technical program currently consists of more than 200 presentations in 39 technical sessions, four specialist sessions, one workshop, a poster session, and keynote; plus 10 panel meetings. A detailed daily schedule of all sessions, workshops, meetings, and networking activities is provided below and continues through page 24.

Please note that the agendas of 10 sessions begin with at least one presentation that is restricted at either distribution statement B (US Government only), D (DoD and DoD Contractors only), or E (DoD Components only). Sessions with at least one restricted presentation are indicated in the Schedule at a Glance below and through page 24 with "Open *". Please review the detailed session agendas in the Preliminary Program for additional information about the restricted talks and who is eligible to attend them. Presentation and session restrictions are subject to change.

What are Panel Meetings & why should I attend them?

Subcommittee Panels represent the primary mechanism for collaboration in technical areas of joint interest to JANNAF agencies, the industry, and academia. If you are interested in participating in JANNAF tasks or wish to learn about potential areas for collaboration, please look through the Schedule at a Glance (pp. 21-24) for panel meetings that align with your interests.

SCHEDULE - Monday, 1 June

Registration Check-In Desk:
10:00 a.m. - 5:00 p.m., Ballroom Level

IT Office: 10:00 a.m. - 5:00 p.m. in Brigade

Afternoon Sessions: 1:30 - 5:05 p.m.

Networking Area Refreshments:
10:00 - 11:00 a.m. in Grand Ballroom 2
3:05 - 4:05 p.m. in Grand Ballroom 2

Lunch Break (On Your Own): 12:00 - 1:30 p.m.

11:00 a.m. - 12:00 p.m.	Early Career Working Group Meeting			King's Garden 3	Open
12:45 - 1:00 p.m.	Session Chair Meeting (Monday Sessions)			Rivers	Closed
1:30 - 3:35 p.m.	1N	PEDCS/ SEPS	Green Energetic Materials	King's Garden 1	Open *
3:35 - 3:50 p.m.	1N	PEDCS/ SEPS	PANEL MEETING: Green Energetic Materials	King's Garden 1	Open
1:30 - 3:35 p.m.	1P	MSS	Modeling and Simulation for Propulsion and Energetic Materials	King's Garden 3	Open *
1:30 - 5:05 p.m.	1Q	PEDCS	Energetic Testing	King's Garden 4	Open
1:30 - 4:35 p.m.	1R	HTMAS	High-Temperature Materials Test Facilities	King's Garden 5	Open
1:30 - 3:35 p.m.	1S	HTMAS	Carbon-Carbon Composites	Grand Ballroom 3	Open
1:30 - 3:05 p.m.	1T	SMBS/ PEDCS	Advanced Manufacturing Methods and Characterization for Propellant	Grand Ballroom 4	Open
3:05 - 3:35 p.m.	1T	SMBS/ PEDCS	PANEL MEETING: Additive and Advanced Propellant Manufacturing Topics	Grand Ballroom 4	Open
4:05 - 4:35 p.m.	1T	SMBS	PANEL MEETING: Service Life / Missile Sustainment	Grand Ballroom 4	Open
4:35 - 5:05 p.m.	1T	SMBS	PANEL MEETING: Nondestructive Evaluation	Grand Ballroom 4	Open

Schedule Color Key

	Session Details		Closed Meetings
	Panel Meetings		Networking Opportunities

"Open D" and "Open *" indicate a session with at least one presentation restricted at B, D, or E

SCHEDULE - Tuesday, 2 June

Registration Check-In Desk:
7:00 a.m. - 5:00 p.m., Ballroom Level

IT Office: 7:00 a.m. - 5:00 p.m. in Brigade

Keynote Address: 8:00 - 9:30 a.m.

Morning Sessions: 10:00 a.m. - 12:05 p.m.

Afternoon Sessions: 1:30 - 6:05 p.m.

Networking Area Refreshments:
7:00 - 8:00 a.m. in Grand Ballroom 2
9:30 - 10:00 a.m. in Grand Ballroom 2
3:05 - 4:05 p.m. in Grand Ballroom 2

Lunch Break (On Your Own): 12:00 - 1:30 p.m.

7:15 - 7:30 a.m.	Session Chair Meeting (Tuesday Sessions)			Rivers	Closed
8:00 - 9:30 a.m.	KEYNOTE ADDRESS: Mr. Alexander Woods - Director of the Joint Energetics Transition Office (JETO) Awards and Announcements			Grand Ballroom 1	Open
10:00 a.m. - 12:05 p.m.	2A	JPM	Tactical Propulsion Propellant Concepts/Combustors	King's Garden 1	Open
10:00 - 11:05 a.m.	2B	JPM	Current and Future Space Systems and Components - I	King's Garden 2	Open
10:00 a.m. - 12:05 p.m.	2C	MSS	M&S for Test Design and Data Analytics	King's Garden 3	Open
10:00 a.m. - 12:05 p.m.	2D	PEDCS	Explosive Reactivity	King's Garden 4	Open D
10:00 - 11:35 a.m.	2E	HTMAS	High-Temperature Materials Applications Modeling and Simulation	King's Garden 5	Open
10:00 a.m. - 12:05 p.m.	2G	HTMAS	Simulation, Test, and Evaluation of ACC-6 Composites	Grand Ballroom 4	Open
10:00 a.m. - 6:00 p.m.	JANNAF Technical Executive Committee Meeting			King's Terrace	Closed
12:00 - 1:20 p.m.	JPM Planning Committee Meeting			Chartiers	Closed
1:30 - 5:35 p.m.	2N	SEPS	Safety and Environmental Protection Considerations for Energetics	King's Garden 1	Open
1:30 - 5:05 p.m.	2O	JPM	Current and Future Space Systems and Components - II	King's Garden 2	Open *
1:30 - 5:05 p.m.	2P	MSS	Modeling and Simulation for Aerospace Vehicle Design	King's Garden 3	Open
1:30 - 5:45 p.m.	2Q	PEDCS	SPECIALIST SESSION: HTPB IPT: Updates, Progress and Plans	King's Garden 4	Open
1:30 - 4:35 p.m.	2R	HTMAS	Refractory Metals and Coatings	King's Garden 5	Open
1:30 - 5:35 p.m.	2S	PEDCS	Performance Characterization	Grand Ballroom 3	Open *
1:30 - 5:05 p.m.	2T	SMBS	Structural Analysis and Design	Grand Ballroom 4	Open
5:05 - 5:35 p.m.	2T	SMBS	PANEL MEETING: Structural Analysis and Design	Grand Ballroom 4	Open
5:35 - 6:05 p.m.	2T	SMBS	PANEL MEETING: Defect Evaluation	Grand Ballroom 4	Open

Schedule Color Key

	Session Details		Closed Meetings
	Panel Meetings		Networking Opportunities

"Open D" and "Open *" indicate a session with at least one presentation restricted at B, D, or E

SCHEDULE - Wednesday, 3 June

Registration Check-In Desk:
7:00 a.m. - 5:00 p.m., Ballroom Level

IT Office: 7:00 a.m. - 5:00 p.m. in Brigade

Morning Sessions: 8:00 a.m. - 12:05 a.m.

Afternoon Sessions: 1:30 - 5:30 p.m.

Networking Area Refreshments:
7:00 - 8:00 a.m. in Grand Ballroom 2
9:35 - 10:35 a.m. in Grand Ballroom 2
3:05 - 4:05 p.m. in Grand Ballroom 2

Lunch Break (On Your Own): 12:00 - 1:30 p.m.

7:15 - 7:30 a.m.	Session Chair Meeting (Wednesday Sessions)			Rivers	Closed
8:00 - 11:05 a.m.	3A	JPM	Evolving Tactical Propulsion - I	King's Garden 1	Open
8:00 - 11:40 a.m.	3B	HTMAS	SPECIALIST SESSION: High Temperature Seal Technology for the Hypersonic Environment - I	King's Garden 2	Open
8:00 - 10:05 a.m.	3C Part 1	MSS	Simulation Credibility: Computational-Experimental Comparisons	King's Garden 3	Open
10:30 - 11:35 a.m.	3C Part 2	MSS	Computational Modeling and Software Tools	King's Garden 3	Open
8:00 - 11:05 a.m.	3D	PEDCS	Energetics Manufacturing and Modeling	King's Garden 4	Open
11:05 - 11:35 a.m.	3D	PEDCS	PANEL MEETING: Propellant and Explosives Process Engineering	King's Garden 4	Open
8:00 - 10:05 a.m.	3E	HTMAS	Silicon Carbide Material Design, Test, Evaluation, and Development - I	King's Garden 5	Open
8:00 - 11:35 a.m.	3F	PEDCS	Liquid Propellants - I	Grand Ballroom 3	Open
8:00 - 11:05 a.m.	3G	SMBS	Materials Properties and Characterization	Grand Ballroom 4	Open
11:05 - 11:35 a.m.	3G	SMBS	PANEL MEETING: Materials Properties and Characterization	Grand Ballroom 4	Open
11:35 a.m. - 12:05 p.m.	3G	SMBS	PANEL MEETING: Experimental Structural and Mechanical Analysis and Test Methods	Grand Ballroom 4	Open
12:00 - 1:20 p.m.	MSS Technical Steering Group Meeting			Chartiers	Closed
12:00 - 1:30 p.m.	HTMAS Technical Steering Group Meeting			King's Plaza	Closed
12:00 - 1:30 p.m.	PEDCS Technical Steering Group Meeting			King's Terrace	Closed
1:30 - 3:05 p.m.	3N	JPM	Evolving Tactical Propulsion - II	King's Garden 1	Open *
1:30 - 5:00 p.m.	3O	HTMAS	SPECIALIST SESSION: High Temperature Seal Technology for the Hypersonic Environment - II	King's Garden 2	Open
1:30 - 5:30 p.m.	3P	MSS	WORKSHOP: Code Credibility: Uncertainty Quantification Using Probability Boxes	King's Garden 3	Open
1:30 - 5:05 p.m.	3Q	PEDCS	Energetics Synthesis	King's Garden 4	Open *
1:30 - 4:35 p.m.	3R	HTMAS	Silicon Carbide Material Design, Test, Evaluation, and Development - II	King's Garden 5	Open
1:30 - 3:05 p.m.	3S	PEDCS	Liquid Propellants - II	Grand Ballroom 3	Open
3:05 - 5:05 p.m.	3S	PEDCS	PANEL MEETING: Liquid Propellants	Grand Ballroom 3	Open
1:30 - 5:30 p.m.	3T	PIB	SPECIALIST SESSION: National Space Strategies - Access, Mobility, Logistics, and Assembly	Grand Ballroom 4	Open
5:30 - 7:00 p.m.	Attendee Networking Hour and Poster Session JANNAF Badge required (this event is for attendees only)			Grand Ballroom 1	Open

Schedule Color Key

	Session Details		Closed Meetings
	Panel Meetings		Networking Opportunities

"Open D" and "Open *" indicate a session with at least one presentation restricted at B, D, or E

SCHEDULE - Thursday, 4 June

Registration Check-In Desk:
7:00 a.m. - 5:00 p.m., Ballroom Level

IT Office: 7:00 a.m. - 5:00 p.m. in Brigade

Morning Sessions: 8:00 a.m. - 12:05 p.m.

Afternoon Sessions: 1:30 - 5:35 p.m.

Networking Area Refreshments:
7:00 - 8:00 a.m. in Grand Ballroom 2
9:35 - 10:35 a.m. in Grand Ballroom 2
3:05 - 4:05 p.m. in Grand Ballroom 2

Lunch Break (On Your Own): 12:00 - 1:30 p.m.

7:15 - 7:30 a.m.	Session Chair Meeting (Thursday Sessions)			Rivers	Closed
8:00 - 10:05 a.m.	4A Part 1	JPM	Propellants and Propelling Charges for Solid Propellant Guns	King's Garden 1	Open
10:30 - 11:35 a.m.	4A Part 2	PEDCS	Gun Propulsion	King's Garden 1	Open
8:00 - 10:05 a.m.	4B	HTMAS	High Temperature Material Development - I	King's Garden 2	Open
8:00 - 11:35 a.m.	4C	PEDCS	Tactical Propellant Ingredients	King's Garden 3	Open *
8:00 a.m. - 12:05 p.m.	4D	PEDCS	Explosive Development and Characterization	King's Garden 4	Open
8:00 a.m. - 12:05 p.m.	4E	HTMAS	High Temperature Material Evaluation	King's Garden 5	Open
8:00 - 11:00 a.m.	PIB Large Liquid Propulsion Working Group Meeting			King's Terrace	Closed
12:00 - 1:00 p.m.	SEPS Technical Steering Group Meeting			Chartiers	Closed
1:00 - 6:00 p.m.	PIB Executive Committee Meeting			King's Terrace	Closed
1:30 - 4:35 p.m.	4O	HTMAS	High Temperature Material Development - II	King's Garden 2	Open
1:30 - 5:05 p.m.	4P	PEDCS	Characterization of Novel Energetic Ingredients and Components	King's Garden 3	Open
1:30 - 5:05 p.m.	4Q	PEDCS	Tactical Propellants	King's Garden 4	Open *
1:30 - 5:35 p.m.	4R	HTMAS	Ceramic-Matrix Composites	King's Garden 5	Open *
6:00 - 8:30 p.m.	SMBS Technical Steering Group Meeting			King's Plaza	Closed

Schedule Color Key

	Session Details		Closed Meetings
	Panel Meetings		Networking Opportunities

"Open D" and "Open *" indicate a session with at least one presentation restricted at B, D, or E

A note about Author Lists

Session agendas provided on the following pages list the primary author only unless the primary author is not the presenter. In that case, both the primary author and presenter are listed.

The full author lists will be included on the papers in the virtual Reading Room during the meeting, and in JDOC once papers have been published.