

54th CS | 42nd APS | 42nd EPSS | 36th ESHS
Joint Subcommittee Meeting | PIB Meeting

Call for Papers

7 - 11 December 2026

Hampton, VA

Abstract Deadline:
12 June 2026

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Cover art designed by JHU WSE ERG Communication Specialist Gabrielle Delisle-Ballard.

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What? December 2026 JANNAF Interagency Propulsion Committee meeting

When? Monday through Friday, 7-11 December 2026

Where? Hampton, Virginia

Unclassified: Hampton Roads Convention Center

Classified: NASA Langley Research Center

Meeting Chair:

Dr. Brian T. Bojko, Naval Research Laboratory, Washington, DC

The following subcommittees will meet:

Combustion (CS)

Airbreathing Propulsion (APS)

Exhaust Plume and Signatures (EPSS)

Energetic Systems Hazards (ESHS)

Programmatic and Industrial Base (PIB)

For additional information, visit the [December meeting page](#).

WHY SHOULD YOU ATTEND A JANNAF MEETING?

[According to previous JANNAF Meeting attendees]

To collaborate with colleagues from other labs and companies

To network with other scientists

To see presentations on a wide variety of subjects

To get great exposure to the industry as a young professional

To present my limited distribution work to a technical audience

To stay informed about changing technologies

ATTENDANCE REQUIREMENTS

The overall security level of the meeting is **Secret**. Unclassified sessions will be held at the Hampton Roads Convention Center; classified sessions will be held at NASA Langley Research Center, approximately a 15 minute drive from the Convention Center. Attendance is restricted to US citizens employed by a DoD, DoE, or NASA facility, or with a DoD, DoE, or NASA contractor facility eligible for receipt of militarily-critical technical data. No foreign nationals are permitted to attend.

To attend the classified sessions, attendees must also possess a personal security clearance of at least Secret with a need-to-know in the areas of rocket, missile, space, aircraft, or gun propulsion.

All attendees will need to have an active JANNAF account. Instructions can be found [here](#).

Non-government attendees (including contractors, consultants, and universities) will need the following:

1. Current government contract or certification from a Sponsoring Government Official
2. Employer's DD 2345 certification number for receipt of militarily-critical technical data

DD 2345: For additional information, contact the Joint Certification Program Office (JCP) at 1-800-352-3572 or visit their web site at <https://www.dla.mil/HQ/LogisticsOperations/Services/JCP/>.

Questions concerning attendance eligibility and JANNAF account access should be directed to Mionna Sharp (msharp@erg.jhu.edu) or by calling (410) 992-7300 ext. 224.

REGISTRATION

Preliminary registration information is provided on the [December meeting website](#) with full details available when registration opens in mid-September. All attendees, including presenters, must register and pay the [registration fee](#).

PURPOSE

The JANNAF Interagency Propulsion Committee focuses on the technology, development, and production capabilities for all types of propulsion systems and energetics for tactical, strategic and missile defense rockets and missiles, for space boost and orbit transfer, for in-space propulsion, and for gun systems. JANNAF provides a forum for discussion of propulsion issues, challenges, and opportunities across the Military Departments, Defense Agencies and NASA. JANNAF subcommittees focus their resources on technical issues of interest to the JANNAF agencies. JANNAF accepts papers that are unclassified/unlimited and unclassified/limited for all meetings; and up to classified Secret as announced in the specific meeting's announcement and call for papers.

**JANNAF IS SOLICITING ABSTRACTS
FOR BOTH PAPERS AND POSTERS.**

ABSTRACT SUBMITTAL GUIDANCE

- The technical areas to be addressed are defined in this announcement. Individuals who wish to submit an abstract should carefully review the topic areas listed on pages 8 - 20.
- **The deadline date for submission of the online Abstract Form is 1 June 2026.** If you need to submit an abstract after this date, please contact ERG (meetings@erg.jhu.edu).
- **Your organization may require abstracts to be processed through an approval system prior to submission. This process takes additional time, so authors should plan accordingly to meet the abstract deadline date.**
- Submitting an abstract represents an agreement to **submit a final paper for publication by 6 November 2026**, attend the meeting, and deliver a 25-minute presentation or a poster. The JANNAF Policy of "No Paper, No Podium" will be in effect for this meeting, with the exception of posters.
- **All abstracts are to be submitted via the JANNAF Abstract Submittal Site.** A JANNAF account is NOT required to submit an abstract.
- Submit only unclassified abstracts with content that is distribution statement A (approved for public release) or C (distribution authorized to US Government and its contractors). **Abstracts will NOT be published** and will only be used by the program committee members for selection and scheduling purposes.
- You will be asked to indicate your presentation's anticipated Distribution Statement when completing required fields on the [Abstract Submittal Site](#).
 - » Dissemination of information from JANNAF presentations is primarily relegated to either Statement A (approved for public release) or Statement C (Distribution authorized to US Government and their contractors).
 - » To properly secure them, presentations marked with Statement B (US Government agencies only), Statement D (US Department of Defense and US DoD Contractors only), or Statement E (U.S. Department of Defense components only), must be placed at the beginning of session agendas.
 - » Papers may have different Distribution Statements than their corresponding presentations.
- The Title field on the Abstract Submittal Site is limited to 150 characters including spaces.
- Only a primary author should be listed when submitting your abstract, unless the presenting author is someone other than the primary author. If accepted, there is no author limit when submitting your final paper and all names will be included in the author list when the paper is published in JDOC.
- Abstract length is limited to 300 words, and may not include tables or figures. State the objective of the work. Describe the scope, method of approach, and any new advances in the state of the art. Highlight important conclusions, and include a brief summary of the data used to substantiate them.
- Indicate confirmation of required resources when completing the abstract submittal form to ensure availability of time, funding, and support for your participation in the meeting. This is NOT related to security review/ approval to submit the abstract or submit/present the paper. A "no" response to this question will place your abstract in placeholder status.
- If the abstract deadline is approaching and you have not received approval to release your abstract, please contact the ERG meetings team (meetings@erg.jhu.edu) for guidance on submitting a placeholder.
- When filling in the form in the Abstract Submittal Site, if there is required information that you do not have, you have the ability to save your form and return once you have obtained the missing information to complete and submit the form.

ABSTRACT SUBMITTAL INSTRUCTIONS

JHU WSE ERG accepts only **electronic submission** of abstracts, presentations, and papers. **Abstracts must be submitted only via the [Abstract Submittal Site](#):**

1. To access the Abstract Submittal Site, go to: <https://jannaf.org/abstractstart>. You may submit an abstract *with or without* an active JANNAF Account. Contact meetings@erg.jhu.edu if you require assistance.
 - » If you are submitting an abstract without an active JANNAF Account, and have not received a validation code (from info@erg.jhu.edu) within 30 minutes of submitting the request, after confirming that the message is not in your junk/spam folder, email meetings@erg.jhu.edu.
 - » If you are submitting an abstract without an active JANNAF Account, you may use your validation code to submit more than one abstract.
2. After reaching the Abstract Landing Page, select the December 2026 meeting, and then click the dark blue "Create new abstract" button to create a new abstract or edit/submit a draft abstract.
 - » Once you have reached the Submission Details tab, you will have the option to save the form as a draft and return to complete it at a later time.
3. When all required fields have been completed accurately, submit your abstract. You will have the opportunity to review your responses before you submit.

AUTHOR TIMELINE

Dates below are subject to change.

Date	Weeks to Meeting	Action
12 June 2026	25	Deadline for receipt of abstracts via Abstract Submittal Site .
10 Aug 2026	17	Approximate date for committee decision emails sent to authors.
28 Aug 2026	14	Deadline for changes to Meeting Invitation and Preliminary Program.
14 Sept 2026	12	Approximate date for Meeting Invitation, Preliminary Program, and registration materials announced to propulsion community.
2 Oct 2026	9	Deadline for award nominations and submittal of Student papers for Best Student Paper award consideration
23 Oct 2026	6	Deadline for submission of changes to the Final Program
6 Nov 2026	4	Last day for discounted Early registration fee .
6 Nov 2026	4	Deadline for receipt of papers and publication clearance forms. Papers not received by this date may be removed from the program.
13 Nov 2026	3	Deadline for reservations at Embassy Suites by Hilton Hampton Convention Center.
20 Nov 2026	2	Last day to register at Regular registration fee (registration form submission and registration fee payment). Late registration required thereafter.
20 Nov 2026	2	Deadline for receipt of presentations
7 Dec 2026	0	Start date for CS/APS/EPSS/ESHS/PIB Joint Subcommittee Meeting

MEETING SUBCOMMITTEES & MISSION AREAS

Click on the Mission Area of interest in the chart below to jump to that section in this Call for Papers.

Mission Area	CS	APS	EPSS	ESHS
I	Ignition and Combustion of Gun Propellants	Turbopropulsion	Plume / Wake / Hypersonic Flowfield Analysis	Thermal Decomposition and Cookoff
II	Solid Propellants and Combustion	Ramjet Propulsion	Plume / Wake / Hypersonic Radiation and Signatures	Shock / Impact-Induced Reactions
III	Explosive Performance / Enhanced Blast	Scramjet Propulsion	Plume / Wake / Hypersonic Effects	Insensitive Munitions Technology
IV	Airbreathing Combustion	Combined / Advanced Cycle Propulsion	Additional Plume / Wake / Hypersonic Topics	Combustion Vulnerability of Stowed Energetics
V	Combustion Diagnostics	Integrated Vehicle Design and Thermostructural Analysis	Composite Scene Signatures of Plume / Wake / Hypersonic Flowfield and Hardbody Configurations	Safety and Hazard Classification of Solid and Liquid Energetics
VI	Liquid, Hybrid and Novel Propellants Combustion	High-Speed Aerodynamics		Energetic Defect Characterization

COMBUSTION SUBCOMMITTEE

JHU WSE ERG Technical Representative

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The JANNAF 54th Combustion Subcommittee meeting will include sessions on chemical combustion phenomena occurring within the interior of guns and combustors of solid, liquid, and airbreathing (including small or expendable turbojets) missile and space propulsion systems. Papers are also invited that will aid in synthesizing, interpreting, and validating current knowledge to make research and development results more useful to design engineers.

Specific areas of interest are listed below:

Mission Area I:

Ignition and Combustion of Gun Propellants

Experimental and modeling studies of ignition, flame spreading, and combustion of solid propellants in guns, mortars and novel gas generators are considered. These studies include the investigation of ignition and ignitability, flame spreading, high-loading density charges, combustion temperature sensitivity, transient combustion (axial and radial pressure waves), and gun barrel erosion under high-pressure gun chamber conditions. Burn rate measurements and techniques, novel gun propelling charge concepts, interior ballistics of grain/stick/disk/consolidated and traveling charges are also considered. Innovative ignition systems and materials, novel chemical igniters and propellant formulations, experimental and analytical techniques to support the production of gun propellants and igniter materials, muzzle flash and blast, mechanical behavior and integrity of propellants in dynamic pressure wave environments, combustion behavior of thermally and mechanically damaged propellant, modeling and studies of surface-coated and deterred propellants, improved gun erosion and ballistic efficiencies through propellant chemical formulations and additive manufacturing are among the many topics included in this mission area. Papers on gun propellant ignition and combustion and propellant vulnerability will be considered for joint CS/ESHS sessions. Technical sessions will be organized as will specialist session that are aimed at discussing new and urgent topics (see below for a list of current topics).

Specialist Sessions

CHEETAH Users Group: As a follow-up to the CHEETAH workshop held at the 48th JANNAF CS Meeting in December 2017, the mission area chairs are soliciting technical presentations (presentation required but paper optional) that highlight applications of the CHEETAH model, observations and/or shortcomings of the model as documented by researchers, and extensions made or suggested to be made to the model for particular applications as performed by individual researchers. The organization of a CHEETAH specialist session will be based on the number of presentations received.

Advances in Gun Tube Erosion Analysis and Testing: A majority of the armed services are proposing extended range munitions that can provide battlefield overreach for lethality (range) and terminal effects (velocity). One of the pivotal issues in weapons systems development and maintenance is the material erosion of the gun tube after repeated use – this erosion is caused by both mechanical and chemical processes and is highly dependent on propellant thermo-chemistry. M&S as well as laboratory-scale testing is often used to investigate erosion, but the problem is very complex. We are soliciting technical presentations (presentation required but paper submission is optional) that highlight R&D in gun tube erosion, modeling and simulation as well as lab-scale and simulator testing and propellant characterization. Presentations that address the problem in broad terms as well as those that investigate root causes are equally encouraged. It is planned to solicit the participation of subject matter experts (SMEs) in gun tube erosion from all of the services. The organization of a Gun Tube Erosion Analysis and Testing specialist session will be based on the availability of the SME's and the number of presentations received.

Gun Propellant Burnrate Determination: As a follow-up to the JANNAF Closed Bomb Round Robin (1982) and subsequent JANNAF Closed Bomb workshops (1998, 2005, 2010) the mission area chairs are soliciting technical presentations (presentation required but paper optional) that highlight new technologies, techniques, and facilities for gun propellant burn rate measurement over a wide range of pressures. Previous JANNAF workshops (reports available from the JDOC database and/or the area chairs) have addressed many of the topics for Closed Bombs (CBs) that require to be updated given new challenges we face in layered, deterred, surface-coated, and additively manufactured gun propellants. In addition, the science of felted-fiber NC combustible cartridge cases has not been fully revealed while at the same time new materials for munition cases such as foamed celluloid are arising. Much of the community is starting to rely upon strand burners (SB) as a replacement for the CB, and so arises the question of SB applicability, confluence, and overlap considering CB facilities (i.e., pressure range). The relative ease at which SB samples are prepared and data (including visual) is taken considering pressure range restrictions and/or overlap with CBs is likely to be a popular topic. The organization of a Gun Propellant Burnrate Determination specialist session will be based on the number of presentations received.

Mission Area II:

Solid Propellants and Combustion

Experiment and theoretical studies of solid propellants and their key ingredients are considered in this mission area. These studies can be related to the specific topics listed below.

- **Decomposition, Ignition, Kinetics, Combustion, and Extinguishment of Ingredients and Solid Rocket Propellants:** Decomposition of ingredients and propellants (including kinetics, mechanisms, microstructure, and thermochemistry of thermal decomposition); ignition of ingredients and propellants (including ignition mechanisms, ignition transients, igniter designs, especially smokeless igniters, and new problems associated with ignition); combustion of ingredients and propellants (including burn rate, pressure exponent and temperature sensitivity, understanding the microstructural combustion zone structure, chemistry, and heat release, effect of motor environment, including spin on combustion, transient burning, combustion of fuel rich propellants, analytical modeling including detailed kinetics studies); hazard initiation of propellants (including inadvertent ignition and effects of high burn rate); methods of extinguishing propellants and implementing thrust termination are considered. Of special interest is how these processes are related to new energetic ingredients and how this knowledge may be used to design new propellants that meet more demanding performance, insensitive munitions, and life cycle requirements. Papers on thermal decomposition ignition and combustion will be considered for joint CS/ESHS sessions.
- **Failure Analysis of Solid Rocket Motors:** Combustion analyses including ignition, flame propagation, burning in cracks and defects, burnback, and flow behavior in support of accident investigations and failure analyses of solid rocket motors are considered. Papers in this area will be considered for joint CS/ESHS sessions.
- **Solid Rocket Propellant Combustion Instability:** Experimental and analytical advancements are considered. Specific topics of interest include: combustion response of low smoke propellants; velocity coupled instability; nonlinear instability; instability at high pressures; motor pulsing; mean flow and acoustics interactions; L^* instability; high frequency instability in low smoke motors; combustion response function measurement techniques; and analytical methods for predicting propellant response functions and motor stability.
- **Metal Combustion:** Behavior of metallic ingredients with special emphasis on nano-particle metals in solid rocket motors is sought. Individual areas of interest include: ignition and burning rate of metal particles or droplets; metal combustion in high density propellants; effects of metal combustion on motor stability and performance; particle phase and size change phenomena; surface melt, agglomeration, and filigree formation; metal combustion in fuel-rich propellants and metal combustion in propellants without ammonium perchlorate; and methods for obtaining in situ particle size measurements.
- **Combustion, Prediction, Performance, and Other Topics in Solid Rocket Motor Behavior:** Combustion related motor behavior and the application of analytical models, experimental research, and subscale testing to their solution are considered. Areas of interest include: methodology for standardizing experimental measurements,

measurement uncertainties, analytical prediction, computer code verification, correlation, extrapolation, and flight confirmation of performance of solid and liquid rocket, missile and space propulsion systems. Papers on grain design and ballistic modeling are also sought. Behavior in conventional ballistic, tactical, low smoke, controllable, spin-stabilized, ducted, nozzleless motors and gas generators are appropriate subjects for presentation, as are methods for calculating combustion chamber flowfields and their interaction with the motor structural components.

Specialist Session

Joint EPSS/CS Tutorial on Chemical Kinetics: Chemical Kinetics are fundamental to combustion processes that occur within rocket engines, solid rocket motors, air-breathing missiles, and the exhaust plumes they produce. The correct understanding of chemical kinetic mechanisms is essential to accurately predict and characterize combustion performance, energy release, thrust produced, and observable product species. However, discerning the chemical species, reaction mechanisms, and reaction rates that comprise the kinetic mechanism for a given set of propellant reactants is a complex activity that requires the complementary application of computational chemistry techniques and experimental measurements. This tutorial session is intended to present the recent application of computational and experimental methods to determine new or updated chemical kinetic mechanisms of propellants of current interest to the signatures community. The presentations will be made in an open forum format to permit questions during each briefing so as to maximize information exchange and the edification of all attendees.

Mission Area III:

Explosive Performance / Enhanced Blast

Investigations related to detonation and blast performance are sought. Topics ranging from detonation propagation, chemical species formed from the detonation, and combustion processes following the detonation are appropriate for this area. Experimental, theoretical, and computational studies are encouraged that address diverse subjects including; detonation properties, metal driving, enhanced blast, Chem/Bio defeat, target response, underwater blast, and blast protection.

Papers elucidating how new or existing energetic materials and/or novel munitions designs can be exploited are of interest. New experimental techniques, advanced diagnostics and new modeling capabilities that are applicable to the dynamic conditions inherent in detonation events are of interest to this community. Reports of propellant technologies that are applicable to explosive performance are also encouraged.

Of particular interest to this mission area are enhanced blast technologies. Investigations of combustion of detonation products, added fuels, and reactive material dispersal for enhancing blast effects in open-air and various confined structures are sought. Targets of interest include tunnels, caves, multi-room structures, and blast chambers. Papers reporting experimental, theoretical, and computational efforts specifically geared toward understanding the non-ideal, post-detonation energy release phenomena are requested. Papers concerning enhanced blast technologies that exploit novel explosive formulations, non-detonative energetic materials, and munitions designs are of interest.

Specialist Session

High Fidelity Modeling of Reactive Materials: The development of predictive modeling capabilities is required to assess performance and design reactive material (RM) formulations that have the desired chemical and physical properties. Models include continuum mechanics-based predictive code (with input from atomistic and mesoscale submodels) with parameters derived from experimental data obtained from measurements of constitutive behavior as a function of strain, strain rate. The mission area chairs are soliciting technical presentations (presentation required but paper optional) that highlight high fidelity modeling efforts focused on the linkage between mechanical properties and energy release phenomenology of RM. The organization of a Reactive Materials specialist session will be based on the number of presentations received.

Mission Area IV:

Airbreathing Combustion

Theoretical and experimental investigations of subsonic, supersonic, and hypersonic combustion phenomena for airbreathing systems (including small or expendable turbojet engines) are considered. Specific topics of interest include: analytical and experimental, including computational fluid dynamics (CFD), determination of combustor flowfield characteristics; connected-pipe testing, freejet testing, and scaling analyses to free-flight conditions; experiments and analyses relating to ignition, mixing and combustion in liquid-fuel, gel/slurry-fuel, and solid-fuel ramjets, gas generator (ducted rocket) combustors, scramjets, and combined cycle engines; the use of ignition and combustion enhancement techniques; studies of liquid and gel/slurry fuel injection, spray formation, vaporization, and combustion processes; the measurement and analysis of combustion instability phenomena; investigation of the formulation, properties, and combustion of high energy-density single- and multi-phase fuels, including boron and other metal-burning slurries and gels; fundamental investigations of airbreathing combustion. Papers in this area will be considered for joint CS/APS sessions.

Mission Area V:

Combustion Diagnostics

This area seeks to bring together the non-intrusive flow field diagnostics and CFD communities to create an interaction beneficial to both. Papers are sought from the flow field diagnostics community on the development and implementation of new or existing instrumentation relevant to any combustion problem. Emphasis is placed on methods producing data required for code verification. Similar papers are sought from the computational community emphasizing measurement needs and uncertainties required for verification of existing CFD codes. This interaction is expected to result in development of new instrumentation for combustion research, methods designed specifically for high confidence measurements of critical CFD parameters, and new approaches for creating computational models.

Specialist Session

Enhancing Synergy between Flowfield Diagnostics and Computational Modeling: We envision hosting a specialist session which will focus on the benefits of, and desire for, enhancing synergy between flowfield diagnostics and computational modeling. The relationship between diagnostics and modeling is inherently symbiotic. However, we see a gap in communication between the two communities. Developers of diagnostics need to better understand what modelers require (and to what fidelity) to provide useful data. Modelers need to better understand what flowfield diagnostics can offer currently, and how they might be further developed to provide greater value.

We view participation from both the flowfield diagnostics and modeling communities as key, and therefore anticipate inviting speakers representing both communities and advertising the session to attract the targeted audiences. From a diagnostics perspective, practitioners of non-intrusive on-body and off-body diagnostics would be targeted, but not exclusively. Also, although part of the Combustion Subcommittee, we envision this session representing and attracting diagnosticians and modelers across the broader community including combustion/pulsation, aerodynamics, and structural disciplines.

For the upcoming meeting, we wish to stimulate discussions on the use of Artificial Intelligence (AI) in expanding the efficiency and aggressiveness in the application of combustion diagnostics as well as computational modeling. We call for papers describing early plans and/or applications of AI in these two areas. Notionally, we aspire to create a session of papers/presentations followed by a structured conversation on the subject.

Mission Area VI:

Liquid, Hybrid and Novel Propellants Combustion

This topic area solicits summaries of work planned, underway, or completed to support state of the art and emerging propellant formulation development for evolving, non-traditional mission applications as well as traditional applications. Primary applications of interest are in aerospace propulsion, but would also include primary or auxiliary power system application developments reliant upon rapid gas generation.

- **Combustion Dynamics of Liquid and Gaseous Rocket Propellants:** Theoretical and experimental studies of steady and unsteady combustion phenomena in propulsion systems using liquid or gaseous propellants are considered. Areas of interest include: transient system or process analysis; characterization of the physical and chemical processes involved in combustion; performance, heat transfer, and cooling prediction methods for subcomponents, components, and assemblies including CFD approaches; stability prediction models; development and application of new instrumentation techniques applicable to spray characterization and measurement of species characteristics such as type, distribution, temperature, droplet velocity and evolution to vapor, etc.; subsystem effects on stability; feedback control, or other adaptive methods of stabilizing liquid engines; stability rating techniques; and validity of subscale stability studies.
- **Combustion Dynamics of Monopropellant, Bipropellant, and Hybrid Propulsion Systems:** Theoretical and experimental studies of steady, unsteady, transition from transient to steady state, and multi-phase combustion phenomena in propulsion systems using liquid monopropellants and bipropellants, liquid oxidizers and solid fuels are considered. Areas of interest include injection, mixing, analytical models of fuel regression rate, chemical kinetics of combustion, ignition system design, and simulation of combustor flows including in applications where these propellants are phase change to gaseous form useable by electric propulsion devices.
- **Combustion Dynamics of Hydrogen Peroxide (HP):** Theoretical and experimental studies of combustion phenomena in propulsion systems using HP are considered. Areas of interest include: effect of stabilizers and additives on longevity and reactivity of HP; development of advanced catalysts and catalytic devices for HP decomposition; chemical kinetics of catalysis; direct energy conversion including fuel cells, thermionics, and thermoelectrics; containment strategies mitigating decomposition over time using advanced materials; manufacture and chemical enrichment of HP; and historical usage of HP in propulsion applications.
- **Combustion for Underwater Propulsion:** Theoretical and experimental studies, numerical modeling, and simulation of steady and unsteady combustion phenomena in propulsion systems for underwater vehicles are considered. Topics of interest include but are not limited to: experimental determination and numerical simulation of combustor flows; underexpanded reacting jets and their mixing, entrainment, and transport characteristics; transients in combustion processes (e.g., kinetics, ignition, quenching, acoustic oscillations in jets, reverse shocks, coherent turbulent structures in fuel-product baths); experimental studies of non- or slowly-reacting similarity systems; combustion similitude, model development, and verification; radiation and other heat transfer effects; behavior of multiphase and multiple, immiscible liquid-phase constituents in combustors; shock, turbulent mixing, and chemical kinetics interactions; and diagnostic measurements, simulation, and combustion instrumentation for underwater propulsion systems.
- **Areas of specific community interest:** Based upon the Combustion Town Hall Meeting held during the December 2017 JANNAF Conference, this Mission Area anticipates papers on the following topics: green monopropellant ignition and thruster scaling; MON25 thruster performance and stability; MON30/hybrid performance and stability; density-specific impulse increase of green monopropellants; results from the Air Force Research Laboratory Broad Agency Announcement for green monopropellant thrusters; green hypergolic performance and stability; and multi-mode applications.

Specialist Session

The Role of Metadata Approaches in the Advancement of Combustion Applications: Experimental chemical kinetics studies in combustion are of foundational importance, wherein discrete findings may be rationalized using modern ab initio quantum chemical, numerical molecular dynamics, or computational fluid dynamics simulations/

theories, and/or other approaches to advance combustion models that cover a wide range of conditions. We are interested in metadata approaches that enrich the utilization of such 'basic' data, with information, which makes it easier to find, use and manage the entire scope of the relevant data domain, so that rapid advancement and fielding of combustion devices can happen.

In this Specialist Session, any area of the work that pertains to the above description will be considered for presentation.



AIRBREATHING PROPULSION SUBCOMMITTEE

JHU WSE ERG Technical Representative

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The Airbreathing Propulsion Subcommittee (APS) addresses technical problems and issues associated with turbojet, ramjet, scramjet, and combined- or mixed-cycle engines.

The JANNAF 42nd Airbreathing Propulsion Subcommittee sessions will discuss technical problems and issues associated with airbreathing propulsion systems for applications to missiles, launch vehicles, aerospace planes, and remotely piloted vehicles. These include technology, components, and engines within the turbojet, ramjet, scramjet, and combined cycle families. Session topics may include characterization of system performance, engine cycle analysis and testing, engine design, engine/airframe integration, thermal management, fluid and structural mechanics, advanced engine structures and materials, fuel control systems, and characterization of advanced airbreathing fuels. **Topics to highlight:**

Mission Area I:

Turbopropulsion

Subsonic and supersonic aviation applications of turbopropulsion. Specific areas of interest include, but are not limited to: novel cycles and architectures, performance and operability, system-level integration and performance, fuels, aero-thermal structural design and analysis, materials and manufacturing, controls, thermal management, component and system test (on the ground or in flight), and mission performance. Non-aviation turbomachinery papers of interest and application to the broader JANNAF mission will also be considered.

Mission Area II:

Ramjet Propulsion

Ramjets: Papers describing either experimental or theoretical studies related to solid, liquid, and gaseous (ducted rocket) fueled ramjet systems or the constituents thereof are welcome. Authors are welcome to submit papers addressing ramjet and ducted rocket technologies at the component, section, or system level. By example, topics at the component level include techniques for mixing enhancement, active and passive control, plume signature reduction, instability, and testing techniques. Papers describing modeling and simulation studies of ramjets or their subcomponents are encouraged. Fuel development for air-breathing applications continues to be an active area of research within the ramjet propulsion mission area.

Mode Transition: Papers that address mode transition either to or from that of conventional ramjet operation, e.g., boost to conventional ramjet or subsonic to supersonic combustion are welcome. Papers should emphasize the technology that assists in this transition.

Technologies with a Ramjet Application: Authors are encouraged to submit papers that address technologies applicable to ramjet systems, e.g., manufacturing technologies and fabrication techniques, etc. Papers need not be associated with a particular system but should be applicable to materials associated with such vehicles and their corresponding flight environment.

Mission Area III: Scramjet Propulsion

Fundamental and Applied Technology for integrated dual-mode and supersonic-combustion scramjets, components, and subsystems:

- Numerical methods for design, analysis, optimization, uncertainty quantification, and performance assessment, to include CFD, cycle analysis codes, and empirical methodologies.
- Experimental ground and flight tests of scramjet propulsion systems, test facilities and/or infrastructure, including test techniques and advanced measurement systems.
- Techniques and methodologies addressing propulsion system controls, thermal management and their impacts on scramjet operability and performance.

Some papers in this area will be considered for joint APS/CS sessions.

Specialist Session

Hypersonic R&D Overview: Abstracts are requested for an overview session reviewing current activities in hypersonic R&D. Technical papers are not required but may be submitted in addition to the presentations.

Mission Area IV: Combined / Advanced Cycle Propulsion

Fundamental and Applied Technology: Combined and advanced cycle airbreathing propulsion and engine controls technology and systems. Of particular interest is numerical and experimental research regarding: 1) Aerodynamic, thermodynamic, and structural integration of multiple propulsive cycles and the manner of mode transition between cycles; 2) Methods of broadening the flight Mach number range of gas turbine and dual-mode ramjet cycles to facilitate mode transition; 3) Exploration of airbreathing cycles other than the Brayton cycle; and 4) System-level evaluations to include the choice of fuels, propulsion-airframe integration, and payoff assessments. Papers in this mission area will be considered for joint APS/CS sessions.

Mission Area V: Integrated Vehicle Design and Thermostructural Analysis

Topics of interest are on integrated vehicle-level design and thermostructural sciences at the component and vehicle level. Broad subtopics of interest include, but are not limited to: vehicle designs, performance, trades, and mission applications; design methodologies, tools thereof, and demonstrative case studies; systems integration, subsystem design, and trade studies; thermal-structural management and integration of components at the system or vehicle level, modeling, analysis, or experimentation of systems ranging from the vehicle to component level; modeling, analysis, and empirical studies on structural service life, high- and low-cycle fatigue, damage, crack initiation, and crack growth. Content is specifically requested on high-speed airbreathing system design; however, content on non-airbreathing high-speed vehicles is also welcome. Papers, specialist sessions, and workshops on the following topics are solicited:

- **Multidisciplinary Analysis and Design Optimization:** Non-deterministic design approaches, shape optimization, open design framework development, sensitivity or uncertainty analysis, metamodeling, and advances in analysis methods or approaches to reduce design-cycle time or improve modeling earlier in the design process. Integrated vehicle or subcomponent design optimization and analysis approaches that focus on improving vehicle-level performance in a multidisciplinary framework are highly encouraged.
- **Structural Concepts and Airframe/Engine Integration:** Structural technologies for enhancing and enabling current and future airbreathing propulsion concepts and systems. Topics of interest include, but are not limited to: Thermal Protection Systems and hot structures; structural solutions and technologies related to thermal management, including actively and passively cooled leading-edge concepts; general design and analysis methods; considerations for structural joints and seals, specifically for multi-material interfaces. Papers are specifically requested which focus upon airframe/engine integration concepts and techniques from a system-level perspective.
- **Material Development, Fabrication and Manufacturability:** Advancements in manufacturing technologies and fabrication techniques for materials and components relevant to the high-speed aerothermal environment; the material or manufacturing process need not be associated with a particular high-speed vehicle. Content on the additive manufacturing applicable to scramjets is particularly encouraged. Discussions addressing material characterization should make specific reference to intended use cases within a relevant structural concept or component, challenges associated with the eventual integration into a structural system and anticipated thermal and mechanical loading conditions under intended operating conditions. Discussion of novel materials or manufacturing methods incorporated in recent, current, or upcoming high-speed flight vehicles are encouraged.
- **Multi-Physics Analysis and Experimentation:** Content is requested which emphasizes numerical frameworks or experimental investigations of compliant structures operating in extreme environments with respect to both aerothermal and aeromechanical loading conditions. Discussions addressing the challenges arising from integration of a structural component into a structural system are encouraged. Content is sought which addresses the coupled interactions between structural deformations and a relevant loading environment (i.e., Fluid Thermal Structural Interaction). Additionally, discussions addressing thermal implications (e.g., thermal pathways, coupling, mitigation, etc.) of systems or subsystems with one another or at the vehicle level are encouraged. Specific focus should be on the impact of the multi-physics interactions on vehicle performance with respect to specific criteria, such as trajectory or mission requirements (maximum Mach, sustainable Mach, range, thrust, etc.) or strength and serviceability requirements and useable service life.
- **High-Temperature and Extreme Environments:** Content is sought which address innovative modeling, analysis, and testing or experimental techniques for use in high-temperature or otherwise extreme environments relevant to hypersonic vehicles. Of specific interest are non-contacting, full-field data acquisition techniques which can be developed and utilized for the generation of validation-quality data sets for this challenging class of problems. Techniques for use in laboratory settings, ground test facilities, as well as those which can potentially be included on flight test vehicles are encouraged.
- **Service Life and Durability:** Content is sought which estimates the service life of a thermal-structural component or whole-vehicle structure. Discussion can include the following topics and related matter relevant to high-speed vehicles: high- and low-cycle fatigue effects; plasticity, creep, other non-linear effects unique to the thermally-driven hypersonic environment, and their interactions; crack growth, crack initiation, or other material discontinuities. Studies derived from numerical, analytical, empirical work, or combinations thereof, are solicited.

Mission Area VI:

High-Speed Aerodynamics

Papers are requested covering numerical, experimental and/or flight test efforts focusing on the aerodynamics and aerothermodynamics related to high-speed airbreathing systems, as well as the vehicle's response to loads. Specific topics of interest include, but are not limited to, aerodynamic coupling with the airbreathing propulsion system, the effect of modeling considerations (e.g., chemistry, transition, and turbulence), aerosciences validation and uncertainty quantification, ground test efforts, and aerodynamic-propulsion effects on control surface performance. Additionally, efforts focusing on multi-disciplinary analyses of the aerothermodynamic environment together with vehicle's structural and/or thermal response are welcome.

EXHAUST PLUMES AND SIGNATURES SUBCOMMITTEE

JHU WSE ERG Technical Representative

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The 42nd JANNAF Exhaust Plume and Signatures Subcommittee meeting will include sessions on phenomena associated with exhaust plumes from rockets, ramjets, space, and gun propulsion systems as well as wakes and hypersonic flows. These phenomena can be divided into three technical areas: plume/wake/hypersonic flowfields, plume/wake/hypersonic signatures (to include electro-optical [EO], infrared [IR], and radio frequency [RF] radiation), and a broad area incorporating other plume/wake/hypersonic effects.

In addition, the EPSS Signatures panel promotes technical interchange among members of the Electro-Optical/Infrared (EO/IR) aircraft/missile signature community from both government and industry.

Instructional Tutorial(s) are solicited. These instructional tutorials are intended to provide the opportunity for each community member to obtain an advanced technical understanding of plume/wake/hypersonic flowfield and signature phenomenology from experts in the field. Each tutorial should be related to a topic listed below. Tutorials should focus on a specific phenomenon or algorithm, provide clear technical instruction, be informative, and carry an academic tone. Tutorials should be limited to two hours or less. Please communicate your interest. **Mission areas and suggested paper topics are listed below.**

Mission Area I:

Plume / Wake / Hypersonic Flowfield Analysis

Papers submitted should be concerned with basic definitions of nozzle and exhaust plume flow fields as well as wake and hypersonic flows. Solid propellant, liquid rocket, and ramjet exhaust plumes will be considered. In addition, plume/wake/hypersonic flow fields at all altitudes will be addressed. Some typical problem areas relating to low/mid-altitude exhaust plumes include external aerodynamic-plume interaction, combustion, turbulent mixing and afterburning, two-phase flow, multi-engine base flow, radiant heating, and oxidizer/fuel gradients. Typical high altitude vacuum plume problems include non-continuum flow, nozzle boundary layer expansion, and condensation. Wake and hypersonic flow problems of interest include ablation mechanisms, flow field modifications caused by outer mold line shape changes due to ablation, and aerothermal heating.

Mission Area II:

Plume / Wake / Hypersonic Radiation and Signatures

Papers are solicited which describe or highlight the following: recent achievements in plume/wake/hypersonic radiation and signatures (to include the EO/IR and RF regimes); plume/wake/hypersonic radiation and signatures related to the generation of vehicle design environments; detection, surveillance, and identification; advancement of theoretical prediction methods; experimental techniques; results of ground and flight measurements; interpretation and correlation of data; any portion of the electro-magnetic spectrum from ultraviolet through longwave infrared to radio frequency (RF) regimes; plume/wake/hypersonic radiation interactions with hardbodies in the RF portion of the spectrum; propulsion systems of all types in terms of thrust level, propellants used, application, and operating altitude; the effects of atmospheric species reacting with chemical constituents in plume/wake/hypersonic flows; plumes in a vacuum; and the effects of atmospheric species on EO/IR/RF signal/signature propagation between an object of interest and an observer.

Mission Area III:

Plume / Wake / Hypersonic Effects

Papers are sought that address the experimental and theoretical characterization of exhaust plume and wake properties as well as their effects such as: impingement pressures and heating for low/high altitude spacecraft vehicle applications, the generation of plume contaminants, the effects of such contamination on vehicle surfaces, and the measurement of plume/wake chemical species concentrations in hypersonic flowfields. Also of interest are papers concerned with convective/radiative base heating due to multi-engine plume interactions.

Mission Area IV:

Additional Plume / Wake / Hypersonic Topics

Other papers dealing with plume/wake/hypersonic flowfield and signature phenomenology and technology that are not covered by the aforementioned areas are invited.

Mission Area V:

Composite Scene Signatures of Plume / Wake / Hypersonic Flowfield and Hardbody Configurations

Papers are solicited for the following topics related to composite scene signatures: EO/IR target signature phenomenology; EO/IR atmospheric transmission/radiation phenomenology and modeling; EO/IR signature target measurements; SPIRITS, FLITES and other signature composite scene codes; SPIRITS target modules; model development and improvements; validation and calibration; applications of signature and scene generation tools to acquisition programs, signature reduction, and operational applications.



ENERGETIC SYSTEMS HAZARDS SUBCOMMITTEE

JHU WSE ERG Technical Representative

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The Energetic Systems Hazards Subcommittee (ESHS) is concerned with hazards associated with energetic systems and how these vulnerabilities might degrade system performance and lethality. Included in this scope are hazard analyses for tactical and strategic missiles; small, medium, and large caliber gun systems; solid and liquid propellant systems; hazards encountered during loading and firing operations; and key technology areas identified from hazard analyses. Additionally, ESHS is involved with the development, standardization and application of meaningful computational/experimental methods for assessing vulnerability and performance of the energetic materials found in propulsion systems and munitions. Finally, the subcommittee is concerned with the identification and solution development for interagency problems associated with energetic system vulnerability and performance, the coordination of interagency sponsored programs, the establishment of nomenclature, and the promotion of technical information and data exchange.

The 36th ESHS meeting will address hazards and related technology areas for energetic materials (including propellants, explosives, and pyrotechnics) found in warheads and propulsion systems of munitions. Topics of interest include the identification of potential hazards to energetic systems, the application of meaningful computational /

experimental methods for assessing hazard risk, the determination of important hazard technology areas, and the development and standardization of computational/experimental methods for minimizing/mitigating the risk of hazards in relevant systems. Papers are invited that (a) address any aspect of vulnerability and survivability, loading and firing hazards of propulsion systems, and weapon systems safety; or (b) aid in synthesizing, interpreting, and validating current knowledge to make research and development results more useful to the design engineer. Meeting topics generally fall into one of two groups: (1) hazards evaluation or (2) hazards mitigation technology. **Mission areas and suggested paper topics are listed below.**

Mission Area I:

Thermal Decomposition and Cookoff

Mission Area I addresses hazards associated with thermal decomposition and cookoff of energetic materials, ammunition, munitions, and rocket motors.

- **Thermal Decomposition, Ignition, and Combustion:** Fundamental experimental and modeling studies of thermal decomposition of reactive materials including EM ingredients and formulations; changes in reactivity from autocatalytic, self-heating and confinement effects; thermal ignition of EMs; and combustion of EMs in off-design scenarios. Papers in this area may be considered for joint ESHS/CS sessions.
- **Thermally-Induced Damage Effects:** Research related to thermally-induced damage with the potential to produce changes in burning rate and material sensitivity with implications for both safety and performance. Studies of the creation, measurement, and assessment of thermal damage in EMs and the associated safety and/or performance effects are encouraged. Papers in this area may be considered for joint ESHS/CS sessions.
- **Cookoff Hazards Assessment and Mitigation:** Cookoff response of energetics systems and components; cookoff mitigation technologies; threat/hazards assessment (THA) of cookoff scenarios; relationships between THA and cookoff test procedures; small scale test methodologies for predicting cookoff of full scale systems; effects of heating rate on cookoff response.
- **Thermal and Combined Environments:** Hazards from thermal environments produced in operational and accident scenarios. This may include experimental and modeling studies of the environments themselves (e.g., aerothermal heating, fire, etc.) and the response of energetic systems (propellants, explosives) to those environments. Effects of combined mechanical/thermal environments produced by accident scenarios (e.g., crash-and-burn) and advanced delivery systems (e.g., g-force, vibration + aerothermal) are also of interest.

Mission Area II:

Shock / Impact-Induced Reactions

Mission Area II is focused on chemical reactions in energetic materials resulting from either strong or weak impacts. These chemical reactions may result in a detonative response (e.g., a shock-to-detonation transition [SDT]) or a sub-detonative event (e.g., deflagration).

- **Energetic Materials Testing:** The development and use of shock sensitivity tests such as gap testing, as well as material characterization experiments (e.g., gas gun experiments and wedge tests).
- **Modeling and Simulation:** In addition to energetic material testing, topics related to model development and simulations used for predicting the energetic material's response to stimulus and impact.
- **System Performance and Lethality:** Finally, system performance and lethality data necessary for model validation and improved characterization of energetic impact events are of interest

Mission Area III:

Insensitive Munitions Technology

Mission Area III supports advances in technologies to reduce or eliminate violent response by a munition when exposed to unintentional stimuli, such as fast or slow heating, bullet or fragment impact, or shaped charge jet impact.

- **IM Technology:** Historical reviews of prior IM technology developments and lessons learned from integration into munitions, ongoing development efforts both general and specific to systems/munitions, design and functional details of passive and active mitigation concept, results of IM and Safety testing of components and complete systems, and evaluation of the relationship between small-scale and full-scale testing.
- **Emerging Issues:** New IM concepts, design trade-off studies, novel computational methods, leveraging different computational methodologies for RDT&E, new and emerging threats, new and/or revised experimental test and evaluation methodologies/analyses, updates to the NATO IM Portfolio, and harmonization of tests/analyses such as the new Insensitive Munitions – Hazard Classification (IM-HC) AOP-4864.

Mission Area IV:

Combustion Vulnerability of Stowed Energetics

Mission Area IV focuses on the response of onboard energetic materials – including fuels, batteries, refrigerants, and stowed munitions – to an ignition source (e.g., shaped charge jet).

- **Stowed Energetic Response:** Detonation, deflagration, or detonation to deflagration (DDT) reactions or burning of any vehicle based energetic system (i.e., fuels used for propulsion, hydraulic oils, lubricants, stowed propellants and ammunition, Li-ion batteries, refrigerants, etc.) when subjected to an ignition source.
- **Experiment Methodologies:** Data collection, analysis and results and modeling and simulation, included but not limited to vulnerabilities to vehicle platforms and mitigation solutions, sympathetic detonation, response of vehicle energetics to overmatching ballistic threats, and characterization of non-conventional energetic materials.

Mission Area V:

Safety and Hazard Classification of Solid and Liquid Energetics

Mission Area V addresses explosives safety siting and hazard classification for DoD ammunition and explosives, small arms, CAD/PAD, rocket motors, warheads, bombs, energetic liquids, and any system that contains energetic materials:

- **Propulsion Systems Safety and Hazard Classification:** Harmonization of hazard classification and insensitive munitions testing, issues identified by the service safety offices, hazard classification issues, differences between insensitive munitions and hazard classification and safety testing and standardization, assessment of response and pass/fail criteria, alternate test protocols and the role of small scale to full scale testing and hazard classification, and miscellaneous safety issues and programs.
- **Hazard Classification of Large Solid Rocket Motors:** Test methods/procedures, analysis techniques, experimental data and computer simulation results related to the assessment of hazard response of large solid rocket motors for hazard classification purposes. In particular, papers covering three hazard scenarios are of interest, including: (1) detonation/explosive reaction characteristics of various propellant families subjected to explosive shocks, for example critical diameter, shock sensitivity, and the relationship between the two parameters; (2) response of large SRMs in an engulfing fire or fast cookoff scenario; and (3) criteria and effects of propellant damage on hazard response of large SRMs in impact and other accident scenarios.
- **Energetic Liquids, Hypergolics and Gels:** The Department of Defense Explosives Safety Board establishes criteria for the hazard classification and siting of energetic liquids, hypergolics and gels DESR 6055.09. These criteria were last updated in the late 1990s. Current space initiatives require new energetic materials and

new combinations of existing materials. These materials in new configurations require improved/new tests and methods for hazard classification. They also require approaches for siting a variety of configurations, concentrations, purity, etc. Alternative test methods, the role of small scale to full scale testing for hazard classification, modeling and miscellaneous safety issues need to be determined and evaluated.

Mission Area VI:

Energetic Defect Characterization

Mission Area VI supports ongoing work in the energetics community performed by the DoD, DOE, and others to evaluate and predict the effects of defected energetic materials in extreme environments such as launch, hypersonic flight, and target impact.

- **Defect Parameterization and Criticality Deduction:** Defect detection and determination; munition and energetics inspection; X-Ray and XCT SOPs and specifications; characterization of defects by type, parameter, and location.
- **Testing and Evaluation:** New/novel experimental methodologies, SOPs, and equipment; new/novel computational methodologies, codes, and software; applicable sub-scale evaluation techniques for defect characterization; time scales and granularity of defect parameter analyses.



PROGRAMMATIC AND INDUSTRIAL BASE

JHU WSE ERG Technical Representative

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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 (RPIB) rationalization opportunities; special actions from senior agency, department, or Executive Office of the President (EOP) leadership; and information provided to decision makers for either situational awareness or policy decisions.

POSTER SESSION INFORMATION

For the December 2026 Meeting, abstracts for poster presentations may be submitted by any interested author, including those considered Early Career professionals. The poster session will take place on **Tuesday, 8 December** at the Hampton Roads Convention Center and will be open to all meeting attendees. All Posters must be unclassified and suitable for public release or approved for presentation at distribution statement C/CUI/FEDCON. Authors of abstracts selected for Poster presentations have the option of providing a paper.

Early Career Posters

JANNAF is interested in offering more opportunities for Early Career Propulsion and Energetics Professionals to engage with one another and the overall JANNAF community. In order to be considered an Early Career Professional, at least one of the following criteria must apply to you:

- A student
- Working in the field for less than five years
- Have obtained your Doctorate within the last five years

If you meet the above criteria of an Early Career professional, you are eligible to submit a poster abstract for any of the subcommittees listed on pages 8-20. When submitting, choose “Early Career Poster” in place of selecting a Mission Area within your preferred subcommittee.

General Posters

Authors interested in presenting a Poster who do not meet the JANNAF definition of Early Career have the option of selecting “General Poster” in lieu of choosing a Mission Area when submitting an abstract. The preferred subcommittee must first be selected so that the identified subcommittee is assigned the Poster abstract for review.

Visit the [Poster Information page](#) for additional details.



Photo released by Darrell Ames, Program Executive Office Missiles and Space

WORKSHOPS/SPECIALIST SESSIONS

Recommendations for workshops or specialist sessions are solicited at this time. Individuals interested in organizing and chairing a workshop or specialist session should contact the JHU WSE ERG Technical Staff member in their respective subcommittee by the deadline of **Friday, 12 June 2026**.

Workshops

The JANNAF Workshop is reserved for bringing the community together to address a specific task or problem, the outcome of which is important and substantial enough to warrant the publication of a final report detailing the discussions, conclusions, and recommendations that resulted from the workshop.

To request a workshop you must submit a [Workshop Request Form](#) to your JHU WSE ERG Technical Representative (see pages 8 - 20 for contact information) or the JANNAF Meeting Planning Team at meetings@erg.jhu.edu. This form must be submitted to ERG by **Friday, 12 June 2026**. The agenda and invitation list is due **Friday, 28 August 2026** for inclusion in the Preliminary Program, and must be approved no later than **Friday, 9 October 2026** for inclusion in the Final Program.

Specialist Sessions

A JANNAF specialist session is an opportunity for experts in a specific technical area to meet to stimulate ideas and contributions from the audience. These sessions are dedicated to a single topic and often include invited presentations. The organization of these sessions is similar to a regular JANNAF paper session with time allocated to individual presentations; however, specialist sessions often include moderator led discussion periods or a question and answer session with expert panelists. Unlike a regular JANNAF paper session, the presentations from specialist sessions may or may not be published as part of the meeting proceedings. Publication can include an executive summary authored by the session chair if desired.

To request a Specialist Session for this JANNAF meeting, a [Specialist Session Request Form](#) must be submitted to JHU WSE ERG. This form requires a statement of justification for the Specialist Session along with a well thought out agenda. Requests will be reviewed by the designated JANNAF subcommittee TSG chair and ERG for approval; this approval is necessary for any Specialist Sessions to be included in the Final Program.

The deadline for submission of a Specialist Session request is **Friday, 12 June 2026**, and forms must include a draft agenda. In order for the draft agenda to be included in the Preliminary Program, all Invited Presentation details must be submitted online via the Abstract Submittal Site no later than **Friday, 28 August 2026**. To be included in the Final Program, the final agenda and online submission of all Invited Presentation details must be received no later than **Friday, 9 October 2026**. If you have any questions about planning a Specialist Session please contact your ERG Technical Liaison or the JANNAF Meeting Planning Team at meetings@erg.jhu.edu.

BEST STUDENT PAPER AWARD

The Best Student Paper Award will be given to an undergraduate or graduate student who authors a paper that exhibits excellence and significant merit. One paper will be selected to receive this award, which will be presented at the JANNAF meeting at which the paper is given. To be eligible for consideration, a student must be the paper's primary author. The paper and its signed and completed JANNAF Publication Clearance Form must be submitted to JHU WSE ERG by **Friday, 2 October 2026**. Please indicate within the abstract submission if you wish to be considered.

Student authors must conform to the same JANNAF eligibility requirements as other authors, per the policy on non-government attendees (see page 4), and are encouraged to work with their advisors to ensure they meet these requirements before registration opens. For student eligibility and participation questions, contact Mionna Sharp (msharp@erg.jhu.edu).

More information about JANNAF Awards can be found on pages 15-17 of the [JANNAF Technical Committee Manual](#).

UPCOMING JANNAF MEETINGS

**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**

1 - 4 June 2026

Pittsburgh, Pennsylvania

Visit the [June 2026 meeting website](#)

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

7 - 11 December 2026

Hampton, Virginia

Visit the [December 2026 meeting website](#)

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

Spring 2027

Location TBD