## JANNAF JPM / PIB / MSS / LPS / SPS 6 - 9 MAY 2024 SCHEDULE AT A GLANCE

This year's technical program currently consists of more than 250 presentations in 45 technical sessions; 5 specialist sessions; 2 workshops; and 6 panel meetings. A detailed daily schedule of all sessions, workshops, meetings, and networking activities is provided below and continues through page 4. Detailed agendas of the technical sessions, specialist sessions, and workshops (if available) are listed in the Program Section of the Preliminary Program beginning on page 21.

Please note that the agendas of 9 technical sessions begin with at least one presentation that is restricted at either distribution statement B (U.S. Government only) or D (DoD and DoD Contractors only). Sessions with at least one restricted presentation are indicated in the Schedule at a Glance below and through page 20 with "Open \*". Please review the detailed session agendas on pages 21 - 45 in the Preliminary Program for additional information about the restricted talks and who is eligible to attend them.

A Schedule Color Key has been provided on each of the following pages.

| SCHEDULE - Monday, 6 May  |  |   |   |               |      |  |  |
|---|--|---|---|---------------|------|--|--|
| 10:00 a.m 5:00 p.m.   | On-Si  | On-Site Check-In and Registration Desk Open 2nd Floor Foyer             |   |               |      |  |  |
| 10:00 a.m 5:00 p.m.   | I.T. O   | ffice Open  | (for Presenters and Session Chairs needing technical assistance)  | Frontier      | Open |  |  |
| 10:00 a.m 11:00 a.m.  | Netwo  | orking Area   | Refreshments  | One Broadway  | Open |  |  |
| 11:00 a.m 12:00 p.m.  | Early  | Career Wo   | rking Group Meeting   | Kiamichi      | Open |  |  |
| 12:00 p.m 1:30 p.m.   | Lunch  | Break - O   | n Your Own  |               |      |  |  |
| 12:45 p.m 1:00 p.m.   | Sessio   | Session Chair Meeting (Monday Sessions) Red Carpet Closed               |   |               |      |  |  |
| 1:30 p.m 24 Hours   | Virtua   | Virtual Reading Room (24/7 virtually with your own device) Virtual Open |   |               |      |  |  |
| 1:30 p.m 6:05 p.m.  | . Monday Afternoon Technical Sessions, Specialist Session, and Panel Meeting |   |   |               |      |  |  |
| 1:30 p.m 5:00 p.m.  | IP   | LPS   | SPECIALIST SESSION: Additive Manufacturing for Propulsion Systems | 18th Century  | Open |  |  |
| 1:30 p.m 5:05 p.m.  | IQ   | LPS   | Propellant Characterization and Performance - I                   | 19th Century  | Open |  |  |
| 1:30 p.m 4:35 p.m.  | IR   | SPS   | Nuclear Thermal Propulsion  | 20th Century  | Open |  |  |
| 1:30 p.m 3:05 p.m.  | IS   | JPM   | Solid Propellant Development and Evaluation                       | Plaza North   | Open |  |  |
| 1:30 p.m 3:35 p.m.  | ΙΤ   | IT LPS New Engine Concepts and Developments                             |   | Plaza South   | Open |  |  |
| 1:30 p.m 5:35 p.m.  | ΙU   | MSS System Level Modeling and Model Based Systems Engineering           |   | Green Country | Open |  |  |
| 5:35 p.m 6:05 p.m.  | ΙU   | MSS   | MSS PANEL MEETING: Model Based Engineering                        |               | Open |  |  |
| 1:30 p.m 4:35 p.m.  | IV   | IV SPS Small Satellite Propulsion - I Kiamichi Op                       |   | Open          |      |  |  |
| 3:05 p.m 4:05 p.m. Networking Area Refreshments One Broadway Open |  |   |   |               | Open |  |  |

| Schedule Color Key |  |  |                 |  |  |  |  |
|--------------------|--|--|-----------------|--|--|--|--|
|                    | Meeting Services Concurrent Sessions or Panel Meetings                           |  |                 |  |  |  |  |
|                    | Networking Opportunities   |  | Session Details |  |  |  |  |
|                    | Closed Meetings Panel Meetings   |  |                 |  |  |  |  |
| "Oper              | "Open *" indicates a session with at least one presentation restricted at B or D |  |                 |  |  |  |  |

| SCHEDULE - Tuesday, 7 May                     |  |             |   |                  |        |  |  |
|---|--|-------------|---|------------------|--------|--|--|
| 7:00 a.m 5:00 p.m.                            | On-Si  | te Check-I  | n and Registration Desk Open  | 2nd Floor Foyer  |        |  |  |
| 7:00 a.m 5:00 p.m.                            | I.T. O   | ffice Open  | Frontier  | Open             |        |  |  |
| 7:00 a.m 8:00 a.m.                            | Netwo  | orking Area | n Refreshments  | One Broadway     | Open   |  |  |
| 7:15 a.m 7:30 a.m.                            | Sessio   | n Chair Me  | eeting (Tuesday sessions)   | Red Carpet       | Closed |  |  |
| 8:00 a.m 10:00 a.m.                           | KEYN<br>Hunts  | NOTE ADD    | DRESS: Dr. Jonathan E. Jones - NASA Engineering and Safety Center, to be followed by Awards and Announcements | Century Ballroom | Open   |  |  |
| 24 hours                                      | Virtua   | al Reading  | Room (available 24/7 virtually with your own device)  | Virtual          | Open   |  |  |
| 9:30 a.m 10:00 a.m.                           | Netwo  | orking Area | n Refreshments  | One Broadway     | Open   |  |  |
| 10:00 a.m 5:00 p.m.                           | JANN   | AF Techni   | cal Executive Committee Meeting   | Great Plains     | Closed |  |  |
| 10:00 a.m 12:05 p.m.                          | Tues   | day Morn    | ing Technical Sessions, Specialist Session, and Panel Meeting   |                  |        |  |  |
| 10:00 a.m 12:05 p.m.                          | 2A   | LPS         | SPECLIAST SESSION: Rotating Detonation Rocket Engine Development Progress, Gaps, and Lessons Learned          | 18th Century     | Open   |  |  |
| 10:00 a.m 11:35 a.m.                          | 2C   | SPS         | Electric Propulsion Ground Facility Effects Research  | 20th Century     | Open   |  |  |
| 10:00 a.m 12:05 p.m.                          | 2D   | JPM         | Future Space Systems and Propulsion Components - I  | Plaza North      | Open   |  |  |
| 10:00 a.m 11:05 a.m.                          | 2E   | JPM         | Advanced Topics in Tactical Propulsion  | Plaza South      | Open   |  |  |
| 10:00 a.m 11:00 a.m.                          | 2F<br>Part I   | MSS         | SPECIALIST SESSION: MSS Plenary   | Green Country    | Open   |  |  |
| 11:00 a.m 11:35 a.m.                          | 2F<br>Part 2   | MSS         | Digital Engineering Processes   | Green Country    | Open   |  |  |
| 12:00 p.m 1:30 p.m. Lunch Break - On Your Own |  |             |   |                  |        |  |  |
| 1:30 p.m 6:05 p.m.                            | Tuesd  | lay Afterno | on Technical Sessions and Panel Meetings  |                  |        |  |  |
| 1:30 p.m 2:35 p.m.                            | 2P<br>Part I   | LPS         | Turbomachinery and Valve Design, Analysis, and Testing  | 18th Century     | Open   |  |  |
| 3:00 p.m 4:35 p.m.                            | 2P<br>Part 2   | LPS         | Propellant Tank Systems Design, Analysis, and Testing   | 18th Century     | Open   |  |  |
| 1:30 p.m 4:05 p.m.                            | 2Q   | LPS         | Propellant Characterization and Performance - II  | 19th Century     | Open   |  |  |
| 4:35 p.m 5:35 p.m.                            | 2Q   | LPS         | PANEL MEETING: Hydrocarbon Fuels  | 19th Century     | Open   |  |  |
| 1:30 p.m 6:05 p.m.                            | 2R   | SPS         | Electric Propulsion Subsystem Research and Development  | 20th Century     | Open * |  |  |
| I:30 p.m 4:35 p.m.                            | 2S   | JPM         | Future Space Systems and Propulsion Components - II   | Plaza North      | Open   |  |  |
| 1:30 p.m 5:05 p.m.                            | 2T   | LPS         | Propulsion-Induced Environments and Loads - Liftoff and Landing   | Plaza South      | Open   |  |  |
| 1:30 p.m 4:35 p.m.                            | 2U   | MSS         | Computational Modeling and Machine Learning   | Green Country    | Open * |  |  |
| 1:30 p.m 4:35 p.m.                            | 2V   | SPS         | Small Satellite Propulsion - II   | Kiamichi         | Open   |  |  |
| 5:05 p.m 6:05 p.m.                            | 2V   | SPS         | PANEL MEETING: Micropropulsion Technologies, Development Programs, Missions and Requirements                  | Kiamichi         | Open   |  |  |
| 3:05 p.m 4:05 p.m.                            | :05 p.m 4:05 p.m. Networking Area Refreshments Grand Ballroom C Open |             |   |                  |        |  |  |

| Schedule Color Key   |  |  |                 |  |  |  |  |  |
|--|--|--|-----------------|--|--|--|--|--|
|  | Meeting Services Concurrent Sessions or Panel Meetings |  |                 |  |  |  |  |  |
|  | Networking Opportunities                               |  | Session Details |  |  |  |  |  |
|  | Closed Meetings Panel Meetings                         |  |                 |  |  |  |  |  |
| "Open *" indicates a session with at least one presentation restricted at B or D |  |  |                 |  |  |  |  |  |

| SCHEDULE - Wednesday, 8 May |   |   |  |                 |        |  |  |
|-----------------------------|---|---|--|-----------------|--------|--|--|
| 7:00 a.m 5:00 p.m.          | On-Si   | te Check-I  | n and Registration Desk Open   | 2nd Floor Foyer |        |  |  |
| 7:00 a.m 5:00 p.m.          | I.T. O  | ffice Open  | (for Presenters and Session Chairs needing technical assistance)   | Frontier        | Open   |  |  |
| 7:00 a.m 8:00 a.m.          | Netwo   | orking Area   | n Refreshments   | One Broadway    | Open   |  |  |
| 7:15 a.m 7:30 a.m.          | Sessio  | n Chair M   | eeting (Wednesday sessions)  | Red Carpet      | Closed |  |  |
| 24 hours                    | Virtua  | al Reading  | Room (available 24/7 virtually with your own device)   | Virtual         | Open   |  |  |
| 8:00 a.m 12:10 p.m.         | Wedı  | Wednesday Morning Technical Sessions, Specialist Sessions, and Workshop |  |                 |        |  |  |
| 8:30 a.m 12:10 p.m.         | 3A  | PIB   | SPECIALIST SESSION: Space Access Mobility and Logistics  | 18th Century    | Open   |  |  |
| 8:00 a.m 9:35 a.m.          | 3B<br>Part I  | LPS   | Engine Production and Manufacturing Advancements   | 19th Century    | Open   |  |  |
| 10:00 a.m 11:35 a.m.        | 3B<br>Part 2  | LPS   | Additively Manufactured Component Development and Test   | 19th Century    | Open   |  |  |
| 8:00 a.m 12:05 p.m.         | 3C  | SPS   | WORKSHOP: Electric Propulsion Operation in the Space Environment and Facility Interactions VI (EPOSE VII) - I  | 20th Century    | Open   |  |  |
| 8:00 a.m 11:35 a.m.         | 3D  | JPM   | Sensors and Measurements for Propulsion Applications   | Plaza North     | Open-* |  |  |
| 8:00 a.m 10:05 a.m.         | 3E  | LPS   | Propulsion-Induced Environments and Loads - Propellant Dynamics  | Plaza South     | Open   |  |  |
| 8:00 a.m 12:00 p.m.         | 3F  | MSS   | SPECIALIST SESSION: Digital Engineering for Test Operations  | Green Country   | Open   |  |  |
| 8:00 a.m 10:05 a.m.         | 3G  | SPS   | Spacecraft Propulsion Systems  | Kiamichi        | Open   |  |  |
| 9:35 a.m 10:35 a.m.         | Netwo   | orking Area   | n Refreshments   | One Broadway    | Open   |  |  |
| 12:00 p.m 1:30 p.m.         | Lunch Break - On Your Own   |   |  |                 |        |  |  |
| 12:00 p.m 1:15 p.m.         | MSS 7   | MSS Technical Steering Group Meeting Red Carpet Closed                  |  |                 |        |  |  |
| 12:00 p.m 1:30 p.m.         | LPS T   | echnical St   | eering Group Meeting   | Great Plains    | Closed |  |  |
| 1:30 p.m 5:05 p.m.          | Wednesday Afternoon Technical Sessions, Specialist Sessions, and Panel Meeting                    |   |  |                 |        |  |  |
| 1:30 p.m 4:35 p.m.          | 3P  | LPS   | Rotating Detonation Rocket Engines - I   | 18th Century    | Open   |  |  |
| 2:00 p.m 3:35 p.m.          | 3Q  | LPS   | Advanced Materials for Liquid Propulsion Applications  | 19th Century    | Open   |  |  |
| 1:30 p.m 5:05 p.m.          | 3R  | SPS   | WORKSHOP: Electric Propulsion Operation in the Space Environment and Facility Interactions VI (EPOSE VII) - II | 20th Century    | Open   |  |  |
| 1:30 p.m 5:05 p.m.          | 3S  | JPM   | Rocket Testing   | Plaza North     | Open * |  |  |
| 1:30 p.m 3:05 p.m.          | 3T  | LPS   | Ignition and Dynamics  | Plaza South     | Open   |  |  |
| 3:35 p.m 5:05 p.m.          | 3T  | LPS   | PANEL MEETING: Combustion Stability  | Plaza South     | Open   |  |  |
| 1:30 p.m 3:35 p.m.          | 3U  | MSS   | Simulation Credibility: Computational Studies  | Green Country   | Open-* |  |  |
| 3:35 p.m 4:35 p.m.          | 3U  | MSS   | PANEL MEETING: Simulation Credibility  | Green Country   | Open   |  |  |
| 1:30 p.m 5:05 p.m.          | 3V  | SPS   | Other Propellants  | Kiamichi        | Open   |  |  |
| 3:05 p.m 4:05 p.m.          | Networking Area Refreshments One Broadway Ope   |   |  |                 |        |  |  |
| 5:30 p.m 7:00 p.m.          | Attendee Networking Hour JANNAF Badge required (this event is for attendees only)  2nd Floor Foyd |   |  | 2nd Floor Foyer | Open   |  |  |

| Schedule Color Key   |  |  |                 |  |  |  |  |  |
|--|--|--|-----------------|--|--|--|--|--|
|  | Meeting Services Concurrent Sessions or Panel Meetings |  |                 |  |  |  |  |  |
|  | Networking Opportunities                               |  | Session Details |  |  |  |  |  |
|  | Closed Meetings Panel Meetings                         |  |                 |  |  |  |  |  |
| "Distro D" and "Open *" indicate a session with at least one presentation restricted at B, D, or E |  |  |                 |  |  |  |  |  |

|   |              |  | SCHEDULE - Thursday, 9 May                                       |                     |        |  |
|---|--------------|--|--|---------------------|--------|--|
| 7:00 a.m 5:00 p.m.  | On-Si        | te Check-I   | 2nd Floor Foyer  |                     |        |  |
| 7:00 a.m 5:00 p.m.  | _            |  | (for Presenters and Session Chairs needing technical assistance) | Frontier            | Open   |  |
| 7:00 a.m 8:00 a.m.  | Netwo        | orking Area  | a Refreshments   | One Broadway        | Open   |  |
| 7:15 a.m 7:30 a.m.  |              |  | eeting (Thursday sessions)                                       | Red Carpet          | Closed |  |
| 24 Hours - 5:30 p.m.  |              |  | Room (available 24/7 virtually with your own device)             | Virtual             | Open   |  |
| 8:00 a.m 12:05 p.m.   |              |  |  |                     |        |  |
| 8:00 a.m 10:05 a.m.   | 4A           | LPS  | Rotating Detonation Rocket Engines - II                          | 18th Century        | Open   |  |
| 10:05 a.m 11:05 a.m.  | 4A           | LPS  | PANEL MEETING: Rotating Detonation Rocket Engine                 | 18th Century        | Open   |  |
| 8:00 a.m 11:35 a.m.   | 4B           | LPS  | Engine Ground Testing and Flight Demonstration                   | 19th Century        | Open   |  |
| 8:00 a.m 10:05 a.m.   | 4C           | SPS  | ASCENT Chemical Propulsion - I                                   | 20th Century        | Open   |  |
| 8:00 a.m 10:05 a.m.   | 4D           | JPM  | Ramjet Propulsion  | Plaza North         | Open * |  |
| 8:00 a.m 10:05 a.m.   | 4E<br>Part I | SPS  | Hall Thruster Research and Development                           | Plaza South         | Open   |  |
| 11:00 a.m 11:35 a.m.  | 4E<br>Part 2 | MSS  | Model Verification and Validation                                | Plaza South         | Open   |  |
| 8:00 a.m 12:05 p.m.   | 4F           | MSS  | Modeling and Simulation of Hypersonic Vehicles                   | Green Country       | Open   |  |
| 8:00 a.m 12:05 p.m.   | 4G           | JPM  | Propellants and Propelling Charges for Solid Propellant Guns - I | Kiamichi            | Open   |  |
| 9:00 a.m 11:30 a.m. PIB Large Liquid Propulsion Working Group Meeting |              |  |  | Red Carpet          | Closed |  |
| 9:35 a.m 10:35 a.m.   | Netwo        | orking Are   | Grand Ballroom C   | Open                |        |  |
| 12:00 p.m 1:30 p.m.   | Lunch        | Lunch Break - On Your Own  |  |                     |        |  |
| 12:00 p.m 1:15 p.m.   | JPM F        | JPM Program Committee Meeting  |  | Executive Boardroom | Closed |  |
| 12:00 p.m 5:30 p.m.   | PIB E        | PIB Executive Committee Meeting  |  | Red Carpet          | Closed |  |
| 1:30 p.m 5:35 p.m.  | Thur         | sday Afte  | rnoon Technical Sessions   |                     |        |  |
| 1:30 p.m 5:35 p.m.  | 4P           | LPS  | Rotating Detonation Rocket Engines - III                         | 18th Century        | Open * |  |
| 1:30 p.m 5:05 p.m.  | 4Q           | LPS  | Combustion Device Modeling and Test                              | 19th Century        | Open   |  |
| 1:30 p.m 4:35 p.m.  | 4R           | SPS  | ASCENT Chemical Propulsion - II                                  | 20th Century        | Open   |  |
| 1:30 p.m 4:35 p.m.  | <b>4</b> S   | JPM  | Propulsion for Tactical Systems                                  | Plaza North         | Open * |  |
| I:30 p.m 2:35 p.m.  | 4T<br>Part I | SPS  | Cathode Technology   | Plaza South         | Open   |  |
| 3:30 p.m 4:35 p.m.  | 4T<br>Part 2 | SPS  | HALL Thruster Modeling and Simulation Plaza South                |                     | Open   |  |
| 2:00 p.m 5:05 p.m.  | 4U           | MSS  | Simulation Credibility: Experimental Studies                     | Green Country       | Open * |  |
| 1:30 p.m 5:05 p.m.  | 4V           | JPM Propellants and Propelling Charges for Solid Propellant Guns - II Kiamichi |  |                     |        |  |
| 3:05 p.m 4:05 p.m. Networking Area Refreshments One Broadway          |              |  |  |                     |        |  |

| Schedule Color Key   |  |  |                 |  |  |  |  |  |
|--|--|--|-----------------|--|--|--|--|--|
|  | Meeting Services Concurrent Sessions or Panel Meetings |  |                 |  |  |  |  |  |
|  | Networking Opportunities                               |  | Session Details |  |  |  |  |  |
|  | Closed Meetings Panel Meetings                         |  |                 |  |  |  |  |  |
| "Distro D" and "Open *" indicate a session with at least one presentation restricted at B, D, or E |  |  |                 |  |  |  |  |  |