

# 43<sup>rd</sup> MMPDS General Coordination Committee Meeting



We cordially invite you to the MMPDS General Coordination Committee meeting that will take place at the Albuquerque Marriott Pyramid North beginning Monday, March 18, 2024 at 8:00 am through Thursday March 21, 2024 at 5:00 pm. A preliminary schedule and agenda are included below.

This meeting brings together subject matter experts from government agencies, aerospace industry users, material producers, and service and testing suppliers to maintain, expand, and improve the two volume MMPDS Handbook. The week's schedule includes sessions for Task Groups, Working Groups, and Steering Groups. All sessions except the Industry and Government Steering Groups are open to any registered attendee. Agenda proposals approved at this meeting will be used to update MMPDS-2025.

Please note that the Fastener Task Group will not have a face-to-face session at this GCC. If you are interested in FTG activities, please contact Battelle to be included in virtual sessions that will be hosted in February and March.

## **AIRPORTS (Distance to Hotel):**

ABQ Intl Sunport (8 miles south)

Santa Fe, NM-Mncpl (42 miles northeast)

Sierra Blanca Regl (132.25 miles southeast)

**HOTEL:** The hotel's address is 5151 San Francisco Rd NE, Albuquerque, NM 87109. The meeting rate for the hotel is per diem \$141. Parking is \$10 a night for hotel guests and for non-hotel guests. The room rate will be available until March 2, 2024, after which the normal hotel rate will apply.

**Hotel Booking Link:** [Click here to reserve your hotel room.](#)

**NOTE:** The meeting rate will apply for up to 2 days before or 2 days after the meeting, upon availability. Be sure to confirm your arrival and departure dates when making your reservation.

## **REGISTRATION and PAYMENT**

The rates for meeting attendance are as follows.

ISG or GSG Member, early discount	1 date only \$ 300 USD	Two or more dates \$ 650 USD	If registered before 3/2/2024
Non- ISG or GSG Member, early discount	\$ 350 USD	\$ 700 USD	If registered before 3/2/2024
Rate if registered after 3/2/2024	\$ 400 USD	\$ 800 USD	Registration after 3/2/2024
Remote Observer – Member	\$ 0	\$ 0	Limit two per registered attendee from a member organization
Remote Observer – Non-member	\$ 150	\$ 300	Limit one per registered attendee from a non-member organization

**NOTE:** If a company is a subsidiary of a member company, they are entitled to the member discount. The Remote Observer role is described below.

**Meeting Registration:** Click here to register for the 43<sup>rd</sup> GCC. All attendees register online. Discount rates will expire March 2, 2024. Please use the following link to access the registration page before proceeding to a secure payment page: [Meetings \(mmpds.org\)](#)

## **FURTHER INFORMATION:**

For further information on the meeting hotel and/or registration, please contact [scalf@battelle.org](mailto:scalf@battelle.org). For technical questions, please contact [halld@battelle.org](mailto:halld@battelle.org).

## Remote Observers

- Remote Observers are individuals who are not in the room. All attendees in the room need to register and pay.
- Each member company may add two remote observers for each employee attending the face-to-face meeting.
- Each non-member organization may add one remote observer for each employee attending.
- Face-to-face attendees register first and will receive information to forward to designated Remote Observer(s).
- Observers will receive the Agenda, Handout, and Minutes of the 43<sup>rd</sup> GCC meeting.
- Remote observers will be able to listen to discussion. Any questions can be presented by a fellow employee in the conference room.
- Remote Observers will be able to hear the live discussion and see presentation materials and chat messages through the virtual meeting invitation. Their microphones will be muted and will stay muted throughout all discussions.



### 43rd MMPDS Coordination Meeting

#### Preliminary Schedule

March 18 - March 21, 2024 - Location: Albuquerque, NM

Time	Monday		Tuesday	Wednesday	Thursday	Friday
8:00-10:00	ISG (members only)	GSG (Invitation only)	GTG	ETTG	MTG	Battelle can be available upon request for software demos before they leave for home.
10:00-10:15	Break		Break	Break	Break	
10:15-12:00	ISG (members only)	GSG (Invitation only)	GTG	ETTG	MTG	Steering, Task, and Working Group chairs may schedule telecons to discuss items in preparation for the meeting.
	ISG/GSG (members only)					
12:00-1:00	Lunch (buffet included in fee)		Lunch (buffet included in fee)	Lunch (buffet included in fee)	Lunch (buffet included in fee)	
1:00-2:45	MATSSG		GTG	ETTG	MTG	
2:45-3:00	Break		Break	Break	Break	
3:00-5:00	ASG		GTG	ETTG	GCC (Include Report from Executive Board, Steering Groups, and Review of Items)	
			PSG	Working Groups		
5:00-6:00	Executive Board					

#### Key:

ASG - Airframer Steering Group  
 ET TG - Emerging Technology Task Group  
 FatWG - Fatigue Working Group  
 FTG - Fastener Task Group  
 GCC - General Coordination Committee  
 GSG - Government Steering Group (members only)  
 GTG - Guidelines Task Group

ISG - Industry Steering Group (members only)  
 MATSSG- Materials and Test Services Steering Group  
 MTG - Material Task Group  
 PSG - Propulsion Steering Group  
 WWG - Welding Working Group  
 V2WG - Volume II Working Group

## 43rd MMPDS Coordination Preliminary Agenda

***SORTED BY ITEM NUMBER***

Item No	Responsible Group		Chpt	Title	Type	42nd Meeting Description
	Final	Initial				
04-21	FTG		8	Fastener Tables of Sunset Review Interest	On Hold	This item is on hold, pending items 23-27, 23-28, and 23-29
08-23	FTG		8	Sunset Review of Table 8.1.3.2.2(c), NAS1921C	On Hold	This item is on hold, pending items 23-27, 23-28, and 23-29
09-13	FTG		8	Sunset Review of Table 8.1.3.2.3(a), MS21140	On Hold	This item is on hold, pending items 23-27, 23-28, and 23-29
11-05	MTG		1	AMS Coordination	Status	C. Shannon will provide a status update.
11-38	FTG		8	Sunset Review of Flush Head, Mechanical Lock Spindle Blind Rivet Table 8.1.3.2.2(e) NAS 1921 M	On Hold	This item is on hold, pending items 23-27, 23-28, and 23-29
12-89	MTG	PSG		Target Materials for Propulsion Applications	Status	The PSG co-chairs will lead discussion of this item.
13-34	MTG		5	Addition of AMS 4919 Ti-6-2-4-2 Plate Properties	Status	C. Shannon will provide a status update.
13-50	GTG		9	ASTM Coordination	Status	D. Hall will lead discussion of this item
14-28	FTG		8	Sunset Review of Table 8.1.4.2(i), LGPL2SC-V Pin, 3SLC-C Collar in Clad 7075-T6	On Hold	This item is on hold, pending items 23-27, 23-28, and 23-29
15-13	MTG		multi	Clarification of Shear Orientation for Legacy Alloys	Status	C. Shannon will provide an update. Expect an Agenda in the fall to cover this year's activity
15-38	GTG		9	Reevaluation of Degrees of Freedom Calculation for Regression with Effect of Temperature	Handout	This item is on hold pending revision of the effect of temperature method.
16-12	FTG		8	Identifying Basis of Fastener Shear Strength on Remaining Tables	Agenda	C. Reakes will present this item at the virtual FTG session
16-13	FTG		8	Corrections to Table 8.1.3.2.2(c) NAS 1921C	On Hold	This item is on hold, pending items 23-27, 23-28, and 23-29
16-23	GTG		6	Re-evaluate Guidelines for Effect of Temperature Curves	Handout	D. Hall will lead discussion of this item
17-23	GTG	MTG	9	Legacy Alloy Review Strategy – Near Term	Status	This and 21-x will be closed because we can't make progress.
17-45	MTG		3	Effect of Temperature Curves for 2395-T84 Extrusion	On Hold	This item is on hold pending revision of the effect of temperature method.
17-52	GTG	FatWg	9	Review Section 9.6.1 - Load and Strain Control Fatigue	Handout	This item will be discussed during the FatWG
17-61	GTG	FatWg	9	Revising R-curve Requirement in Table 9.2.4	Status	This item will be discussed during the FatWG
17-62	GTG	FatWg	9	Revising Fatigue Requirement in Table 9.2.4	Status	This item will be discussed during the FatWG
17-63	GTG	FatWg	9	Use of Box-Cox Transformation in the Fitting of Fatigue Data	Status	This item will be discussed during the FatWG
19-19	GTG	FatWg	9	Consideration of a new Equivalent Stress model for Load-Controlled Fatigue	Status	This item will be discussed during the FatWG
19-25	GTG	ASG	9	Guidelines for Derived Properties for Legacy Alloys	On Hold	On hold pending resolution of Item 17-23 Legacy review. Decisions will be made on a case-by-case basis.
19-34	GTG		9	Waive Requirement for Bearing Properties When Appropriate	Handout	D. Hall will lead discussion of this item
19-37	GTG-F	FTG	9	Establish a Guideline for Reinserting Chapter 8 Tables. (Solid Fasteners)	On Hold	Placed on hold, pending items 23-27, 23-28, and 23-29
19-38	ETTG			Process Intensive Materials & Technologies SDO Coordination	Status	D. Hall will provide a status update.

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	Final	Initial				
20-10	MTG		3	Upgrade of Secondary Properties of 7075-T76511 Aluminum Alloy Extrusions	Status	Waiting on data. Analysis will be done using reduced ratio method, unless there is sufficient data for new indirect. Universal may have more data. Kaiser will do testing on their material.
20-13	ETTG			CMH-17/MMPDS Coordination & Collaboration	Status	D. Hall will provide a status update.
20-16	GTG	ETTG		MMPDS & Additive Metals - Program Plan	Status	D. Hall will provide a status update.
20-30	GTG	ETTG	9	Components of Variance Analysis of AM, Cast, & Wrought Ti 6-4	Handout	B. Krile, W. White or M. Snyder will present this Handout
20-35	MTG		multi	Alloys Requested for Analysis	Status	C. Shannon will provide a status update.
20-36	MTG		multi	Request for Secondary Property Data	Status	C. Shannon will provide a status update.
21-02	GTG	ETTG	9	Section 9.5 & 9.6 for Volume II	Handout	D. Hall will provide a status update.
21-18	ETTG			Updates from V2WG Sub-teams	Status	Each sub-team will provide a status update.
21-20	GTG	ETTG	9	Microstructural Submittal Requirements	Agenda	C. Shannon will present this item with support from the M&M co-chairs.
21-40	GTG	ETTG		Impact of Powder Re-use on AMS7000 625 LPBF	Handout	B. Krile, W. White or M. Snyder will present this Handout
21-42	MTG	PSG	6	Update for Haynes 230 Strength vs. Temperature curves	Handout	D. Hall will lead discussion of this item
21-46	ETTG		10	MMPDS Vol 2, Certification & Qualification "Further Showing"	Agenda	D. Hall and the C&Q sub-team will present this item
21-48	GTG	MTG	9	Periodic Testing Options for Specifications	Agenda	This and 17-23 - since we can make no progress, we are going to close this activity.
21-52	MTG	ASG	3	Removal of 7075-T6xxx Design Allowables for Thick Sections	Agenda	C. Shannon will present this item.
21-53	ETTG		6	Analysis of 718 Laser Powder Bed Fusion per AMS7038	Status	C. Shannon will provide a status update. The sponsor is collaborating with four other companies to sponsor AMS 7024.
22-03	FTG		8	Fasteners Requested for Analysis	Status	C. Reakes will provide a status update
22-13	GTG	ETTG	10	V2, 10.8 Considerations for the Development of Design Values	Agenda	D. Hall and the C&Q sub-team will present this item
22-15	FTG		8	Test plan for Fastener MS20426AD in 2024-T42	On Hold	On Hold pending funding for testing.
22-18	GTG		9	Section 9.2.1.5: Stress-Strain Properties	Agenda	check on which item creates stress-strain curve section in Volume I.
22-33	GTG	ETTG	9	Microstructure Information Accessibility for MMPDS, V2	Status	D. Hall will provide a status update.
22-38	GTG-F	FTG	9	Guidelines for Re-Inserting Chapter 8 Tables (Blind Fasteners)	On Hold	This item is on hold, pending item 19-37
22-46	MTG		3	Update Stress Corrosion Data for Tables in 3.1.2	Status	C. Shannon will provide a status update.
22-53	GTG	MTG	9	Review of Table 9.2.4.1	Agenda	This item will be presented in the GTG.
23-04	GTG	ETTG	10	V2, 10.3 Overview of Qualification	Agenda	D. Hall and the C&Q sub-team will present this item
23-11	GTG	ETTG	10	Section 10.6 Consensus Standards	Agenda	D. Hall and the C&Q sub-team will present this item
23-14	MTG		5	Revision of Ti-6Al-4V Die Forging Property Table	Agenda	C. Shannon will present this item.
23-16	MTG		3	2050 SCC Test Data	Status	C. Shannon will provide a status update.
23-19	GTG-F	ETTG	9	Review of 9.7 for Volume II	Status	D. Hall will provide a status update.
23-20	GTG	ETTG	9	Section 9.8 & 9.9 for Volume II	Status	D. Hall will provide a status update.

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23-22	ETT	G	3	6061-RAM2 per AMS 7054	Status	C. Shannon will provide a status update.
23-25	GTG	ETT	multi	Additional Content Required to Publish Material Allowable Entries in Volume II	Status	If no comments are received before December 30, 2023, this item will be considered approved and closed. As of this date, no comments have been received.
23-27	GTG-F	FTG	9	Modification of Sunset Procedures for Swaged Collar / Threaded Fasteners	On Hold	This item is on hold, pending item 23-28
23-28	GTG-F	FTG	9	Modification of Sunset Procedures for Solid Rivets	Agenda	C. Reakes will present this item at the virtual FTG session
23-29	GTG-F	FTG	9	Modification of Sunset Procedures for Blind Fasteners	On Hold	This item is on hold, pending item 23-28
23-30	GTG-F	FTG	9	Minimum Spec Content Requirements for Fasteners (like 9.2.2)	Agenda	C. Reakes will present this item at the virtual FTG session
23-33	GTG		9	FCGR Variable Load Analysis Methods	Status	C. Reakes will provide a status update
23-34	GTG		9	Role and Documentation of Specimen Location Used in Indirect Analysis	Handout	Questions have been raised regarding how the indirect analysis treats reference and derived property tests from different specimen locations within a heat lot. This item will consider what guidance may be provided for the design and conduct of tests to optimize the value of the indirect analysis.
23-36	GTG-F	FTG	9	Ch. 8 A-Basis Static Allowables Requirement for Fastener Fatigue Figures	Status	C. Reakes will provide a status update at the virtual FTG session
23-38	GTG		9	Mechanical Property Table Presentation of Test Orientations	Agenda	This item will be presented in the GTG.
23-42	MTG		5	Upgrade and Expansion of CP-70 Ti per AMS 4921	Agenda	C. Shannon will present this item.
23-43	MTG		3	Correction to 7349-T76511 Extrusion Mechanical Properties	Status	An Agenda item or Handout will be prepared if the data are received in time. Battelle is currently waiting on data from Constellium.
23-44	GTG		9	Derived Properties to Include S-Basis	Agenda	Additional edits are proposed to Table 9.2.4(a) Minimum Data Requirements for Tensile, Bearing, Compression, and Shear Properties, that quantify requirements to develop S-Basis properties by indirect analysis.
23-46		PSG		NIMS/NEDO Intro Presentation		If NIMS/NEDO cannot share data, this item will be closed with no action.
23-48	ETT		5	Ti-6Al-4V per AMS 7004/7005	Status	C. Shannon will provide a status update.
23-52	FTG			Clarification of Typical Yield Joint Curve	Agenda	C. Reakes will present this item at the virtual FTG session
23-53	MTG		5	Fatigue Curve for Ti-6-2-4-2	Status	C. Reakes will provide a status update
23-54	MTG			Review of Fracture Toughness Tables	Agenda	C. Reakes will present this item.
23-55	GTG			Definitions in Volume I	Status	If no comments are received before December 30, 2023, this item will be considered approved and closed. As of this date, no comments have been received.
23-56	GTG	ETT		Use of Columns in Volume II	Handout	D. Hall will lead discussion of this item
23-57	GTG			MMPDS Bylaws: Clarify GCC roles and responsibilities.	Agenda	D. Hall will present this item

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23-58	GTG		9	Update Subscripts in Indirect Equation	Agenda	Item 23-32 standardized nomenclature for the indirect analysis to use the terms "reference" and "derived". This item addresses changes to mathematical variable subscripts in MMPDS to make them consistent with the new terminology.
23-59	GTG		9	Scenarios for Upgrading from S-Basis to C/D-Basis	Agenda	D. Hall will present this item
23-60	GTG			Definition of S-Basis for Volume I	Agenda	D. Hall will present this item
23-61	ETTG			V2WG Coordination & Direction	Status	D. Hall will provide a status update
24-01	MTG		3	7140-T7451 Plate: Review 8-10 Inch Tensile Minimums	Agenda	C. Shannon will present this item.
24-02	GTG		9	Update to Indirect Method to Reduce the Occurrence of T99 > T90	Agenda	While the probability is low, the possibility of T99>T90 exists in the indirect calculations. Working with Boeing, several improvements are being investigated to reduce that probability.
24-03	GTG		9	Equations for Normal Distribution k-factors	Agenda	D. Hall will present this item
24-04	ETTG		5	Ti-6Al-4V JMADD Test Plan	Agenda	A representative from NIAR will present the JMADD test plan for GCC review and feedback.
24-05	ETTG		5	Ti-6Al 4V GAMAT Test Plan	Agenda	A representative from Boeing will present the GAMAT test plan for GCC review and feedback.
24-06	GTG		9	Update to Section 9.3 Data Submission Guidelines	Agenda	C. Shannon will present this item.
24-07	GTG			Review Appendix A.3 Definitions - Format	Handout	D. Hall will present this item. The intent is to review the content and format to verify that all definitions are up-to-date with ASTM, etc. and to improve clarity where possible. Combining the list from both Volumes would simplify maintenance.
24-08	MTG			Update Table 2.6.4.0(b) per AMS 5578	Agenda	C. Shannon will present this item.
24-09				Update Sections 9.1-9.3 in Volume I to be consistent with the reorganized content in Volume II.	Agenda	D. Hall will lead discussion of this item
24-10	GTG			Section 1.4.7.2 Bearing Load Orientation	Agenda	C. Shannon will present this item.
24-11	GTG			Section 1.4.6 Corrections	Agenda	C. Shannon will present this item.
24-12				2124 Aluminum Alloy FCGR Corrections	Agenda	C. Reakes will present this item
24-13	GTG	ETTG/ MTG	9	Definition of Bulk Material	Agenda	D. Hall will review this item.