



UNITED STATES MARINE CORPS
COMMAND ELEMENT
II MARINE EXPEDITIONARY FORCE
PSC BOX 20080
CAMP LEJEUNE, NC 28542-0080

II MEFO 3966.1B
G-9

MAY 02 2017

II MARINE EXPEDITIONARY FORCE ORDER 3966.1B

From: Commanding General, II Marine Expeditionary Force
To: Distribution List

Subj: II MARINE EXPEDITIONARY FORCE SCIENCE, TECHNOLOGY, AND EXPERIMENTATION
(II MEF ST&E) STAFF

Ref: (a) MCO 3960.6, Marine Corps Science & Technology (S&T)
(b) MCO 3900.20, Marine Corps Capabilities Based Assessment
(c) II MEF Campaign Plan 2013-2016
(d) 36th Commandant's Planning Guidance
(e) Force Development Strategic Plan

Encl: (1) II MEF Standing Operating Procedure for Universal Needs
Statement Review Board
(2) II MEF Standing Operating Procedure for ST&E Working Group
(3) II MEF Standing Operating Procedure for Enlisted Innovation Symposium

1. Situation

a. In reference (d), the 36th Commandant established an experimentation end state to "develop and nurture the intellectual energy, innovation, and creativity that will enable the Marine Corps to lead tactical and operational innovation."

b. Reference (e) further establishes a framework designed to promote a collaborative, cohesive, "learning organization" that can more effectively prepare the nation's expeditionary force in readiness for a complex and uncertain future.

c. The II MEF ST&E staff was established to provide II MEF with a central interface to Marine Corps and Department of Defense (DoD) S&T and associated programs such as those envisioned by the 36th Commandant and Commanding General (CG), Marine Combat Development Command (MCCDC)/Deputy Commandant for Combat Development and Integration (DC CD&I). II MEF ST&E also acts as the central point of collection, staffing, and submission of II MEF Deliberate Universal Needs Statement/Urgent Universal Needs Statements (DUNS/UUNS) that are used to register new and emerging requirements for the Marine Corps.

d. The II MEF ST&E staff will consist of a S&T Officer Assistant Chief of Staff G-9 (AC/S G9), an Office of Naval Research (ONR) Science Advisor (SCIAD), a Marine Corps Warfighting Lab Liaison Officer (MCWL LNO), an Operational Physiologist, and a Reserve Science and Technology Officer from the II MEF Individual Mobilization Augmentation Detachment (IMA Det). The references and this Order provide policy and procedural guidance for the II MEF ST&E staff.

2. Cancellation. II MEFO 3966.1A.

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3. Mission. The II MEF ST&E staff receives needs and requirements input from the II MEF Command Element and Major Subordinate Commands/Elements (MSC/E), communicates those needs to applicable external organizations, and monitors emerging technology initiatives, innovative solutions, and concept-based experimentation in order to provide II MEF Marines and Sailors with enhanced warfighting capabilities to enable mission success.

4. Execution

a. Commander's Intent. The S&T Officer and members of the ST&E staff are the direct representatives of the CG for all matters pertaining to innovation, technology, and experimentation. The ST&E staff will assist II MEF integration into the Force Development process through identification of emerging capabilities, collaboration with outside organizations and innovation from within the operational units. The ST&E staff will accomplish this through direct and indirect interaction with II MEF organizations and other external agencies in order to leverage available assets, with an end state of enhancing the MEF's warfighting capabilities through the promotion and use of innovation and technology.

b. Concept of Operations

(1) The II MEF ST&E staff will be guided in their duties by guidance from the CG, Deputy CG (DCG), Chief of Staff (CoS), Special Orders and the applicable instructions contained in this Order and the listed references.

(2) The ST&E staff will closely coordinate with II MEF G3 plans personnel to support and inform reference (e) campaign of learning and capability based assessment of current gaps and capabilities.

(3) The ST&E staff will monitor long range technology plans and programs and reporting requirements for the war fighter to meet policy directives and organizational goals.

(4) The ST&E staff is the II MEF connection to the development of large and complex emerging technology programs, functions, initiatives and collaboratively sets priorities for investment.

(5) The ST&E staff will screen proposals from government agencies or vendors through the appropriate vetting process that will integrate appropriate technology in a timely and effective manner.

c. Subordinate Element Missions

(1) II MEF S&T Officer

(a) The S&T Officer serves as the CG's S&T representative, and is charged with directing the planning, implementation, and management of emerging innovation and technology activities throughout II MEF. Also known/referred to as the AC/S G-9, the S&T Officer reports directly to the II MEF CoS.

(b) Maintain CG and Staff situational awareness of current and future technological initiatives.

(c) Attend, plan, and/or execute the review and demonstration of appropriate emerging technologies and equipment that may benefit II MEF. Coordinate with appropriate staff sections for the participation of subject matter experts (SME), as required, to assess these reviews and demonstrations.

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(d) Screen technical proposals through the appropriate vetting process that will integrate technology in a timely and effective manner.

(e) Coordinate the processing of UUNS/DUNS from II MEF organizations as described in enclosure (1).

(f) Staff Marine Corps Capability Based Assessment and Marine Corps Enterprise Integration Plan products.

(g) Liaise, coordinate, and collaborate with II MEF organizations, Marine Corps Center for Lessons Learned (MCCLL), MCCDC, Marine Corps Systems Command (MCSC), MCWL, ONR and DoD S&T community in order to provide innovative solutions that enhance the MEF warfighting capability.

(h) Coordinate operational, logistical, and personnel requirements to support tests and evaluations with the II MEF G3, G4, and G1.

(i) Formulate section budgets, monitor costs, and allocate resources to achieve the technology goals set forth by the CG.

(j) Plan and coordinate regular meetings with the II MEF ST&E Working Group (STEWG), as described in enclosure (2), in order to disseminate information, establish priorities, and make decisions.

(k) Collaborate with the II MEF G3 across the overarching "warfighting challenges" identified by DC CD&I to help develop and integrate capability solutions for II MEF.

(2) Office of Naval Research (ONR) Science Advisor to CG, II MEF

(a) Increase ONR, Navy labs, and warfare centers understanding of Marine Corps requirements by participating in exercises and theatre operations planning.

(b) Collaborate with the II MEF Command and the S&T community to identify, evaluate, and insert technologies into exercises and operations in order to assess and improve force survivability, sustainability, and maintainability.

(c) Initiate and/or inform the development of basic research, applied research and advanced technology development as it pertains to II MEF needs.

(d) Evaluate maturing technologies and guide decisions regarding transition of products with warfighting value.

(e) Serve as II MEFs S&T subject matter expert (SME).

(f) As advocate, articulate support requirements identified as priority warfighting enablers to ONR on behalf of the CG, II MEF.

(3) II MEF IMA Detachment S&T Officer

(a) Support II MEF S&T Officer and ONR Science Advisor on emerging innovation and technology activities.

(b) Serve as II MEF S&T Officer in the absence of the S&T Officer and during periods of non-availability.

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(4) Marine Corps Warfighting Lab (MCWL) Liaison Officer to CG, II MEF

(a) Interact with the II MEF Staffs to assist in the identification of operational shortfalls and requirements that may be fulfilled with technology solutions.

(b) Advise military and civilian personnel on technology integration and operational requirements.

(c) Act as the initial point of contact for any experimentation, demonstrations, and technology integration conducted within II MEF by MCWL.

(d) Assist in the preparation of memorandums of understanding for the conduct of specific experiments.

(e) Assist, develop, and execute visitor and media plans for the conduct of experiments.

(f) Support the II MEF G3 across the overarching "warfighting challenges" identified by DC CD&I to help develop and integrate capability solutions for II MEF.

(5) II MEF Operational Physiologist (OP)

(a) Serve as the CG's SME for all human performance (HP) and human systems integration (HSI) issues, projects, and initiatives.

(b) Support training and education needs of II MEF and its subordinate units in the areas of HP and HSI across the range of military operations in all environmental conditions and physiological states.

(c) Serve as an Institutional Review Board (IRB) qualified research assistant for any HP and HSI experimentation projects involving human subjects.

(d) Serve as II MEF operational physiology SME at military and professional conferences and meetings addressing HP or HSI related issues.

(e) Maintain liaison with Naval Aerospace/Operational Physiologists supporting the Marine Corps to include physiologists at Headquarters Marine Corps, Marine Corps Systems Command and the Naval Survival Training Institute.

(f) Act as the II MEF Deputy Science and Technology Officer in any administrative tasks in support of the ST&E Office.

(g) Serve as the HP and HSI SME advisor to Safety Investigation Boards as required.

(h) Provide recommendations and comments for mishap factors on Safety Investigation Reports (SIR) and endorsements of SIRs as required.

(6) II MEF Enlisted Innovation Coordinator (EIC)

(a) The EIC will be selected annually by a panel lead by the II MEF Sergeant Major. The EIC serves as the Command Element's official systems and technology innovation liaison for the enlisted community. The EIC's primary role is facilitating, identifying, and communicating innovative ideas from junior enlisted Marines, and to connect them into appropriate organizations resources and/or ongoing efforts when appropriate.

(b) Act as the point of contact for enlisted Marines interested in solving specific operational problems or seeking assistance in developing new procedures and technologies.

(c) Arrange opportunities for Marines to meet and network in order to develop an ecosystem of creative enlisted thinkers throughout the MEF. These opportunities include coffee hours, happy hours, working groups, etc.

(d) Organize periodic educational opportunities in order to expose Marines to new technologies and concepts. These seminars will be as informal as possible and lead by subject matter experts from a variety of disciplines.

(e) Maintain awareness of innovative efforts throughout the MEF and periodically check in with those efforts in order to provide resource support and to brief II MEF CG and Sergeant Major.

(f) Liaise, coordinate, and collaborate with II MEF organizations, MCCLL, MCCDC, MCSC, MCWL, ONR and DoD S&T community in order to maintain awareness of current innovation efforts and to assist in identifying enlisted Marines who may have relevant expertise.

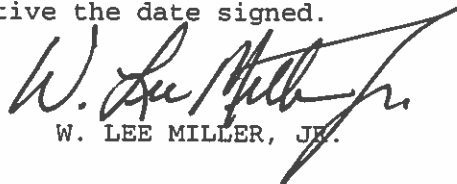
(g) Organize and host an annual II MEF Enlisted Innovation Symposium as described in enclosure (3).

4. Administration and Logistics. Recommendations concerning the contents of this Order may be forwarded to the CG via the chain of command.

5. Command and Signal

a. Command. This Order is applicable to all II MEF organizations and attachments.

b. Signal. This Order is effective the date signed.


W. LEE MILLER, JR.

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**II MEF Standard Operating Procedure for Universal Needs Statement
Review Board**

1. **Purpose.** Provide II MEF G-9 guidance to review and staff a recommendation of concurrence/non-concurrence to the CG II MEF with regard to submitted Urgent Universal Need Statement (UUNS) and Deliberate Universal Need Statement (DUNS) from Major Subordinate Commands (MSC) or Major Subordinate Elements (MSE).

2. **Overview**

a. The Universal Needs Statement (UNS) is a means to solicit innovative solutions for capability-driven warfighter requirements and support the effective and efficient transition of current and emergent technology injects for II MEF.

b. The intent is to identify "operational enhancement opportunities and/or deficiencies in capabilities" not propose specific solutions.

c. An UUNS is used to initiate the Urgent Needs Process (UNP). It is an exceptional request from a combatant command-level Marine component commander for a warfighting capability that is critically needed by forces conducting combat or contingency operations. Failure to deliver the requested capability will likely render the requesting units unable to accomplish their mission or increase the risk of harm to personnel and/or loss of life.

3. **UNS Process Flow**

a. U/DUNS originate from subordinate units and are submitted to II MEF via their respective MSC/MSE. After concurrence by the MSC/MSE, the request is forwarded to the II MEF G-9 via hard copy, email, or SharePoint. II MEF G-9 coordinates II MEF staff review of the U/DUNS. II MEF G-9 will initially screen the request to ensure it meets the requirements of references (a) and (b). II MEF G-9 confers with each staff section to determine the appropriate Subject Matter Experts (SME) to review the request. II MEF G-9 will provide the staff review comments and recommendations to the originator via the chain of command in order to provide an opportunity to address the staff findings or cancel the U/DUNS.

b. If the U/DUNS originate from a Marine Expeditionary Unit (MEU) and is sent directly to II MEF, the II MEF G-9 will request review from the other II MEF MEUs. II MEF G-9 will also request review of the U/DUNS by the MSC/MSE that normally would have cognizance over the MEU unit affected when the MEU is not composited.

c. Once the staff review is complete and the comments are addressed, an UNS Review Board is assembled to validate and make recommendations prior to submission for signature to the CG, II MEF. During the UNS Review Board, a briefer from the originating unit will be provided 15-20 minutes to present their U/DUNS. The UNS Review Board members will concur or non-concur and

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**II MEF Standard Operating Procedure for Universal Needs Statement
Review Board**

provide written comments on the merit of the UNS. If the decision is to concur the U/DUNS is forwarded to the CG II MEF for signature. If the board non-concurs, the U/DUNS is cancelled or returned to the originating unit for further refinement. If the board concurs, the II MEF G-9 will prepare an executive summary and consolidated board comments for inclusion in the package forwarded for signature to the CG II MEF.

d. Once signed, the U/DUNS package is returned to the II MEF G-9 for additional processing. II MEF G-9 will enter the U/DUNS into the appropriate UUNS or DUNS section of the Capabilities Portfolio Management System (CPMS) and forward to MARFORCOM for endorsement. If not signed, it is returned to the originating unit for further refinement or cancelled. Source documents such as the electronic version of the U/DUNS, the presentation given at the UNS Review Board and any other supporting documentation will be uploaded to CPMS to facilitate review. II MEF G-9 will track progress of the U/DUNS via the CPMS.

4. UNS Board Membership

a. II MEF UNS Review Board is comprised of the following permanent members:

- II MEF Chief of Staff (Chair)
- AC/S G-1
- AC/S G-2
- AC/S G-3
- AC/S G-4
- AC/S G-6
- AC/S G-7
- AC/S G-8
- AC/S G-9 (Facilitator)
- AC/S G-10

b. As required board members:

- Office of Naval Research Science Advisor
- Marine Corp Warfighting Lab Liaison
- Information Management Officer (IMO)

c. Members from remaining staff sections can be added to the UNS Review Board, as required, if the requested capability lies within their purview (e.g., Staff Judge Advocate, Medical, etc.). The UNS Review Board and/or originating unit may have Subject Matter Experts (SME) in attendance to discuss items that need clarification.

5. **Supporting Documentation.** The documents used by the II MEF G-9 to prepare the UNS package for the board and subsequent submission for CG, II MEF signature are:

**II MEF Standard Operating Procedure for Universal Needs Statement
Review Board**

- Agenda
- Comments page
- Consolidated Comments page
- Executive Summary
- Urgent Needs Process flowchart

6. **Administration and Logistics.** Point of contact is the II MEF AC/S G-9,
Mr. Michael Edwards, 910-451-3980, michael.e.edwards@usmc.mil.

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**II MEF Standing Operating Procedure for Science, Technology and
Experimentation Working Group**

1. Situation

a. In accordance with this Order and reference (c), the ST&E staff is responsible to the Commanding General II MEF for providing a continuous interface with Science, Technology, Experimentation, and Acquisition communities in order to shape future technologies and obtain next generation weapons, equipment, and tools for use by II MEF forces. It is a conduit between the warfighter and the organizations providing capabilities to II MEF, its Major Subordinate Commands (MSC) and Major Subordinate Elements (MSE). These providers fall into four categories:

- The science and technology (S&T) community within the Department of Defense and the private sector.
- The test and evaluation community.
- The acquisition community.
- The resources requirements community of Headquarters Marine Corps (HQMC) and the Chief of Naval Operations (CNO).

b. It is necessary to form a Science, Technology, and Experimentation Working Group (STEWG) at II MEF to provide greater warfighter insight, input, guidance, oversight, and ownership of the work performed by the II MEF ST&E staff.

2. **Composition.** In addition to the II MEF ST&E staff, the STEWG will be formed with at least one representative from each of the G-1, G-2, G-3, G-4, G-6, G-7, G-8, G-10, IMO and HSS staff sections and each II MEF MSC/MSE - 2d Marine Aircraft Wing (MAW), 2d Marine Division (MARDIV), 2d Marine Logistics Group (MLG), 22d Marine Expeditionary Unit (MEU), 24th MEU, 26th MEU, and II MEF Headquarters Group (MHG). Battalion participation will include: 2d Intelligence Battalion, 2d Radio Battalion, 2d Air Naval Gunfire Liaison Company (ANGLICO), 2d Law Enforcement, and 8th Communications Battalion. Participants from outside II MEF will include Marine Corps Special Operations Command (MARSOC), Marine Corps Forces Command (MARFORCOM) G-9, Marine Corps Systems Command (MCSC), Naval Surface Warfare Center, Indian Head-Explosive Ordnance Disposal Technology Division Demonstration and Assessment Team (DAT), Marine Corps Center for Lessons Learned (MCCLL), Center for Naval Analysis, Marine Corps Engineering School and Marine Corps Installations (MCI) - East. Additional participation will be coordinated by the ST&E staff, as necessary.

3. **Schedule.** The STEWG will meet every quarter, at a minimum, and at other times, as required, to establish S&T priorities, make recommendations, and provide guidance to the ST&E staff.

4. Execution

a. **Concept of Operations.** Approximately one month prior to each meeting, the ST&E staff will present the draft agenda to the Chief of Staff, obtain approval, and disseminate the approved agenda, with any necessary read-ahead material, to all members of the STEWG. For emergent requirements meetings (e.g., Urgent Need Statements, short turnaround priority rankings by HQMC, ONR and other organizations), there may be less notice. The following procedures will apply:

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**II MEF Standing Operating Procedure for Science, Technology and
Experimentation Working Group (Cont'd)**

(1) ST&E staff prepares topics and background read-ahead material, facilitates meetings, provides technical analysis.

(2) ST&E staff prepares draft meetings outcomes report, submits to STEWG members for their review, obtains consensus on the accuracy of the report, and includes any non-concurrence positions.

(3) ST&E staff outbriefs an executive summary in conjunction with normal Principle Staff meeting (e.g., at conclusion of Chief's Weekly or Operations Intel Brief).

(4) Final report with its decisions is approved by at least the Deputy Commander through the Chief of Staff (COS).

b. Tasks

(1) II MEF COS. Chair the STEWG, and vote in the event of a tie.

(2) STEWG Members

(a) Serve as voting members of the STEWG.

(b) Review read-aheads, actively participate and vote during the meeting, and review meeting outcome reports.

(3) ST&E Staff. Execute all functions as described throughout this order.

5. Administration and Logistics. Point of contact is the ONR SCIAD to II MEF, Mr. Richard Kirchner, 910-451-5628, richard.kirchner@usmc.mil.

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II MEF Standing Operating Procedure for the Enlisted Innovation Symposium**1. Situation**

a. Today's Marine Corps is faced with a number of emerging challenges, from tech-enabled non-state actors to increasingly aggressive peer state militaries. The rapid development of technology over the last decade has made today's battlefield more complex and chaotic than it has ever been before. In order to successfully transition into this new era of warfare, II Marine Expeditionary Force (II MEF) will need to rely on the adaptability and ingenuity of its junior enlisted Marines, especially its Noncommissioned Officers (NCO). This requires us to educate our small unit leaders on today's threats and to ensure that they remain engaged and informed about current force development initiatives throughout the Marine Corps and the Department of Defense (DoD)

b. It is necessary to form a II MEF Enlisted Innovation Symposium in order to provide NCOs with education on emerging threats and technologies, and capitalize on their technical acumen. Attendees should be prepared to discuss these challenges with their peers and senior leaders both during and after the event.

2. **Schedule.** The Enlisted Innovation Symposium will meet annually to educate and engage a wide enlisted audience from throughout the MAGTF. The event may span two or three days and should include some combination of structured lecture-style seminars, question and answer sessions, breakout discussion groups, and open networking/leisure time.

3. Execution**a. Commander's Intent and Concept of Operations**

(1) **Commanders Intent.** The intent of this symposium is to provide NCOs with a relaxed academic environment in which to learn about and discuss future challenges and opportunities facing the Marine Corps. It will also serve as an opportunity for Marines to network with their peers in order to establish symbiotic relationships throughout the Marine Air-Ground Task Force (MAGTF). This cross-communication is imperative to our ability to defeat and deter today's networked threats. By encouraging communication between NCOs across our many different units, we will foster a spirit of innovation throughout our entire enlisted corps. Additionally, we will also enable our enlisted Marines to exert an influence on the development of our future force by giving them the knowledge and confidence to research, develop, and present their ideas to senior leaders throughout the Marine Corps.

(2) **Concept of Operations.** The II MEF Enlisted Innovation Symposium will consist of presentations and discussions. These topics should be developed through discussion by a diverse planning team of non-commissioned officers (NCOs) with the guidance of subject matter experts and the II MEF Science, Technology and Experimentation (ST&E) Staff. Topics may include intelligence updates, new technologies, operational challenges, leadership techniques, and current developments in the Marine Corps and the Department of Defense (DoD). Planning will begin no later than three (3) months before the event to ensure that there is time to make changes and respond to challenges that may arise. A recommended planning template is included in Enclosure (1).

II MEF Standing Operating Procedure for the Enlisted Innovation Symposium

b. Coordinating Instructions

(1) Major Subordinate Commands (MSCs) will identify and nominate attendees in accordance with the requirements listed below. Attendees should meet the following criteria:

(a) E-4 or E-5 Marine or Sailor.

(b) Known for maturity and critical thinking ability.

(c) Recognized as a leader by their peers.

(d) Capable of effectively communicating information learned at the symposium to Marines and Sailors of all ranks.

(2) Representation from each MSC is required. Personnel Requirements are listed below.

(a) 2d MarDiv - 65 attendees.

(b) 2d MLG - 65 attendees.

(c) 2d MHG - 35 attendees.

(d) 2d MAW - 35 attendees.

(3) Attendees are invited to respectfully engage with both speakers and their peers without the constraints of rank or billet; all should feel comfortable asking questions and providing input. Additionally, all attendees should be prepared to discuss the event with their command senior leaders upon its conclusion.

4. Administration and Logistics. Point of contact is the II MEF AC/S G-9, Mr. Michael Edwards, 910-451-3980, michael.e.edwards@usmc.mil.

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II MEF Standing Operating Procedure for the Enlisted Innovation Symposium

Planning Template:

1. Determine Topics
 - a. Form and convene planning team.
 - b. Identify a number of potential topics in discussion.
 - c. Attempt to organize topics into a directional agenda.
 - d. Remove extraneous topics.
 - e. Identify a number of potential speakers for each topic.

2. Identify Space
 - a. Identify potential locations for the event.
 - b. Ensure that locations meet logistical requirements (parking, restroom facilities, access to food/water).
 - c. Rank facilities in order of preference.
 - d. Identify availability.

3. Identify Dates
 - a. Identify a number of potential dates, keeping in mind demands from major exercises or training evolutions.
 - b. Remove dates immediately before holidays.
 - c. Cross-reference dates with space availability dates.
 - d. Secure date and space.

4. Contact Speakers
 - a. Email first speaker preferences with dates to ask for availability. These speakers may include high-ranking officers or key civilian experts.
 - b. Once key speakers have been identified and locked on, begin to design schedule around their requirements.
 - c. Contact remaining speakers; be prepared to discuss time slots and dates.
 - d. Develop initial draft schedule and send to all speakers. Ensure that they confirm their attendance.
 - e. Finalize schedule.
 - f. Collect bios.
 - g. Assist speakers in developing travel plans.

5. Advertise the Event
 - a. Draft letter for release by II Marine Expeditionary Force (II MEF) Command Element.
 - b. Route letter through appropriate administrative channels.
 - c. Secure signature.
 - d. Plan distribution method. The II MEF Sergeant Major may be best suited to disseminate information to the subordinate elements to ensure that all elements of the MAGTF are represented.
 - e. Receive RSVPs. Recommend collecting email addresses of all attendees in order to send follow-on information.

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II MEF Standing Operating Procedure for the Enlisted Innovation Symposium

6. Send Support Information
 - a. Send all attendees preparation packets. These may include maps, directions, locations of local food/stores, and parking passes if necessary.
 - b. Send periodic updates to ensure that attendees remember and become interested prior to the event.

7. Host the Event
 - a. Ensure that speakers have all requirements for their presentations.
 - b. Ensure that room exists for breakout discussion groups if necessary.
 - c. Coordinate to ensure that microphones, combat camera support, etc. are available.
 - d. Send final reminder email.
 - e. Prepare 'thank-you' mementos or awards for speakers.

8. After-Action
 - a. Collect after-action reviews from all participants.
 - b. Prepare after-action report.
 - c. Publish consolidated after action report.