WELCOME to the first Joint-MMAST Newsletter! The goal of this publication is to share information about DoD Medical Modeling & Simulation (MM&S) entities, initiatives, research, products/services, articles/publishings, best practices, lessons learned and so much more. If you have suggestions for newsletter topics or want to feature the awesome MM&S happening at your site, please send an email with content/pictures/contact information to the DMMSO team: dha.ncr.education-trng.mbx.dmmso@mail.mil.

**Mission Statement**

DMMSO is the lead organization for the centralized management of shared service MM&S capabilities and solutions to support medical education and training. The management of MM&S by this office will support the development, management, and integration of requirements, capabilities, and systems for health care operations; promote the use of MM&S across the Department; and improve medical readiness, survivability, quality of care, patient safety, and efficiency.

The DoDI 6000.18, Medical Modeling and Simulation Requirements Management, published August 22, 2018, established and directed the DMMSO to: centralize MM&S; support Military Health System (MHS) planning, decision-making, test and evaluation, and education and training; eliminate unnecessary duplication of costs; and more effectively determine and produce the MHS mission requirements needing standardized M&S solutions and systems.

The DMMSO team currently has 9 team members who coordinate and support over a dozen agencies across the DoD. The Requirements Branch is located in Falls Church, VA and the Implementation Branch is located on Joint Base San Antonio Fort Sam Houston, TX. Feel free to contact them with any MM&S questions you may have.

DMMSO Team Contact Information on last page.

**DMMSO Lines of Effort**

**Manage Requirements**
- Manage needs for future MM&S capabilities
- Coordinate requirements analysis
- Support generation of requirements documentation

**Support System Staffing & Review**
- Support staffing through requirements systems to validation

**Coordinate Implementation**
- Track implementation of solutions
- Establish guidelines for standardized tools for training assessments

**Assess MM&S Enterprise**
- Develop measures of effectiveness/performance (MOEs/MOPs)
- Determine effectiveness of new capabilities
- Provide policy recommendations
The AFMMAST Program provides strategic guidance to the Air Force Surgeon General on medical simulation. It supports medical training and education through the utilization of a distributed human patient simulator network and advanced information technology solutions. This robust program includes more than $73.83 million in equipment and $7.22M in personnel assets (52 FTEs) operating in 93 locations worldwide. The AFMMAST Program works to improve patient outcomes and builds medical skills better than other learning modalities, with the evidence to prove it. The focus of the program is to support the Air Force Medical Service (AFMS) by standardizing processes and integrating simulation where it meets the training needs of our healthcare team members to provide quality care for our patients.

The AFMMAST Program Management Office (PMO), located at Joint Base San Antonio Randolph, Texas provides guidance on simulation center operations, training on and acquisition of equipment and collaborates with subject matter experts on simulation supported curriculum. In addition, the program tracks equipment inventory and aids in the selection of new or replacement equipment.

Please check out the helpful tools and cutting-edge information by visiting our AFMMAST Portal: https://intelshare.intelink.gov/sites/afmmast. There you will find our monthly newsletter, contact information for the PMO and Tier one sites, as well our Simulation Procurement Equipment Requirements Matrix (SimPERM).

AFMMAST PMO: 63 Main Circle, Joint Base San Antonio Randolph, TX 78150-4549; Organizational Email: aect-sgr@us.af.mil

Secure AFMMAST Portal (please complete the one-time self-registration): https://intelshare.intelink.gov/sites/afmmast (*Select your DoD EMAIL Certificate*)

Public AFMMAST Portal (Sim 101, Sim 201, and Mobile Apps): www.afmmast.cemm.org


AFMMAST PMO POCs

Chief, Medical Modernization/AFMMAST
Lt Col Janelle Robertson
DSN: 487-9726, COMM: (210) 652-9726
Email: janelle.robertson@us.af.mil

Program Manager, Medical Modernization/AFMMAST
SMSgt Leticia Thomas
DSN: 487-9617, COMM: (210) 652-9617
Email: leticia.thomas@us.af.mil

Curriculum Branch
Mrs. Maya Machacon
DSN: 487-9720, COMM: (210) 652-9720
Email: maya.machacon.ctr@us.af.mil

Mr. Richard Harper
DSN: 487-4421, COMM: (210) 652-4421
Email: richard.harper.11.ctr@us.af.mil

Ms. Karen Johnson, AE/AMC SGK
DSN: 779-6282, COMM: (618) 229-6282
Email: karen.johnson.19.ctr@us.af.mil

Deputy Chief, Medical Modernization/AFMMAST
Mr. Joseph Ruisi
DSN: 487-8546, COMM: (210) 652-8546
Email: joseph.ruisi.1@us.af.mil

Operations Branch
Mr. Jerry Gomez
DSN: 487-9611, COMM: (210) 652-9611
Email: gerardo.gomez.1.ctr@us.af.mil

Medical Logistics Branch
Mr. Frank Puente
DSN: 487-9614, COMM: (210) 652-9614
Email: francisco.puente.1.ctr@us.af.mil

Program Analysis Branch
Mrs. Kristina Richardson
DSN: 487-8536, COMM: (210) 652-8536
Email: kristinia.richardson.1.ctr@us.af.mil

Information Technology Branch (vacant)
Army CSC Simulation Committee (CSC)

Army CSC MISSION STATEMENT

The Army CSC will be a worldwide leader in managing and directing multi-disciplinary simulation training to enhance Graduate Medical Education, assist in Redeployment training and improve patient safety. We will ensure that our providers are “Trained, Competent, Safe, and Ready” to care for our Soldiers and their families.

- Initially funded in 2007 (Deering et al., 2012)
- Has oversight of GME Simulation Training at the 10 Army GME Hospitals
- Covers 15 different medical specialties to meet accreditation and certification requirements for residents
- Sets standard simulation equipment and curriculum packages for each specialty
- All CSC Simulation Centers are integrated into their respective MTF and assist with hospital-based training (nursing/certificate course/readiness/etc.)
- Trains over 60,000 providers annually

Accreditations:

- Society of Simulation in Healthcare (SSIH) 8/10 sites
- American College of Surgeons (ACS) 4/10 sites

GME Programs Supported

1. Anesthesia
2. Dermatology
3. Ear Nose & Throat (ENT)
4. Emergency Medicine
5. Family Medicine
6. General Surgery
7. Internal Medicine
8. Obstetrics & Gynecology
9. Ophthalmology
10. Orthopedics
11. Pathology
12. Pediatrics
13. Psychology
14. Radiology
15. Urology

Army CSC POCs

Incoming Chair, Army CSC
LTC Maria M. Molina, MD, FACS, FACOG, CHSE
Chief of Simulation Brooke Army Medical Center
Joint Base San Antonio Fort Sam Houston, TX
Work: (210) 916-1544; DSN: 429-1544
Email: maria.m.molina8.mil@mail.mil

ASC/Army CSC Administrator
Mr. Hugh L. "Duke" Ellington, JR., DAC, GS-12
Madigan Army Medical Center, Bldg 9925B
Joint Base Lewis-McChord, WA 98431
Work: (253) 968-2808; DSN: 782-2808
Email: hugh.ellington2.civ@mail.mil

10 Army GME Hospitals

1. Carl R. Darnall Army Medical Center (CRDAMC), Fort Hood, TX
2. Eisenhower Army Medical Center (EAMC), Fort Gordon, GA
3. Fort Belvoir Army Community Hospital (FBACH), Fort Belvoir, VA
4. Madigan Army Medical Center (MAMC), Joint Base Lewis-McChord, WA
5. Martin Army Community Hospital (MARTIN), Fort Benning, GA
6. San Antonio Military Medical Center (SAMMC), Joint Base San Antonio
   Fort Sam Houston, TX
7. Tripler Army Medical Center (TAMC), Honolulu, HI
8. Walter Reed National Military Medical Center (WRNMMC), Bethesda, MD
9. William Beaumont Army Medical Center (WBAMC), Fort Bliss, TX
10. Womack Army Medical Center (WAMC), Fort Bragg, NC

The MSTC Program is a Department of the Army funded program of record (POR) established to provide standardized platforms for the delivery and execution of up-to-date tactical combat casualty care (TC3) training and testing for all US Military Personnel. MSTCs provide a dynamic environment simulating a tactical/combat setting for training and testing of Medical and Non-Medical personnel. MSTCs provide the ability to physically simulate realistic scenarios requiring critical thinking, multi-tasking and decision making. MSTCs enable increased lethality by providing a realistic venue to enhance individual and collective combat casualty response skills. The MSTC is the flight simulator and Close Combat Tactical Trainer (CCTT) equivalent for medical training and testing.

Each MSTC provides a modifiable, reconfigurable, and sustainable capability to simulate operating environments, with associated stressors of various combat conditions including hostile and friendly force engagement with diverse battlefield environments. Training goes beyond learning individual medical tasks; the MSTC provides the ability to apply patient management skills in a dynamic tactical environment for Medics and Combat Casualty Responders to practice their skills in realistic surroundings and scenarios.

The MSTC program provides 21 training facilities in both CONUS and OCONUS locations. Each facility is equipped with a standardized basis of issue plan (BOIP) which includes training aids, devices, simulators and simulations (TADSS), audio/visual equipment for producing realistic battlefield conditions and medical military operation in urban terrain (M-MOUT) structures. Specific guidelines and standards for building size, training area, equipment, personnel and capabilities are established by the capability production document (CPD) to ensure every MSTC has like capabilities and provides quality training.

The standardized MSTC includes a fully climate controlled facility with reconfigurable/expandable classrooms, validation rooms, skills training rooms, tactical training suite, virtual training/computer learning room and an instrumented training control room. Outside training areas maximize the use of blended reality and multi-use capabilities. MSTCs have outside medical training and skills validation lanes that provide mounted, dismounted, MOUT and other battlefield conditions. There are litter obstacle lanes for training 68W and combat life saver (CLS) certification and/or recertification and a separate covered training area to conduct limited tactical training during inclement weather.

The MSTC program implements most current training and doctrine for Combat Medics and Combat First Responders through training curriculum approved by the Health Readiness Center of Excellence (HRCoE). Between FY2010 and FY2019, the 21 MSTCs have trained over 581,000 personnel. The MSTC program is managed by the US Army EMS Programs Management Division, located at Ft. Sam Houston, TX.

**MSTS POCs**

**MSTC Program Management Office**
US Army Emergency Medical Service (EMS) Programs Management Division
Joint Base San Antonio Fort Sam Houston, TX
Work: (210) 221-0837

The NHJAX simulation center is located within the Staff Education and Training (SEAT) Department which supports readiness training throughout the Military Treatment Facility (MTF). The simulation program prepares physicians, nurses and corpsmen using high-fidelity simulation and skills labs. Mannequins are used to simulate patient problems utilizing high-risk, low-volume simulation scenarios, realistic role-playing, and thorough de-briefings. The simulation center also has a skills lab with a simulator on the Multi-Service Unit where nurses and corpsmen can practice their medical/nursing skills using mock scenarios.

The simulation center utilizes a Gaumard NOELLE birthing simulator for Code Purple drills on the Maternal/Infant and Labor & Delivery units. A Gaumard HAL simulator is employed for command-wide Code Blue and Code Stroke drills, along with Laerdal Resusci Anne for Basic Life Support (BLS) drills. Additionally, task trainers are set up for the residents to practice skills such as joint injections, PAP smears, suturing, and peripherally inserted central catheter (PICC)/midline insertions. The NHJAX simulation center supports all the resuscitative programs offered through SEAT such as BLS, Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), Trauma Nursing Critical Care (TNCC), and Advanced Trauma Life Support (ATLS). Finally, Innovative Tactical Training Solutions (ITTS) TOMManikins are utilized for Tactical Combat Casualty Care (TCCC), and will be used for the HM Trauma Training program starting in January 2019 which will directly support Hospital Corpsman transitioning from their first shore-based duty station to an operational tour.

NHJAX POCs

Simulation Nursing Director
Ms. Terri Burns MSN, RN-BC
Work: 904-542-9185
Email: terri.l.burns9.civ@mail.mil

Simulation Technician
Mr. David DeFiore
Work: 904-542-7088
Email: david.s.defiore.ctr@mail.mil

Site Spotlight: Naval Hospital Jacksonville (NHJAX), FL
The annual I/ITSEC is organized by the National Training and Simulation Association (NTSA), which promotes international and interdisciplinary cooperation within modeling and simulation (M&S), training, education, analysis, and related disciplines. I/ITSEC consists of peer-reviewed paper presentations, tutorials, special events, professional workshops, a commercial exhibit hall, a serious games competition, and Science, Technology, Engineering and Math (STEM) events for teachers and secondary students.

This I/ITSEC was the most productive we at DMMSO have had to date. The DMMSO kiosk at I/ITSEC 2018 had roughly 350 visitors over the course of four days and was located within the DM&SCO booth. Thanks to Mr. Citizen and the DM&SCO staff (https://www.msco.mil) for allowing us to be part of their exhibit area and showcase our DMMSO initiatives.

Contacts and demonstrations included:
- Air Force Medical Modeling and Simulation Training (AFMMAST) Program
- Army Telemedicine and Advanced Technology Research Center (TATRC)
- British Aerospace (BAE) Systems
- CAE Healthcare
- Cyber Security and Information Systems Information Analysis Center (CSIAC)
- Dedicated Computing
- Defense Modeling and Simulation Catalog
- Gaumard Scientific
- Gooru
- Innovative Tactical Training Solutions (4ITTS)
- Joint Training Tools
- KForce Government Solutions (KGS), TraumaFX
- Laerdal Medical
- Leidos
- North Atlantic Treaty Organization (NATO)
- OPPOR Solutions
- Program Executive Office for Simulation, Training and Instrumentation (PEO STRI)
- Pulau
- RSI
- Simulation and Training Solutions (STS)
- Simulation Interoperability Standards Organization (SISO)
- Sony
- The McConnell Group
- And more!
DMMSO Organizational Email: dha.ncr.education-trng.mbx.dmmso@mail.mil

Mr. Ruben Garza, Jr., Branch Chief, DMMSO
Work: (210) 221-0587; DSN: 471-0587
Email: ruben.garza44.civ@mail.mil

MSG Erik McConnell, DMMSO Superintendent
Work: (703) 681-7170
Email: erikz.mcconnel1.mail.mil

DMMSO Requirements Branch
7700 Arlington Blvd
Falls Church, VA 22042

Mr. Preston Whitlock, (571) 765-6113
Email: willie.p.whitlock2.ctr@mail.mil

Mr. Rodney Cowden, (571) 765-6112
Email: rodney.g.cowden.ctr@mail.mil

Mr. Adam Glusczyk, (571) 765-6112
Email: adam.d.glusczynski.ctr@mail.mil

Ms. Cynthia Barrigan, (571) 765-6111
Email: cindy.r.barrigan.ctr@mail.mil

DMMSO Implementation Branch
4270 Gorgas Circle, Suite 522, Bldg 1070
Joint Base San Antonio Fort Sam Houston, TX 78234

Mr. Kazmer Meszaros, (210) 221-0107; DSN: 471-0107
Email: kazmer.meszaros.ctr@mail.mil

Ms. Daphne McGill, (210) 808-0259; DSN: 420-0259
Email: daphne.r.mcgill.ctr@mail.mil

Mr. Lou Cortez, (210) 221-9147: DSN: 471-9147
Email: luciano.m.cortez.ctr@mail.mil

DMMSO Intelink Site: https://intelshare.intelink.gov/sites/dmmso

DMMSO Newsletter Topics: if you have an idea for future newsletter topics, please send to DMMSO: dha.ncr.education-trng.mbx.dmmso@mail.mil

Upcoming Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-10 May 2019</td>
<td>Special Operations Medical Association Scientific Assembly (SOMSA)</td>
<td>Charlotte, NC</td>
<td><a href="http://www.specialoperationsmedicine.org/">http://www.specialoperationsmedicine.org/</a></td>
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<tr>
<td>14-16 May 2019</td>
<td>International Forum for the Military and Civil Simulation, Training and Education Community (ITEC)</td>
<td>Sweden</td>
<td><a href="http://www.itec.co.uk/agenda">http://www.itec.co.uk/agenda</a></td>
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<tr>
<td>2-6 Dec 2019</td>
<td>Interservice/Industry Training, Simulation and Education Conference (I/ITSEC)</td>
<td>Orlando, FL</td>
<td><a href="http://www.iitsec.org/">http://www.iitsec.org/</a></td>
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Additional events listing: https://www.healthysimulation.com/17612/healthcare-simulation-conferences-2019

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