CoERCCC Meeting
Marriott San Antonio, TX
01-02 March 2023

1 Mar 2023

Time (CST)	Event / Topic	Presenter / POC
0800-0815	CoERCCC Welcome & Administrative	COL Cunningham
0815-0845	CoERCCC Hail & Farewell Committee Documents	COL Cunningham
0845-0930	CoERCCC Review of Past Meeting Due-Outs and Status	COL Cunningham
0930-1015	Recent CASEVAC Experience & Project Caladrius Cases	LCDR Flieger/LCDR Roszko
	30 Minute Break	
1045-1130	Change of focus in the CTS	COL Baker
1130-1215	Australian Air Ambulance Lessons Learned	CAPT(USNR) Tobin
1215-1300	TACEVAC Update	CMsgt(sel) Brit Adams /LCDR* (Congrats !) Flieger

1. **Admin Remarks and Introductions (COL Cord Cunningham):** COL Cunningham, Chair of the Committee on En Route Combat Casualty Care (CoERCCC), convened the meeting and welcomed meeting participants. COL Cunningham briefly reviewed the meeting's agenda. Mr. Sestito discussed critical issues, transportation, and logistical information for participants. All participant introductions followed.

2. **Hail and Farewell Committee Documents (COL Cunningham):**

3. **CoERCCC Review of Past Meeting Due-Outs and Status (COL Cunningham):** COL Cunningham reviewed and discussed the current and largest EnRoute challenges the committee and the DoD currently face:

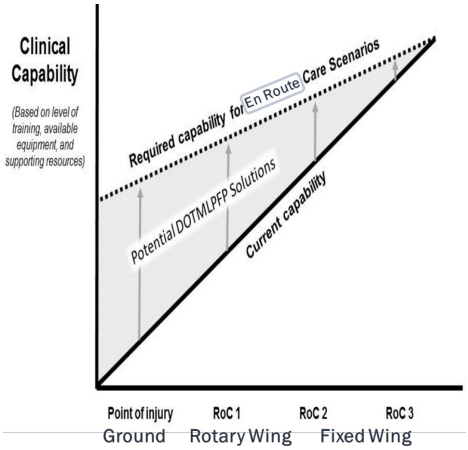
   Biggest ERC Challenges
   - LSCO(MASCAL)
   - INDOPACOM
   - Arctic/Cold Weather
   - Skill sustainment
   - Common operational picture/planning
   - PMI/MEDLOG
   - Patient Monitoring
   - Decision Support
   - Documentation

Current Lines of Effort / Deliverables

- Medical Direction and Commander Messaging
- TACEVAC Memo
- Proficient credentialed statement including clinical experience inflection (10 resusc/annual SAFD EMS)
- R&D to validate training methods/task saturation
- Deployed med content
- PCAD concept leveraged
- 9-line relook and evacuation precedence(redefine)
- Inflection points of evac (2nd triage like sacco) and class 8 resupply

Expectations from your Membership

- Actively participate in a subcommittee
- Voting membership (50) and SME designations
- Continue to serve as ERC advocates to the services
- Bring identified issues to the attention of CoERCCC



4. **Recent CASEVAC Experience & Project Caladrius Cases (LCDR Fliegler/ LCDR Roszko):** LCDR Fliegler presented a patient vignette on a Shipboard fire CASEVAC situation from a Peruvian ship during combined operations. She reviewed the organic and +plusMedical/Dental capabilities and amount of personnel on the USS Lincoln (CVN), location at the time of the incident and the information passed prior to arrival. Report of two (2) patents with significant burns 90% reported.
    -Main function of carrier is provide air superiority, not casualty receiving
    -Just returned from deployment
    -Rim of the Pacific, every 2 years, 26 Nations, war-gaming
        -Medical conference prior to, but no plans to practice Medical Evacuations

-After receiving report from Senior Medical Officer (SMO) Recruited CRNA and Search and Rescue (SAR Tech) to accompany on the pickup mission.

-Flight time was approx. 40 min to casualties

-Team formation was heavily discussed, as Nurse is not required to have any JECC, etc Training on a Carrier. Huge asset and coincidence that LCDR Fliegler had been to dunker training, JECC Training etc. Under normal circumstances standard ship RN is not ideal candidate for transport.

This needs to be addressed

-Time was of the essence due to severity of burn, discussed removing crew chief and using SAR Tech.

*These missions are not properly detailed as a Medical Asset**

- Picked up casualties from Coast Guard Cutter who had arrived and began rendering care from Peruvian ship of incident.

-received report from Coast Guard Independent Duty Health Technician
-placed in stokes litter
-wet burn dressings with wool blankets over
-head to toe assessment pt 1 75% got intubated significant swelling; pt 2 not intubated 85%, but not as much to face/swelling
-IV started to both, fluid resus, ketamine
-translator on-site; approx. 20min on deck before transport

Issues encountered:

-first flight EVER for CRNA, no previous experience on any military aircraft
-impossible to get vital signs due to locations and extent of burns
-space
-stokes litter/ transfer to SAR litter (no sheet under pt)
-detoured to Tripler from Burn Center against request (same distance)
Non-medical decision maker
-Fed fire, no AD asset to turn over to
-No resupply option
-AAR submitted, zero feedback from line

LCDR Rozsko briefed on Caladrius.

-ADSMs and Tricare beneficiaries receive acute medical and surgical care at civilian hospitals, often due to local / State EMS protocols or lack of availability of specialized care at local DHA facilities.

-**Goal** – recapturing med/surg cases will

- Support the generation of a ready medical force
- Improve the quality of care provided to beneficiaries
- Provide real-time information to the line on ADSM medical readiness
- Decrease BAG-2 costs

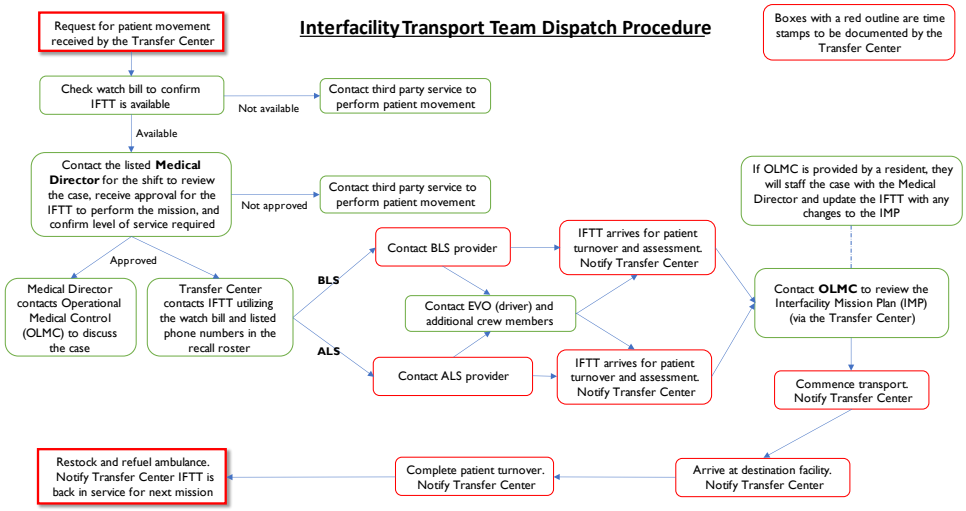
How do we do this?? – Link tertiary Civilian and MTF's.

Ex: Development of ground-based and fixed-wing patient movement teams will connect ADSMs stationed at locations with minimal military health system resources to tertiary care MTFs that can provide specialized med/surg capabilities that they would not otherwise have access to.

Statistics to date

- Over 75 active-duty corpsmen, nurses, and physicians trained
  - EVOs
  - EMTs
  - Paramedics (via MOA with HSCWINGLANT)
  - Respiratory therapists
- 282 total ground transports since start of operations (Jun 1, 2022)
  - ~$160,000 in patient movement costs saved
  - Limited operations (12-hours / day, 5-days / week) since Oct 2022
  - ~ 35% of transports ALS level of care or SCT
- DHA has given approval for $5 million / year in funding to support acquisition of airframe / air crew with goal of initiating fixed wing transports by end of FY23

LCDR Rozsko then presented a patient vignette highlighting the recapture of care possibilities. He then outlined the Interfacility algorithm that has been developed in Tidewater area.



CDR Jensen: *appreciate this presentation and great to see it's working to recapture care. Since it is no longer a pilot and you are actively doing this…how do we incorporate this to compliment training for people like LCDR Fliegler prior to deployment?*

***LCDR Rozsko**: Not going to work at every location, but great point. Volume dependent, but the fact they are out doing patient touches and implementing decision making processes. We are working to expand this out and implement a strategic plan to standardize partnerships.*

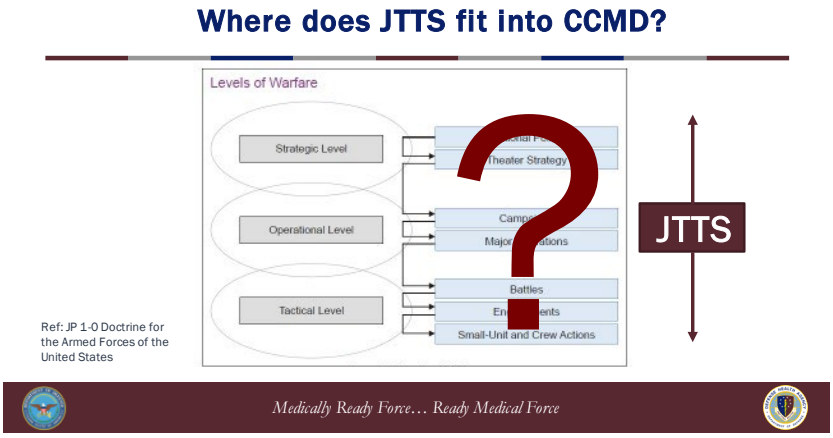
***1SG Harmon**: How is funding going to work for fixed wing implementation and how this could work with National Medical Disaster System (NMDS)?*

***LCDR Rozsko:** Contract for entire crew; money will be transferred from DHA to TRANSCOM and they will conduct bidding etc; joint training, CAIMS accreditation in the works.*

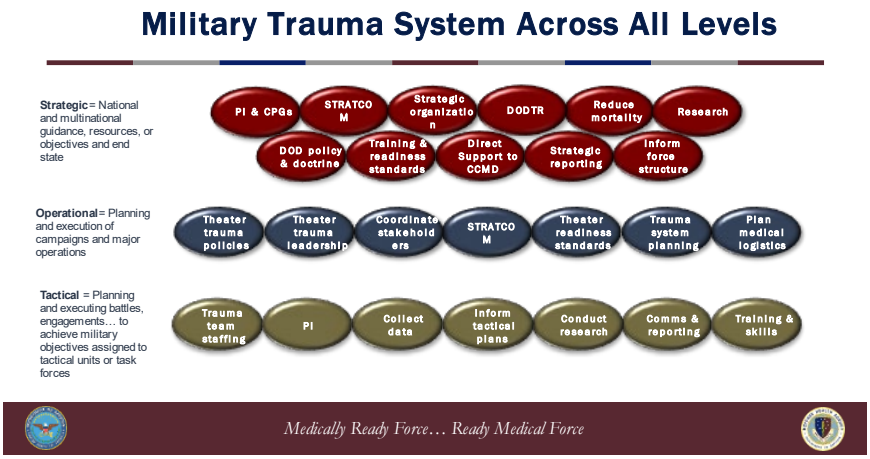
5. **Change of focus in the CTS (COL Baker):** COL Baker discussed the evolution of the DoD Trauma System, offering a historical perspective from implementation in theater of war during OIF/OEF and the implementation of the JTS Operational Performance Improvement Cycle. A brief timeline representation of implementation of the DoDI and NDAA making the JTS the Reference Body for Trauma for the DoD.

   COL Baker then reviewed the PI process and how the JTS Impacts patient care and the survival rate of casualties.

   CTS consists of a group of trauma system and emergency services experts that will maintain a framework of core functions and capabilities for Phase 0 operations at all times and will be scaled to contingency requirements identified by the CCDR.

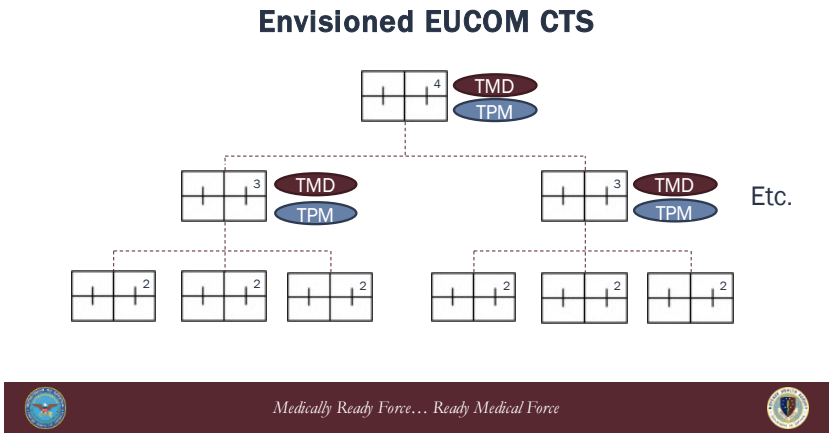


   COL Baker then discussed the Levels of war and hierarchy of action and strategy and implementation of all three levels or phases of combat.



CDR Jensen *– until the services make this important… training the right people to do the right jobs to create this system-based goal to develop Role2/3, because we are not at war. Its not a requirement, they say this is the COCOM responsibility, but it just doesn't happen this way.*

We conducted an experiment with EUCOM as the example on how we would stand up from Phase Zero "0" how to organize this CTS. Tried to imagine an organization that would look like this:



How do we apply this to INDOPACOM:

***CDR Jensen**: The walker dip, we all know what this is...it's that 40% decrease in the Casualty Fatality Rate. This needs to go to the INDOPACOM CDR not Surgeon, this is what systems can do for you. The Services are not providing you a "System." The System domain knowledge is not being messaged, talked about outside this JTS echo chamber, or implemented. That's a go to war capability, and a gap, a phase 2 operation, phase zero has zero authority, no staff, billets, service to support.*

***COL Baker:** the solution is to write the O-plans to address these "requirements" so the services can figure out how many FRSD's, for example, to make.*

Recommended Courses of Action:

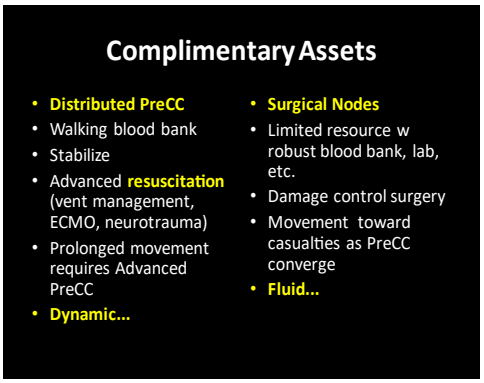
- Military Services should build trauma system capabilities into their deployable medical formations in Phase 0
    - And build trauma system capabilities into MTFs
- CCMDs should update OPLANS with CTS Appendices
    - And exercise their CTS at major exercises
- JTS should lead DOTMLPF updates

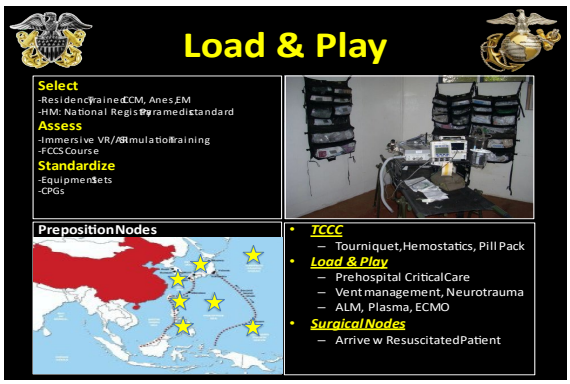
6. **Australian Air Ambulance Lessons Learned (CAPT Tobin):** CAPT Tobin presented a Distributed Prehospital Critical Care in Peer-Peer Conflict. His objective is to contextualize the problem, identify, limiting factors, and develop courses of action.

   CAPT Tobin presents the mind set of changing the thought process from complicated continuum of Roles 1-5 to simply – 1. Tourniquet/TCCC 2. Transport 3. Trauma Center/Surgical Team

   Air superiority is going to be an issue with the tyranny of distance in the Pacific. There is a defensive posture of about 1k nautical miles, so no surgical Naval vessel will be able to be close enough to the fight. Identification of location will result in long range missile attacks. If you can't move you will be killed, and the minute you turn on a monitor, WiFi or actuate anything with a signal, you're dead.

   Need to change from Load and Go – to – Load and Play be more reliant on other vehicles of opportunity. Ability to bring the trauma bay to the patient. Anesthesia, management of TBI, thoracostomy. You can do things in the field with the right people, the right training, and the right resources.





CAPT Tadlock: *Two-fold, but it really starts with honesty to the Line as to what we can and can't do, and if they don't listen, then have contingency plans to augment the risk they are willing to assume. DCR is cool, but what happens when they hold on to the pt. for 4-5 days due to lack of mobility?*

CAPT Walrath*: Return to duty may be the highest concern. Near peer adversary may be saving more lives and assuming that these critical patients become expectant. OIF/OEF was not a near-peer adversary, and we will not have air superiority…98% survival rate is unrealistic. Infectious disease and DNBI may be more crippling that trauma.*

COL Cunningham: *Discusses changes to the agenda for Day 2 to accommodate the JTS Thursday morning Combat Casualty Care Conference.*

7. **TACEVAC Update (CMSgt Adams/LCDR Fliegler):** COL Cunningham gave historical perspective on the update, conducted an azimuth check on the committee at large and trying to put a final stamp on this and pushing it to staffing. The intent of this is NOT to replace organizational formalized guidelines...SMOG, SOR Medic Handbook etc. Just to serve as guidelines for the rest of the community with no formalized basis. TACEVAC is currently defined in the lexicon as the third (3rd) phase of TCCC.

   CMSgt introduced team who has worked on this and HMC Papalski for leading these efforts to current state and the move from TCCC to ERC.

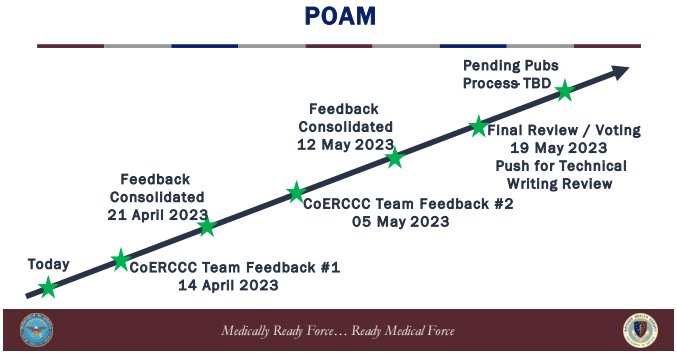
LCDR Fliegler highlighted points to mirror PCC guidelines and tiering the levels of care…and ensuring we are not reiterating TCCC points, but picking up AT TACEVAC, understanding TCCC has been conducted. Tier 1 thru Tier 4 without guidance for the average person. Someone could pick up these guidelines and go through each category and execute these "*very direct usable checklist*."

How ERC Guidelines are Formatted

TACEVAC Role-Based Guidelines for "How ERC Guidelines are Formatted"			
TCCC-ASM	TCCC-CLS	TCCC-CMC	TCCC-CPC
All Personnel - Complete Basic TCCC Management Plan for "XX" then: Additional care above TCCC guidelines relating to Enroute Care ALL PERSONNEL start here with basic interventions and are build upon in subsequent Tiers. Example: TQ placement is a Tier 1 skill, thus, "reassessment" is in Tier 2-4, not placement, since placement is a Tier 1 skill			
Re-assess and Apply/Re-apply MARCH interventions, as needed asdf			
		Prepare for Movement • Casualty preparation prior to movement	

Try to account for the lowest common denominator for all platforms regardless of mode of transport.

Proposed Timeline:



Due outs / Discussion for TACEVAC Guidelines:

- Input/Recommendations for guidelines should also include reference, if applicable
- Team (sub-committee) assignments for Guideline sections
  - Max 40 personnel
  - Will be coordinating with the sub-committee leads
- Service-specific aircraft tables (aircraft layout, load, electric, O2 calculations, etc.)
- Cross-check with current guidance (SMOG, AE/CCATT, PJ)

George Hildebrandt: *These guidelines are VERY important; they provide a framework for people like me to reference for CDID and for explanation to CDR's as to why they need this piece of*

equipment to execute this mission as set by the SME's in the medical realm that do the job and saves lives.

8. **Subcommittee Break out Session: The Committee broke into subcommittee WG** *(Research/CPG/Ed&Training/Policy& Doctrine/Patient Hand Off)*

- Policy and Doctrine(P&D):
  - SCPO Walsh & Cunningham
- CPG and PI:
  - LCDR Paul Roszko
- Education and Training:
  - HMC Wayne Papalski & LCDR Dana Flieger
- Handoff and Documentation (HO&Doc):
  - MSG Joey Hernandez
- Research and Product Steering(R&D):
  - Mr. George Hildebrandt & LtCol Joe Maddry

2 Mar 2023

Time (CST)	Event / Topic	Presenter / POC
0700-0800	**Subcommittee Discussions**	Subcommittee Leads
0800-0830	**Recent AE case**	CMSgt(sel) Adams
0830-0900	**Medical Direction Position Statement & Discussion**	Cunningham/Roszko
30 Minute Break		
0930-1015	**Flight Paramedic Currency Survey**	CMsgt(sel) Brit Adams & Matt Sovine
1015-1100	**Tactical Medical Augmentation Team**	COL Anderson Dr Torres & Matt Harmon
1100-1130	**JECC Updates/ECCN Updates**	LTC Ruben Cruz
1130-1215	**SAVEO2 and DEVICE Research**	Dr Ginde Col(USAFR) Bebarta
60 Minute Lunch / Break		
1315-1345	**JTS CPG/PI update or more likely JSAP and PECC Updates or both**	Teri Duquette-Frame/ Kathy
1345-1415	**JTS Lexicon/JP 4-02 Update**	COL Cunningham
1415-1445	**Lines of Effort CoERCCC discussion**	COL Cunningham
1445-1530	**Closing Comments/Due Outs**	COL Cunningham

1. **Subcommittee brief-backs (Subcommittee Chairs):** COL Cunningham, the Chair of the Committee on En Route Combat Casualty Care (CoERCCC), convened the meeting. COL Cunningham briefly reviewed the meeting's agenda for the day and changes subcommittee brief backs until after lunch.

2. **Recent AE Case (Maj Gould):** Maj Gould gave a background on his current assignment deployed as Command Surgeon in East Africa; briefed on a case involving a CASEVAC on 5 Jan 2023 from a FOB in Africa to CLDJ.

05JAN23 CASEVAC: FOB to CLDJ

Background: On 05JAN23 at 0600Z a U -28 aircrew deployed to an East African FOB presented to medical with complaints of 2x days of abdominal pain and fevers. Eval by SOFME and PA at the local Role I was suspicious for appendicitis. SOTG -EA JOC contacted at 0700Z to request CASEVAC.

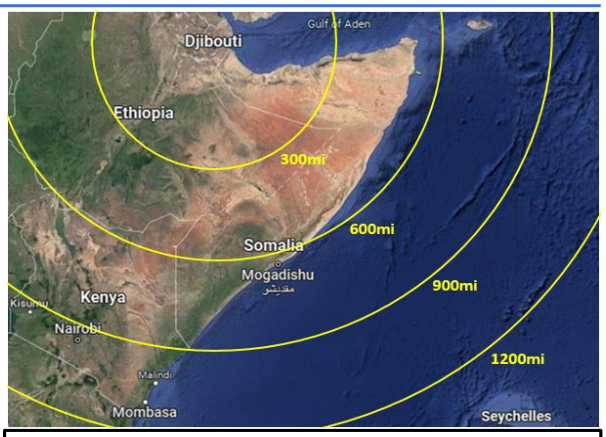
WHO: 32 y/o U -28 Combat Systems Officer

WHAT: Evaluation for abdominal pain via labs and CT with potential surgical intervention pending results

WHEN: 050700ZJAN23

WHERE: East African FOB

WHY: The patient's location did not have CT or lab capabilities and the potential for a surgical condition



MIST Report:

Mechanism / Medical Complaint: RLQ Abd Px x2 days

Injuries Identified: None

Signs / Symptoms: Fever of 101.1F otherwise VS stable / PE with RLQ pain to palp & rigidity, abd guarding, + pain with heel tap / pt ambulatory

Treatment: 60mg IM Ketorolac / 1g PO Acetaminophen / 500mg PO Ciprofloxacin / 500mg PO Metronidazole

Patient Movement/Care Timeline:

05JAN0744Z: Patient transported to airfield and loaded onto waiting NSAv aircraft

05JAN0815Z: NSAv wheels up

05JAN1130Z: NSAv wheels down CLDJ – met on ramp by PRCC staff

05JAN1148Z: Arrived at EMF, transfer of care from SOFME to on -site surgeon, CASEVAC mission complete

05JAN1600Z: Patient underwent Laparoscopic Appendectomy, tolerated well, made full recovery

18JAN0900Z: Cleared by general surgeon to travel, patient departed theater bound for home station via rotator

Lessons Learned:

Limited communication at FOB w/ PRCC – *Recommend additional NIPR line in SOFME Clinic*

Lack of lab capability at FOB – *Recommend bedside / rapid lab evaluation (iSTAT) for use at Role I*

SOFME IDMT learning CASEVAC on -the-go – *Recommend CASEVAC training prior to deployment*

Limited communication methods while enroute – *Recommend SOFME deploy with personal radio*

Delayed communication w/ receiving providers – *Recommend contacting earlier in the flow chart*

POC: Maj Kevin Gould / DSN: 700 -434-0436

COL Cunningham: *Just like to confirm appendix measurement 11Cm not 11mm??*

Maj Gould: *Yes, that's the report I got, seemed a bit much to me too, but no wonder they were perplexed by ultrasound images at first.*

Mr. Ramey Wilson: *Have you guys explored how you would use Kenyan aircraft if there wasn't Air Transport available.*

Maj Gould: *We have not exercised that, but there was definitely a concern of maintenance and safety of those aircraft, but I think it would be an action of last resort, but we are looking to incorporate more interoperability. MASCAL or more grievous injury would make more sense to get them to Nairobi.*

CMSgt Adams: *How long would it have taken if you didn't have fixed wing aircraft via another platform…and do you think it would have affected the patient's outcome?*

Maj Gould: *N+1 is an asset we can spin up of one hour, but unless dedicated medical bird we have trouble flying over Ethiopia and then around Somalia, so it takes 4-5hrs..so 10hr difference vs 3.5hrs it took.*

3. **Medical Direction Position Statement & Discussion (COL Cunningham/LCDR Rozsko):** This is an ongoing effort from the Committee as a Due out mirroring other very successful Position Statements produced by the Committee on Surgical Combat Casualty Care.

   BLUF: there lack infrastructure and system component, which is Medical Direction and localized protocol, credentialing across the services etc. Even though Army function as EMT they are not recognized as National EMT scope of practice. They are practicing above the level of Physical oversight.

   CAPT Tadlock: *we have an agenda topic for Non-surgeons doing surgery, and we hope to address is as a Position Paper so there may be some discussion overlap and corresponding efforts.*

   LCDR Rozsko references different points in the document and the status of Navy ERC efforts and the lack of pre-hospital services, guidance, and direction. The document has been socialized across the services and Committees.

   Monty: *The intent overall is for a BN Surgeon or Role 1 Doc/PA would go through Tier 4 and be fully qualified to do it and training it and a few additional modules on how to be a Medical Director. Services are just seeing the word "provider" for Tier 4, but it is not build that way, it is for Providers at Role 1 and not for a Nurse at Role 3 or a Physical Therapist…its build for BN Surgeon, PA's etc.*

   Discussion ensured on timeline, "what this is going to be," and is it right to focus on the Physician as the Medical Director? Highlighting the combined team. Creation of a Tier 4 course without disrupting Tier 4 and the time limit for Training etc. Clear marching order of the importance of this and March will be the deadline imposed on ERC as a finished product.

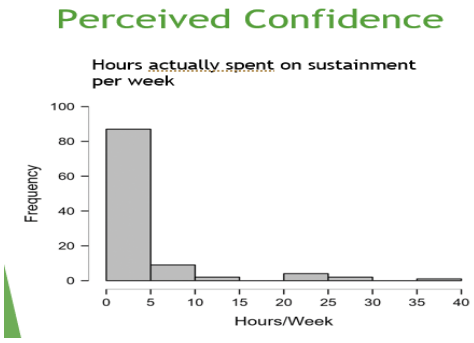
   Col Andrus: *It is imperative TRANSCOM is involved in this and ensure everyone on the Membership can abstain or "agree and remove their name" if their current position creates conflict etc. and try and mitigate all dissention prior to the final product.*

4. **Flight Paramedic Currency Survey (Matthew Sovine/ CMSgt Adams):** Mr. Sovine board certified Flight Paramedic and functions for J-7 Education and Training and presented objective data on an IRB study on Fox 2 cognitive, human exempt feedback data.

   Intent is to take back these identified problems and have statistical data to back it.

   -Combat load is high
   - -Demographics 105 responses meeting inclusion criteria (AD F2)
   - - Significantly important to F2's is medical and trauma
   - - F2's report Unit Taskings and Operational Tempo as significant barriers to sustainment compared to other barriers

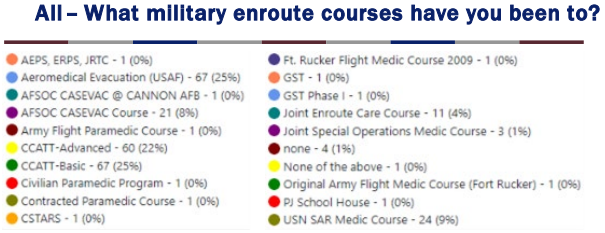
- F2's reported 100% that change was necessary to any current sustainment Program
    -extreme change to unit training needed
    -medical proficiency; designated Med Dir
    -F2 refresher
    -TCCC/BLS not meeting Paramedic Req for knowledge
- F2's report agree that they would like more training in all areas and correlate with feeling more confidence on trauma management and tactical medicine skills in the current model

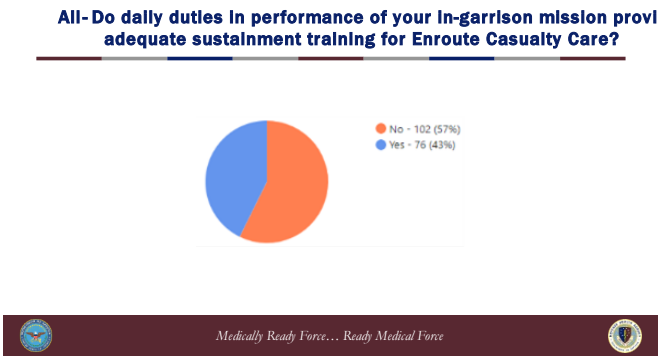


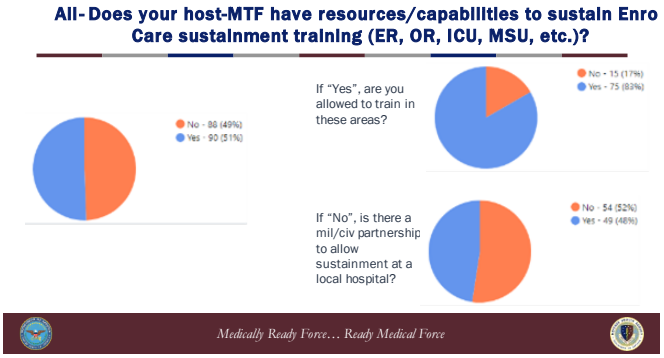
CMSgt Adams briefed on ED&TR subcommittee survey data on Certifications and how are they sustaining. Sent to ERC providers to get a pulse on Mil/Civ Partners training opportunities.

BLUF:

- Despite a wide variety of enlisted and officer skill sets, current certifications, and training opportunities:
    - 57%state daily duties do not provide adequate sustainment training
    - 49% state that host-MTFs have capabilities to sustain training
    - 48% state that there are mil/civ partnerships to enhance sustainment (mainly CSTARS platforms)
    - Only 27% are in an environment daily or weekly for sustainment
    - 46% have not provided care enroute in the past year
    - 78% state that **<u>more training is needed</u>** to "**<u>provide the best care possible</u>**"

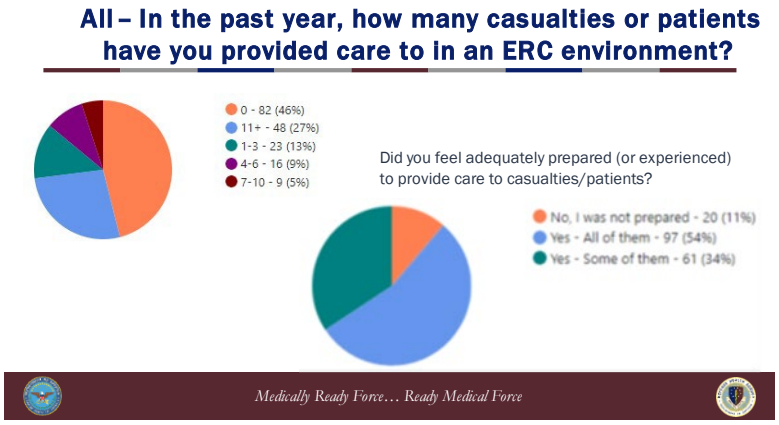






All – In order for me to provide the best care possible, I NEED more sustainment training (didactic, skills/lab, simulation, or actual patient experience).

"78% "agree" or "somewhat agree" that more sustainment training is needed"



SCPO Allen: *unfortunately, this is not going to change, getting our guys hands on ride a longs, we need to change the thought process, adult learning model (Case study) but guidelines don't provide clinical knowledge, so maybe we reapproach how we teach.*

Maj Munn: mitigate and remove unit interaction and put them on orders to Mil/Civ exposure. Push for top cover and the importance of training. We created a Flag system for training time

and literally made time slots unavailable to Unit requirements to ensure Medical personnel were removed for appropriate exposure.

5. **Tactical Medical Augmentation Team (COL Anderson/Dr. Torres/ Matt Harmon):** Col Anderson gave an intro for the team to present and turned the presentation over to Matt.

Matt Harmon gave perspective on the topic of TACTICAL MEDICAL AUGMENTATION TEAM (TMAT).

- INTENDED TO MEET THE CSAF CHALLENGE TO ACCELERATE CHANGE OR LOSE
- MEET DOD STRATEGIC MEDICAL GOALS FOR FUTURE CONFLICTS (LSCO/DISTANCE)
- RESULT OF GAP ANALYSIS CONDUCTED WITHIN OUR RESCUE COMMUNITY
- TO PROVIDE FORCE MULTIPLIER FOR COMBATANT AND MEDICAL COMMANDERS BY BRINGING HIGHER LEVEL OF CARE FURTHER FORWARD SPECIALIZING IN NON-REGULATED PATIENT MOVEMENT

WHAT IS A TACTICAL MEDICAL AUGMENTATION TEAM

- LIGHTWEIGHT, MOBILE, AGILE, SMALL LOGISITICAL FOOTPRINT
- PLATFORM AGNOSTIC
- ADAPTABLE IN TEAM COMPOSITION TO MEET OPERATIONAL NEEDS
- PROVIDES A PFC AND CRITICAL CARE CAPABILITY
- INCLUDES A FLIGHT SURGEON WITH ABILITY TO RTD
- BASED ON PROVEN CAPABILITIES OF PARARESCUE, CCATT, DUSTOFF, USN SAR AND BRITISH MERT
- DESIGNED TO BE COMPATIBLE WITH SPECIALTY TEAMS SUCH AS THE SOST, GHOST AND NEW CONCEPT TEAMS SUCH AS THE PCAD (PROLONGED CARE AUGMENTATION DETACHMENT).

What makes this different: ***We are modular***

- LIVES WITHIN THE RESCUE COMMUNITY WHERE THERE ARE DEDICATED PATIENT MOVEMENT PLATFORMS (AIR, GROUND, SEA)
- EMBEDDED WITHIN THE RESCUE SQUADRON INCREASES AGILITY, COHESION, GEOGRAPHICAL COVERAGE AND EFFECTIVENESS
- TRAIN TOGETHER FOR SEAMLESS INTEGRATION
- PROVIDE CARE BETWEEN PARARESCUE AND ROLE 2/3 CARE OR TRANSLOAD WITH OTHER PATIENT MOVEMENT TEAMS SUCH AS CCATT/AE
    - PHYSICIAN (FLIGHT SURGEON/TRAUMA PHYSICIAN THAT IS CCATT ELIGIBLE)
    - NURSE (TRAUMA/CRITICAL CARE TRAINED)
    - FLIGHT PARAMEDIC (BOARD CERTIFIED FP-C, EXTENDED SCOPE)
        - UNIQUE TO TMAT, AND DIFFERENTIATES FROM CCATT

Where are we with this concept?

- ORGANIZED AND IMPLEMENTED IN 2020 WITHIN 920TH RESCUE WING

- DEVELOPED, ASSESSED, VALIDATED, PARTICIPATED IN NAMED EXERCISES
  EXERCISED: CONUS: FLORIDA, ARIZONA, NEW MEXICO, HAWAII
  OCONUS: PHILLIPINES
- WHITE PAPER PUBLISHED AND MULTIPLE GENERAL OFFICERS BRIEFED
- OVERALL GOAL IS DEVELOPMENT OF A UTC TO AUGMENT THE USAF RESCUE AND DOD MEDICAL COMMUNITY

LTC Sams: *Am I correct in saying that you guys are now at the stage of manning, equipping and sustaining this concept? And I think it is very important that your capabilities meet what you are advertising.*

Dr. Torres: *Yes, exactly.*

CAPT Tobin: *How have you overcome some of the same obstacles for TACETT?*

Matt Harmon: *Some of the feedback was that TACETT wasn't very user friendly. Didn't interact with community regularly because they rove and attach to different teams all the time.*

SMSgt Anderson: *AFMS is the absolute wrong route. Need to socialize with A3SG Col Nelson and develop a UTC within the AF Special Warfare construct and make it Line owned.*

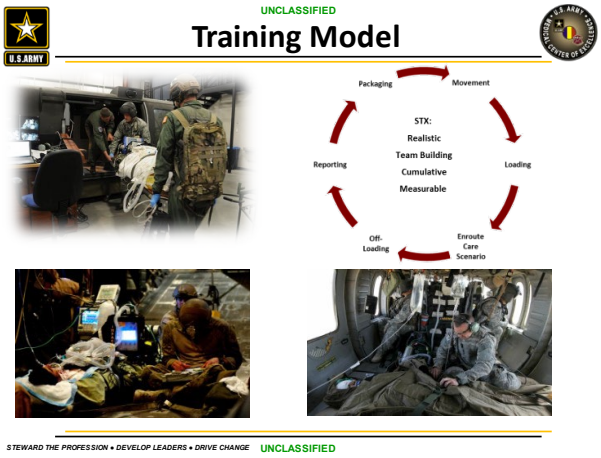
6. **JECC Updates/ECCN Updates (LTC Cruz):** LTC Cruz Director of JECC to present updates and ECCN curriculum and reviews Mission/Vision of JECC. The course is composed of Distributed Learning required prior to arrival, Didactics and Exams and Equipment Familiarization and Practical Exercises.
    - ITRO course
    - Held 5 times per year
    - FY23: 15 seats for International Students
    - Class size: Optimal (32), Maximum (38)
    - Target Audience:
    - 66S / 66T / 68WF2 / 66F / 65D / 60-62 series
    - Current Advanced Cardiac Life Support (ACLS) or equivalent required
    - Class 3 Flight Physical required

DTC JECC Capability Training simulator platforms:

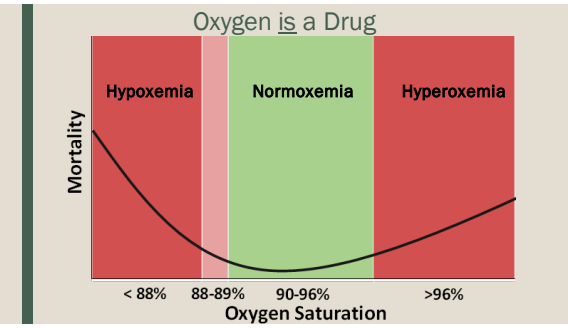
- x4 UH-60 Medical Suite Trainers (MST)
- x14 Laerdal High Fidelity 3G Manikin
- x14 Low Fidelity Manikin
- x40 Person Classroom
- Patient Movement Items class - Joint equipment
    - Defibrillators, Ventilators, Monitors, etc.
    - Static Hoist Tower

What's New to DTC?:

- x1 V-22 Osprey Medical Suite Trainer
- x4 Trauma FX High Fidelity Manikin
- x5 K9-diesel Military Working Dog Manikin
- New generation MOVES transport system



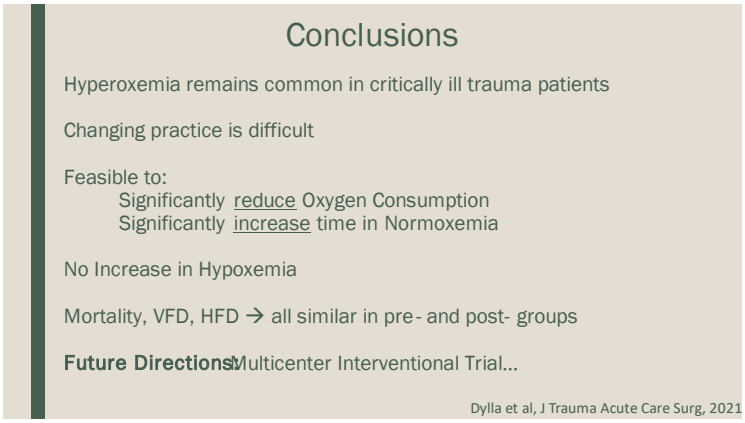
7. **SAVEO2 and DEVICE (Dr. Ginde/Col Bebarta):** Dr. Ginde presented on the paradigm shift of supplemental oxygen to avoid morbidity from hypoxemia. The history of excessive oxygenation in PFC and ERC, the harm it may cause, the lack of benefit and logistical issues with oxygen tanks and the knowledge gap on limited data of oxygen titrations targets in critically injured patients.



Systematic review of oxygenation and clinical outcomes to inform oxygen targets in critically ill trauma patients

David J. Douin, MD, Steven G. Schauer, DO, MS, Erin L. Anderson, RN, Jacqueline Jones, PhD, RN, Kristen DeSanto, MS, Cord W. Cunningham, MD, MPH, Vikhyat S. Bebarta, MD, *and* Adit A. Ginde, MD, MPH, *Aurora, Colorado*

- Design: Pre/Post Observational Pilot Study
  - 12 Months "Pre" and 6 Months "Post" Implementation
- Target: SpO2 90-96% or PaO2 60-100mmHg
- Cohort: Adult Patients with Acute Injury requiring ICU Admission
- Setting: University of Colorado Hospital

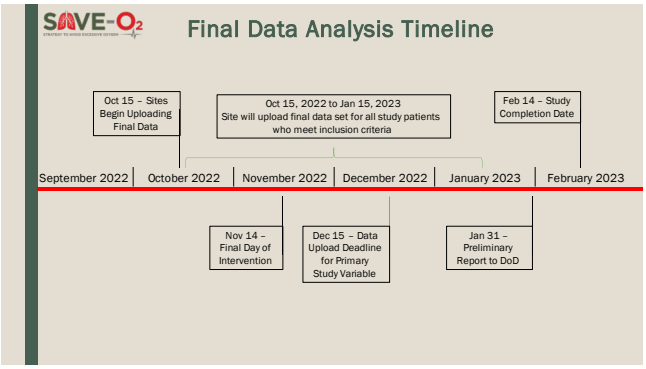


SAVE-O2
STRATEGY TO AVOID EXCESSIVE OXYGEN

Objective: determine feasibility, safety & effectiveness of targeted normoxemia to conserve oxygen and improve clinical outcomes in critically injured patients (polytrauma and burn)

Design: Cluster Randomized, Stepped Wedge Implementation Trial

Human Subjects Issues: Minimal Risk, Waiver of Informed Consent (efficient & saves costs)



- SAVE-O2 is ongoing
    - Enrollment completed in late 2022
    - Initial results in early 2023
    - Final results in spring 2023
- Goal: evaluate targeted normoxemia approach and define oxygen requirements for combat casualty care
    - Safety
    - Effectiveness in reducing need for (high) concentrated oxygen
    - Effectiveness in improving patient outcomes
- Short-term outcomes in polytrauma and burn patients
- Open questions re: autonomous solutions, prehospital implementation, long-term outcomes (esp TBI patients), burn wound oxygenation

George Hildebrandt *– from an acquisition standpoint, by use of this study we can identify the threshold of a system. This will help us understand the extra liter of flow. We can never give FIO2 of 100% because there is no pure oxygen generator...so do I need medical grade oxygen?*

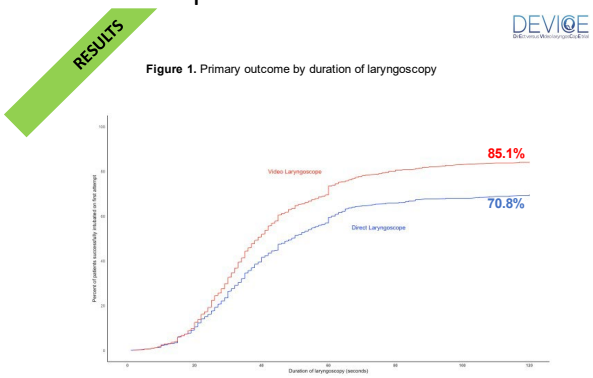
Dr. Ginde *– Seems like what acquisition wants to know is what proportion of patients from a certain injury pattern needs none or a certain oxygenation pattern…adequately with less than 4-6 liters…it's never going to be 100%, but it will be extremely rare to hit these targets. This was meant to be a knowledge product, but of course secondarily to inform acquisitions.*

Matt Harmon *– Civilian flight side we were lucky to get 85 on COVID patients and COPD live in the high 70 's/ low 80's all day without anoxic brain injuries, so even if we could save 5% of SPO2 we are saving liters of O2 in PFC environment…can we go lower safely…did you look at going to 75%-80%.*

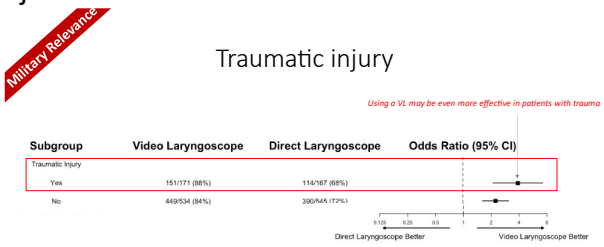
Dr. Ginde *– 85% was the target when we questioned the expert panel to prevent hypoxemia. It might be a good, better, best type decision.*

Dr. Ginde then presented on the results ready for publication on the use of Direct vs Video Laryngoscopy. Failure to intubate on first attempt is associated with increased risk of complications.

- **Direct**
  - Requires skill to obtain an adequate view, particularly in anatomically difficult situations
  - Easy to pass the endotracheal tube once a good view is obtained
- **Video**
  - Easier to obtain a good view even in difficult situations
  - Can be harder to pass the endotracheal tube even with a good view



Highlighting the Military Relevance on success rate with Video vs Direct Laryngoscopy in Traumatically Injured Patient.



The discussion concluded with talk of CPG implication and the use at POI in austere environments. Although Video has proven success rates, the applicability in remote/austere POI environments may not lead to implementation from capability developers. The study was well received and commended for their in-depth analysis and study structure.

8. JTS Lexicon / Lines of Effort CoERCCC discussion / Closing Comments (COL Cunningham):

JP 4-02 updates: COL Cunningham discussed the contentedness of TACEVAC vs CASEVAC vs MEDEVAC language and the lexicon being identified as TACEVAC and CASEVAC being used synonymously…so our goal is to differentiate where in TCCC/ERC the lexicon changes based on training, manning, equipment etc.

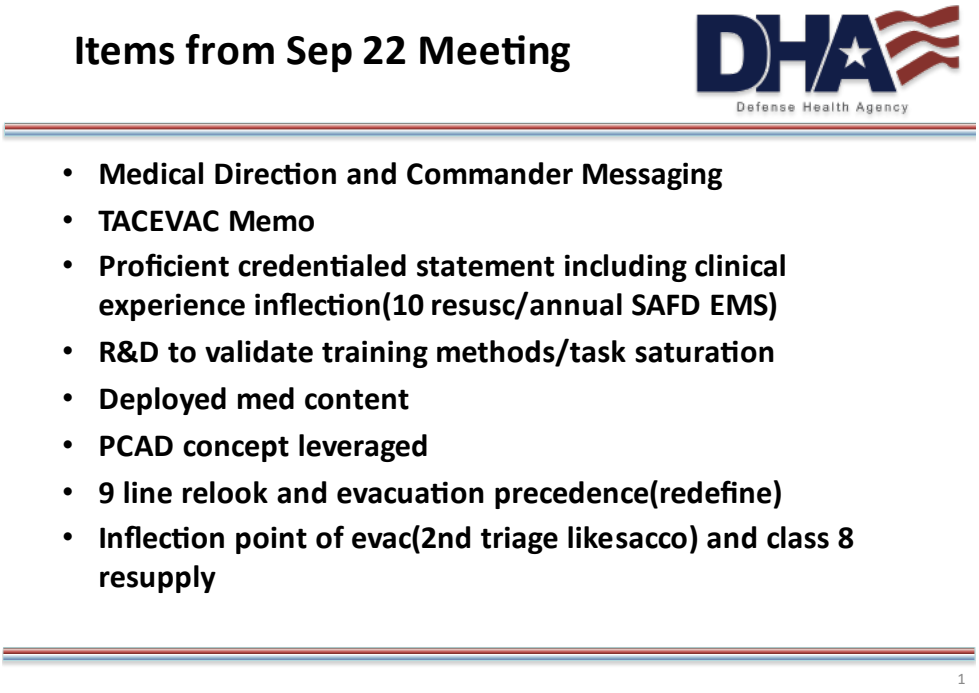
SMSgt Anderson: *CASEVAC is dedicated to have an advanced medical capability/provider such as SOIDC/PJ etc. and not a phase of care vs a capability of care. CASEVAC would be a designated platform that would come with varied capabilities.*

COL Cunningham: *CASEVAC is unregulated, provision of medical capability…I feel like we are all saying the same thing, but the big difference is regulated vs. unregulated and whether it is a capability or a phase of care.*

Maj Simon: *From AF perspective when discussing ERC, TACEVAC is a function and under that is CASEVAC/MEDEVAC the difference being trained individuals on both CASEVAC/MEDEVAC but MEDEVAC has a platform identifier and regulated for patient movement.*

CAPT Walrath*: Correct, and if it is missing any of the three criteria it is CASEVAC, MEDEVAC is designated, dedicated, and has prepositioned medical assets.*

The meeting concluded with a review of projects from 2022 meeting and ways forward on future projects.



Main Projects Update

- DD3104(HO&Doc)
- ERC Capability Levels and Common Tasks(P&D, Tng&Ed)
- TACEVAC Guidelines(Tng&Ed)
- JP 4-02 and Trauma Lexicon ERC terms(P&D)
- Defense Readiness Reporting System items(P&D)
- Medical Direction Guidance, Tier4 TCCC, OPG (CPG/PI)
- Establish NRP as minimum skill for certain level ERCT(Tng&Ed)
- Cross level common skills at service ERC schoolhouses(Tng&Ed)
- Prep for Evacuation inputs toCoTCCC(HO&Doc)
- Interfacility Txfr, ERC Patient Packaging, & Vent(CPG
- Advocate for FY24-26 POM Research Funding(R&D)
- ERC equipment standardization editorial for R&D community(R&D)

"Medically Ready Force...Ready Medical Force"

COL Cord Cunningham, USAR
Chair, Committee on EnRoute Combat Casualty Care

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CDR Shane Jensen, USN
Chair, Defense Committees on Trauma

Enclosure (1) – Meeting Attendance

JTS Staff:
COL Jennifer Gurney (JTS Chief)
LtCol Lindsey July
COL Cord Cunningham (Chair)
COL Jay Baker (CTS Branch Chief)
CAPT Matthew Tadlock (CoSCCC Chair)
COL Brian Sonka (Virtual)
CDR Shane Jensen (DCoT Chief)
CDR Brenda Williams (Virtual)
Lt Col Andrew Rohrer (Virtual)
HMCM Justin Wilson (JTS SEA)
CMSgt (sel) Britt Adams
Harold Montgomery (Virtual)
Dominick Sestito
Dallas Burelison
Danielle Davis
Bruce Tarpey
Larry Crozier (Virtual)
Laura Runyan (Virtual)
Billy Orr (Virtual)
Linda Martinez (Virtual)
Teri Duquette-frame
Sherry Fraley
Kim Smith (Virtual)
Juli Beadleston (Virtual)
Trevor Gipper
Curtis Hall (Virtual)
Candace Lesane (Virtual)
Arthur Cruz (Virtual)

Members/Presenters/Invited Guests
COL Kirby Gross (Virtual)
CAPT Benjamin Walrath
CAPT Joshua Tobin
LtCol Joseph Maddry
LTC John Joe Pena
LTC Valerie Sams
LCDR Brian Ferguson
LCDR Diane Davis
LCDR Dana Fliegler
LCDR Paul Rozsko
Maj Adam Kruse
Maj Erica Simon
Capt Yevgeniy Maksimenko
LT Kevin Hunt
1stLt Tyler Davis
MSgt Shawn Anderson
MSgt Benjamin Taylor
SMSgt Edward Crowe
SCPO Thomas Walsh
1SG Matthew Harmon
1SG Eric Pelky
SFC Joseph Hernandez
SFC Phillip Hogsed
SFC James Johnson
HM1 David Allen
Mr. George Hildebrandt (Virtual)
Dr. Adit Ginde
COL Steve Gaydos (Virtual)
Col Dave Andrus (Virtual)
Col Vik Bebarta
Col Corey Anderson
CDR Tony Torres (Virtual)
CDR Autumn Riddell (Virtual)
CDR Stacy Stats (Virtual)
Lt Col Sarah Huffman (Virtual)
LTC Wendy Warren (Virtual)
LTC Ruben Cruz
Maj Alexander Torres
Maj Joshua Burkhart (Virtual)
1STLt Jamie Eastman (Virtual)
MSgt Marc Villano (Virtual)
Dr. James Karesh (Virtual)
Mr. Matthew Sovine
Mr. James Cardwell (Virtual)
Mr. Gary Beistel (Virtual)
Mr. Ryan Honnell (Virtual)
Ms. Brittany Dickerson (Virtual)
Mr. William Gephart (Virtual)
Ms. Judy Logeman (Virtual)
Mr. Alex Nguyen (Virtual)