

2019 SOMSA Program – Assembly Only (Wed-Fri)

Day 3: Wednesday, May 8, 2019 - General Session

Time	Session Title	* Indicates NTM Credit	Speaker
0750-0800	Opening Remarks		Harold Montgomery Melissa Givens Chetan Kharod
0800-0815	Senior Leader Welcome		VADM Timothy G. Szymanski
0815-0900	*Strategic Overview: Embracing the Spectrum of SOF Medicine: Manning and Equipping to Sustain Health, Human Performance, Prehab, Resiliency, Trauma Management, Medical Care and Recovery		VADM Timothy G. Szymanski
0900-0930	SOF Combat Medic Vignettes: Mass Casualty Triage and Movement with Limited Resources; Effective Triage During MASCAL Event		Stephen Meyer Grant Flemming
0930-1000	*Research Track: The Role of Technology Research in Enhancing Care in Austere Operational Environments		Jeremy Pamplin
1000-1045	Break/Visit Exhibitors		
1045-1130	*Tom Deal Memorial Lecture: Go to the End of the World... Then Turn Left and Go a Bit Farther		Olen Netteburg
1130-1200	*Wounded Warrior: Overcoming the Odds		Israel Del Toro
1200-1300	Lunch On Your Own/Visit Exhibitors		
1300-1330	Business Meeting		
1330-1400	International Track: A British Perspective of SOF Medicine; Standardization of TCCC across NATO Special Forces by Setting up NAEMT Training Sides		LTC Robert Poole; Alan O'Brien
1400-1430	MilSOF Track: Austere Resuscitative and Surgical Care in Support of Forward Military Operations; Austere Surgery JTS CPG		Jay Baker
1430-1500	*Human Performance & Resiliency Track: PrTMS Trans-cranial Stimulation to Reduce Depression/Anxiety/Insomnia		Kevin Murphy
1500-1545	Break/Visit Exhibitors		
1545-1615	UW-GHE Track: TBD		Mark Mitchell, SOLIC
1615-1645	TEMS Track: Wounding Patterns in Mass Casualty Hostile Events		Mike Clumpner
1645-1730	US Special Operations Command Mortality Review: 2001-2018		Russ Kotwal Ed Mazuchowski Harold Montgomery
1800-1900	*Moderated Poster Session for CME		
1730-1930	Opening Reception - Exhibit Hall		

Day 4: Thursday, May 9, 2019 - Concurrent Tracks

Time	Session Title	* Indicates NTM Credit	Speaker
0800-1000	Track 1: MilSOF		
0800-0815	SOF Medics and Medical Direction		Cord Cunningham
0815-0845	*UAV/Drone Casevac - The SOF Medical Future?		Paul Parker
0845-0915	*Hypocalcemia and the Lethal Triad		Ricky Ditzel
0915-1000	Everybody Lies - Sono Gets the Truth!; SOF Medics without Ultrasound like a Sniper without a Scope		Kasia Hampton Christopher Dare
0800-1015	Track 2: TEMS		

0800-0830	<p>Training Scars – Things We Are Doing with Simulation that May Harm Our Learners</p> <p>The use of simulation to train pre-hospital providers has been shown to be a valuable educational tool when used properly. Used improperly, simulation may imbed behaviors that could harm the provider or much worse, the patient. This presentation will discuss the potential harm we could be doing to our students using simulation in ways that do not follow researched best practices. We will discuss common negative training issues/causes and also ways to mitigate imbedding those into our trainings.</p>	Timothy Whitaker
0830-0930	<p>Medical Best Practices at Mass Casualty Hostile Events</p> <p>Attendees will learn about the wounding patterns seen in civilian, mass-casualty, hostile events. The presenter will discuss wounding patterns associated with active shooter events, vehicle-as-a-weapon events, mass stabbing events, and fire-as-a-weapon. Published research shows that the wounding patterns in these events differ from the wounding patterns seen with similar weapons, but in non-mass casualty events. Much of the published data on hostile mass-casualty events focuses on combat research. Recently published data indicates a significant difference in civilian, hostile mass-casualty event wounding compared to combat wounding patterns. Last, the presenter will also discuss multiple prehospital treatment best practices as hostile mass casualty events.</p>	Mike Clumpner
0930-1015	<p>Tactical Medicine: Beyond Boundaries - The Diversity of the Calgary Metro TEMS Unit</p> <p>The Alberta Health Service Emergency Medical Services (AHS EMS) Calgary Metro Tactical Emergency Medical Support (TEMS) Unit understands the importance of preparedness and cross-sector collaboration with the public safety community. We believe that readiness saves lives, and it is this principle that drives our program training, mission-preplanning, preventative care and medical treatment rendered during mission driven, high-risk, large-scale, and extended EMS and law enforcement operations.</p>	Shane Fitzpatrick Jason Zubkowski
0800-1000	Track 3: Human Performance & Resiliency	
0800-0830	<p>*Tactical Performance Index (TPI) - Creating a Human Optimizing Culture</p> <p>Dave Barry and Mike Sanders will discuss 7th Special Forces Group's holistic assessment and feedback protocol for capturing and improving the total human performance potential of soldiers. As part of the 7th's Human Performance Optimization Culture, the goal of the Tactical Performance Index is to produce soldiers performing at the highest level mentally, physically, spiritually, and socially.</p>	Mike Sanders Christopher Brooks
0830-0900	<p>*Current Concepts in Injury Prevention and Performance Maximization</p> <p>The USOC has developed several programs to track and monitor the health of elite athletes during their competitive career. This presentation will introduce the Elite Athlete Health Profile, Elite Athlete Monitoring Program, and Return2Performance program.</p>	Dustin Nabhan
0900-0930	<p>*Facts, Fallacies, and the Future: What Works/What Doesn't and the Way Ahead for SOF Nutrition</p> <p>The talk will cover current practices and what we know works and doesn't work in terms of nutrition and supplementation. Lastly we briefly discuss what SOF Nutrition might look like in the future based on current initiatives.</p>	Nicholas Barringer
0930-1000	<p>*The Acute and Chronic Cardiovascular Risks of Endurance Exercise: What the Operator Needs to Know</p> <p>This talk will discuss the acute risk-benefit ratio with acute exercise and explore the emerging literature on potential long term harm from excessive endurance exercise. I will describe current "gaps" in the exercise and cardiovascular risks and benefits literature and conclude by discussing considerations in making prudent recommendations.</p>	Francis O'Connor
0800-1000	Track 4: Medical Support Operations for UW-FID	
0800-0830	UW in 2019	Michael Hetzler

0830-0930	Panel: Digital Disruption in the Gray Zone: An Audience-Engaged Discussion on Phase 0-1 UW to Persist, Overcome and Prevail The panel will engage the audience in an interactive dynamic scenario that illuminates gray zone challenges from an aggressive competitor that engages and targets human, economic and infrastructure through cyber means to disrupt, deter and manipulate healthcare, humanitarian assets, decision-making and services. The discussion will focus on the 0-1 phase of unconventional warfare and cascade consequences highlighting cyber and digital disrupters against un-whiting targets.	Joan Myers
0930-1000	UW Training and the Future of SOF Medical Missions	Paul Loos
0800-1000	Track 5: Research Oral Presentations	
0800-0820	Safety Analysis of a New Generation Freeze-dried Plasma Product: Report of a Completed Dose-escalation, Phase 1 Clinical Trial.	Jose Cancelas
0820-0840	Trends in Prehospital Analgesia Administration by US Forces from 2007 through 2016	Mike April
0840-0900	Deployment of Low Titer O-Positive Whole Blood in the Prehospital Environment	Randall Schaefer
0900-0920	Comparison of the Dart Target™ and Traditional Landmark Method for the Placement of Chest Decompression Needles in the Treatment of Tension Pneumothorax.	Michael Morrison
0920-0940	The Effects of Concussion History and Resilience on Positive Psychological Outcomes in Active Special Operations Forces (SOF) Combat and Combat Support Soldiers	Nikki Barczak
0940-1000	The Effects of a Novel Checklist on Self-Efficacy for Rapid Sequence Intubation	Kevin Foss
0800-1000	Track 6: International	
0800-0845	Training Doctors for SOF	Bartosz Tolala Robert Poole Christian Neitzel
0845-0930	Training Paramedics for SOF	Alan O'Brien Kyle Kotze
0930-1000	The German Approach for Training Doctors for SOF German approach on the Advanced Field Care by TCCC training for Battalion Physicians- Concept and evaluation of the effect of full scale training.	Florent Josse
1000-1045	Refreshment Break/Visit Exhibitors/Poster Viewing	
1045-1215	Track 1: MilSOF	
1045-1115	*Diving in Special Operations: A Special Tactics Perspective	H. Leo Tanaka
1115-1145	Robotic Enabled Autonomous and Closed Loop Trauma Care in a Rucksack – TRACIR	Ronald Poropatich
1145-1215	*Coffee Ground Hemostasis Case report of a pediatric patient who presented to a U.S. Forward Resuscitative Surgical team with a hemostatic head wound packed using coffee grounds.	Justin Grisham
1045-1215	Track 2: TEMS	
1045-1145	AAR of The Tree of Life Synagogue Shooting Brief description of civilian versus military wounding patterns and mostly After Action Report of the Tree of Life Synagogue Active Shooter event with highlights on the medical side of the operation.	Keith Murray
1145-1215	Terror in Talihina, Oklahoma	Matt Drummond
1045-1215	Track 3: Human Performance & Resiliency	
1045-1115	*Pearls and Pitfalls in Addressing Common Sports Medicine Complaints in the Special Operations Athlete This lecture will cover an evidence based approach to commonly seen sports medicine issues in the Special Operations community. Frequent mistakes made in the diagnosis and management of these conditions will also be discussed.	Scott Young

1115-1145	Neuromechanical Responsiveness in Traumatic Brain Injury This lecture explores the vulnerabilities in the current practice of sports related concussion care. Evidence suggests an increased risk of MSK injury after sports related concussion which is felt to be due to unrecognized abnormalities that persist beyond the resolution of symptoms and beyond the scope of current return to play testing. We introduce the concept of "neuromechanical responsiveness" which describes how an athlete optimally integrates their neurocognitive and neuromuscular processes. We then will provide data that supports the use of Neuromechanical responsiveness testing for concussion that may translate to a safer return to play.	Chad Prusmack
1145-1215	*Pain Management Optimization for SOF New innovations in non-pharmacological approaches to pain management.	Steven Scott
1045-1215	Track 4: Medical Support Considerations for UW-FID	
1045-1115	*Global Health Engagement in Conflict Zones- The WHO Red Book The session will highlight key documented challenges facing medical teams providing care in armed conflict and complex emergencies including application of core humanitarian principles, International Humanitarian Law (IHL), coordination, security & protection, and preparedness & conduct. We will present an update (and solicit feedback) on the ongoing development of a new World Health Organization (WHO) Guidance Document (The Red Book) to address these challenges and provide teams with practical advice including best practices for current and future complex theatres of operations.	Hossam Elsharkawi
1115-1145	*CA Approach to GHE	John Schwartz
1145-1215	Show Me the Money: Funding GHE and UW projects	Mark Swayne
1215-1230	SOF Global Health Engagements and Combat Aviation Advisors Briefing	Kenneth Beadle
1045-1215	Track 5: Research Oral Presentations	
1045-1105	Field-Deployable 'Dry Component' Approach to Resuscitation for Hemorrhagic Shock	Jennifer Richards
1105-1120	Prolonged Field Care - The U.S. Air Force Pararescue Experience	Richard Luna
1120-1140	Skills Retention of SWAT Operators Applying the Abdominal Aortic and Junctional Tourniquet	James Vretis
1140-1120	Prehospital Combat Pill Pack Administration in Iraq and Afghanistan: A Department of Defense Trauma Registry Analysis	Jason Naylor
1200-1215	The Role of Oral Progenitor Cells in Wound Repair and Regeneration	Lindsay Davies
1030-1215	Track 6: International	
1030-1130	The Localization Strategy: Self Sustainable Lifesaving Kits for Niger	Swijns Stijn
1130-1215	Repetitive Sub-concussive Trauma in CANSOF Breachers and Snipers: A Clinical Perspective	Isabelle Vallee
1215-1330	Lunch On Your Own/Visit Exhibitors/Poster Viewing	
1215-1330	The Second-Half Updates: Paths to PA/MD/DO/CRNA/USUHS and Scholarships	
1330-1500	Track 1: MiISOF	
1330-1400	SOF Surgical Support by Non-Surgeons Current operations in AFRICOM and future conflict evacuation times will not be as short as they were during Afghanistan and Iraq. Conventional forces fighting near peer opponents in mega-cities and unconventional warfare teams in resource limited areas will lack rapid evacuation to definitive medical care. Surgical support will need to consist of many small teams of well trained, critical care/surgical specialists that can move to the casualty and provide extended stabilization and resuscitation.	Alex Merkle Josh Randles
1400-1430	*SOF CBRN Medical Planning 1) Why CBRN medicine is different and can be complicated from both a planning and management perspective; 2) Strategic, Operational, and Tactical medical planning	Jason Lorette

	considerations; 3) Medical intelligence and CBRN intelligence different yet complementary; 4) Importance of integrating medical approach with operational elements and mission profiles; 5) Integration with LEO/EMS; 6) Medical therapy medico-legal considerations (animal evidence vs high level evidence).	
1430-1500	Tactical Combat Casualty Care Training Innovation: Objective Measurement of Learning & Performance Using AI Augmented Training Platforms & High Fidelity Trauma Simulators	Dan Irizarry
1330-1500	Track 2: TEMS	
1330-1400	RAMP Mass Casualty Triage Technique, A New Answer To An Age Old Problem With poor triage being a common item in after action reviews of many active shooter and terrorism incidents it is time for the community as a whole to move towards a new solution. This talk will discuss the newly developed RAMP Triage Technique and its application in the tactical and mass casualty setting. Using current evidence based methods the technique utilizes the combination of a radial pulse and mental status to place trauma victims into one of three categories. The simplified algorithm allows for a more rapid and accurate identification of critical patients and can reduce overall scene time for critical patients. Flaws in the currently used algorithms such as START and SALT will also be discussed in an effort to open a dialogue on ways to improve current systems.	Brad Keating
1400-1500	Anchorage SWAT Ginami Street Barricade and Shooting - Aggregate TEMS Lessons Learned On September 21, 2016 Anchorage Police Department SWAT responded to Ginami Street in Anchorage for a barricaded military veteran wanted for a shooting. Over the next 24 hours, SWAT engaged in barricade tactics under deteriorating weather conditions, including the use of mechanical and explosive breaching, chemical agents, acoustic and NFDD disruption, negotiations, use of armor, canine, sniper, stealth approaches and finally tactical deconstruction of the structure. The lone suspect demonstrated a propensity for violence by engaging the team in gunfire and showing extensive knowledge of tactics and will to resist. The suspect was finally killed during an exchange of gunfire more than 27 hours after the initial 911 call, but not before injuring two SWAT officers. Hydration, nutrition, field sanitation, sleep/rest cycles, point of wounding care and command monitoring were all significant factors in operational sustainability for a geographically isolated team with limited relief resources. The incident became the pivot point for a shift towards dedicated fire-based TEMS support for APD SWAT, as the culmination of of events truly reflected the motto - "No one else is coming, it is up to us".	Seth McMillan
1330-1500	Track 3: Human Performance & Resiliency	
1330-1400	Use of Artificial Intelligence in Biomarker Testing Nutritional biomarker testing has become somewhat commonplace within the high-performance athletic community. Unfortunately, there's little published research to support which performance-related markers prove to be most useful, as well as any synergy/discord between the nutrients examined. In this presentation, we discuss the application of artificial intelligence in understanding solitary, binary, and ternary performance-enhancing nutritional relationships.	Chris Talley
1400-1430	*A Multi-Disciplinary Approach to Neuroendocrine Dysfunction This talk will give an overview of the potential causes of neuroendocrine dysfunction in the SOF community. There are unfortunately multiple issues that may be occurring at once and affecting neuroendocrine function leading to a decrease in recovery and healing from brain injury but also from musculoskeletal injury.	David LeMay
1430-1500	*Non-Pharmacological Sleep Modulation Sleep is increasingly regarded as a foundation for performance as well as physical and mental health. With an increased understanding of the side effects of pharmaceuticals commonly utilized to treat disturbed sleep, there is currently a heightened awareness of more naturalistic or behavioral means that can be used	Jacob Collen

	when working with elite populations. This presentation will outline what is currently known about these methods and means of utilization of these interventions.	
1330-1500	Track 4: Medical Support Considerations for UW-FID	
1330-1400	<p>*Complex Medical Operations in Conflict Zones – The Ebola Outbreak in the Eastern Democratic Republic of Congo</p> <p>Unlike previous Ebola outbreaks, this one in the eastern DRC is in an active conflict zone. Ebola responders have been attacked by rebel and militia groups and some of their health facilities have been destroyed. There are “no go” areas due to insecurity, preventing free and unhindered access to the affected population. The situation has been further complicated by a contentious presidential campaign and election and a questionable election outcome. The political turmoil has heightened the population’s distrust of government officials, including those from the Ministry of Health and their national and international colleagues responding to the Ebola outbreak. We will discuss the efforts by the government and international community to access the affected population and contain the outbreak under these difficult circumstances.</p>	William Garvelink
1400-1430	Underground Surgical Care: Syria	Ahmad Tarakji
1430-1500	Planning Medical Support to UW Operations, A Medic's Perspective	Justin Rapp
1315-1500	Track 5: Research Oral Presentations	
1315-1330	Military Prolonged Field Care and Survival in Iraq and Afghanistan	Stacy Shackelford
1330-1345	Movement Screening for Musculoskeletal Injury Risk: Utilization as a Surrogate for Impact Screening	Darren Hearn
1345-1400	Consensus-Based Recommendation for Oxygenation Targets in Critically Injured Patients	Steven Schauer
1400-1415	Norwegian Emergency Medicine System's Training and Equipment for Penetrating Injuries. A National Survey-based Study	Jorgen Melau
1415-1430	First Responder Advanced Life Support Improves Outcomes in the Helicopter Transported Trauma Patient	David Wampler
1430-1445	A Retrospective Review of the Respiratory Effects of Analgesic/Anxiolytic Agents Administered to Traumatically Injured Civilians in the Prehospital Setting	Tasia Long
1445-1500	Description of Penetrating Trauma in Children by Age and Location: A National Trauma Database Review	Joseph Kelly
1330-1500	Track 6: International	
1330-1400	<p>*Review on the Prehospital Response to Terrorism</p> <p>Terrorism has increased in frequency over the past decade and prehospital response architecture has been evolving in accordance. Evolution of response requires a robust reporting and critical analysis system to identify lessons from previous attacks, however there is a limited amount of literature published after these events. This systematic review analyses the baseline of reporting on prehospital terrorism response.</p>	Matt Pepper
1400-1500	<p>*Civilian, Military Coordination and the Future of Humanitarian Response</p> <p>Global Response Management (GRM) was the first humanitarian organization to respond to civilian trauma needs in the battle of Mosul. Pete Reed and Alex Potter (the Executive Director and Vice President of the Board, respectively) will present on the process of GRM entering the battle, how the organization coordinated between both Iraqi and coalition military partners, report on outcomes, and discuss the moral ambiguities faced as a humanitarian partner in a non-traditional context.</p>	Alex Potter Peter Reed
1500-1545	Refreshment Break/Visit Exhibitors/Poster Viewing	

1545-1715	Track 1: MilSOF	
1545-1615	*Project Reach: A Gap Analysis of Telemedical Capabilities of the Special Operations Medic	Grigory Charny
1615-1645	PACE Plan in INDOPACOM: Self-aid, Buddy-aid, and Patient Evacuation in INDOPACOM	Andrew Oh
1645-1715	Initial In-house Critical Care Flight Paramedics Program Role 1 battlefield medical care includes all aid delivered from point of injury until the casualty is delivered to surgical care. Providing paramedic level care to combat wounded improves survival chances. In a military conflict with soldiers experiencing multiple injuries, head injuries, airway compromise, ventilator insufficiency, and prolonged transport times, the critical care paramedic is a necessity.	Cord Cunningham
1530-1715	Track 2: TEMS	
1530-1600	*Thaum Lung Cave Rescue in Thailand-PJ involvement	Derek Anderson
1600-1630	*Low Titer Fresh Whole Blood Transfusion Programs in TEMS This session will provide insight on how to implement a low titer fresh whole blood transfusion program for a tactical team. It will outline the required coordination and steps needed to ensure success. This is also applicable for a community who may wish to implement a program in case of a disaster or mass casualty situation.	Wren Nealy
1630-1715	Active Threat Response in Nashua, NH: the Process, the Plan & the Test Prior to 2013, the active threat plans in Nashua, New Hampshire consisted of separate responses by law enforcement, fire, and emergency medical services.. There was no coordinated plan. Involvement with area hospitals was not considered other than receiving patients. The Nashua Police SWAT Team and the Nashua Office of Emergency Management recognized this gap. This presentation shares this city's and Southern New Hampshire Medical Center's solution for creating and testing an integrated active threat plan.	Mark Hastings
1545-1645	Track 3: Human Performance & Resiliency	
1545-1615	*Suicide Prevention The suicide rate in USASOC is persistently higher than in the conventional Army. Dr. Bacon will discuss suicide trends in general and how USASOC is trying to prevent suicide.	Bryan Bacon
1615-1645	*"Ryan's Story" - A Warrior Who Got Left Behind A conversation about special operators who come home with invisible wounds from war. The eroding impact of moral injury and near death experiences as a component of poly-trauma. The complication of blast related TBI.	Frank Larkin
1545-1715	Track 4: Medical Support Considerations for UW-FID	
1545-1615	*Global Health Engagement in Asymmetric and Hybrid Conflict: Lessons from Ukraine Current and future strategic threats and challenges require NATO to amplify disaster preparedness policy functions that enable the interoperability of NATO nations with that of NATO partner nations such as Ukraine. We discuss Global Health Engagement from 2014- present day with the Ministry of Defense in Ukraine for warfighting in the Joint Forces Operations (previously the Antiterrorist Operation (ATO)) in Eastern Ukraine. This includes a review of strategies and programming related to mitigation of morbidity from hybrid war, challenges to the Golden Hour, Prolonged Field Care, Blood Far Forward, Telemedicine, Drone Technology and Remote Damage Control Resuscitation and surgery (RDCR/DCS) at the Ukraine-Multi Domain interface.	John Quinn
1615-1715	Panel: Trojan Footprint (CA/SOCEUR)	Geoffrey Washburn Jamie Riesberg
1545-1700	Track 5: Research Oral Presentations	
1545-1600	How Telemedicine Impacts Clinical Decision and Performance In Prolonged Field Care Scenarios: A Preliminary Review	Sena Veazey

1600-1615	Augmented Ultrasound Intelligence Protocol for Detection of Pneumothorax	Sena Veazey
1615-1630	In Vitro Evaluation of RSDL® Product for Efficacy to Select Dermal Toxic Chemical Compounds	Laura Cochrane
1630-1645	Preparing for the Unforeseeable: Validation of a Research-driven Hemorrhage Control Training Protocol in Norway	Erik Dragset
1645-1700	The Role of NCO in Avoiding Heat-induced Adverse Health Effects of Military Recruits during Exercise	Emiel Boers
1545-1700	Track 6: International	
1545-1630	*SOF CBRN Medical Planning 1) Why CBRN medicine is different and can be complicated from both a planning and management perspective; 2) Strategic, Operational, and Tactical medical planning considerations; 3) Medical intelligence and CBRN intelligence different yet complementary; 4) Importance of integrating medical approach with operational elements and mission profiles; 5) Integration with LEO/EMS; 6) Medical therapy medico-legal considerations (animal evidence vs high level evidence).	Jason Lorette
1630-1700	TCCC: Lessons from Brazil's Narco Drug War Rio has had for the past two decades a homicide rate higher than any other country in the world, including countries at war like Syria. The same happens with wounded at those firefights. Many of those are related to police operations we are involved in.	Leandro Castro
1800-1830	Mess Night Reception (Ticket Required)	
1830-2100	Mess Night (Ticket Required)	
Day 5: Friday, May 10, 2019 - General Session		
Time	Session Title	Speaker
	* Indicates NTM Credit	
0800-0830	SOCOM Medical Update	David Hayes
0830-0915	DARPA Update	Matthew Hepburn
0915-1015	SOF Combat Medics Vignettes: Casualty Treatment of Massive Ocular Hemorrhage due to IED; Subclavian Artery Transection; 160th SOAR(A) CASEVAC Lessons Learned; TBD	Patrick Murphy Ethan McDonald Damien Trout Griffin Elzey
1015-1030	Refreshment Break	
1030-1100	Meeting the Needs of Our Nation Round 2: Feasibility of Former SOF Medics Serving as Physician Extenders	Arthur Kellerman, Dean of USUHS
1100-1130	*PFC Update	Jamie Riesberg
1130-1230	TCCC Update	Frank Butler
1230-1240	Concluding Remarks	Melissa Givens Chetan Kharod