The Special Operations Resuscitation Team: Robust Role III Medical Support for Today's SOF Environment

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ABSTRACT

Special Operation Forces (SOF) have historically relied upon conventional medical assets for Role II and higher medical support. Over the last five years, the need for SOF-specific medical teams and surgical support was identified and addressed. Several Special Operations based Role II assets are now available to support operations, each with unique personnel and capabilities. The Special Operations Resuscitation Teams (SORT) have been engaged in several joint deployments in the last year, demonstrating the mission readiness and lifesaving trauma support for which the teams were designed. The future of SOF Role II has many unique challenges, including personnel resourcing, training, and joint operational planning.

OBJECTIVES

Provide a historical perspective on the evolution of SOF-specific Role II medical support. Review current SOF-specific Role II capabilities and employment. Discuss unresolved issues related to SOF-specific Role II capabilities and employment.

"9-line MEDEVAC incoming. 4 urgent surgical, 2 urgent, and 1 priority inbound to your location, ETA – 15 minutes. Injuries include 2x gunshot wound (GSW) to chest and abdomen, 1x GSW shoulder/chest, 1x multiple GSWs to lower extremities, tourniquets applied, 1x gunshot wound to head – GCS 14, and 3x multiple fragmentation wounds to extremities – hemorrhage controlled with tourniquets and pressure dressings. Further information is unavailable at this time."

This is no scenario, but a real 9-line from OEF.... Do you have the required personnel, training, and equipment to take this MEDEVAC? Is the forward surgical asset prepared to not only offer surgery, but critical care, prolonged patient hold, and evacuation for these patients?

HISTORICAL PERSPECTIVE: DEVELOPMENT AND CAPABILITIES OF SOF-SPECIFIC ROLE II MEDICAL SUPPORT

At the July 2003 U.S. Special Operations Command (USSOCOM) Medical Lessons Learned Conference, Special Operations Forces (SOF) medical leaders and medical operators identified the need for expeditionary, short-term, SOF-specific Role II medical support for initial entry operations into immature theaters or remote locations of mature theaters. Role II capability includes trauma resuscitation, critical care holding, and en route medical care. The current NATO term "Role II" includes resuscitative surgery. For clarity in this article, resuscitative surgical capability in addition to traditional Role II functions will be identified with a "b" – Role IIb. The SOF medical community has extensively discussed how best to provide the *resuscita*-

tive surgery component of Role IIb. The community is less familiar with a unique SOF asset that provides the underpinning of Role IIb care – trauma resuscitation, critical care holding, and en route medical care. In this article, I will discuss the evolution, capabilities, and current employment of the Special Operations Resuscitation Teams (SORTs); a low-footprint, flexible SOF asset specifically designed and trained to provide robust Role II medical support to SOF Operators in austere or remote environments.

Following the 2003 Lessons Learned Conference, the Army Medical Department (AMEDD), which owns all Army medical assets, agreed to create three 8-pax teams capable of providing Role II capability for SOF. These Role II teams, now known as Special Operations Resuscitation Teams (SORTs), were created with billets assigned to the 528th Special Operations Support Battalion. At the time, the 528th came under the command of the Special Operations Support Command, which is now the 528th Sustainment Brigade (Airborne) - 528th SB(A). Currently, SOF has three SORTs: two active component teams in the 528th SB(A) and one National Guard team in the newly formed 197th Special Troops Support Company. This third team was previously in the Reserve Component but history showed that resource and training requirements prohibited this team from ever reaching mission ready status.

The SORTs do not have organic surgical capability, primarily because the 528th did not have any assigned billets for general or orthopedic surgeons. The initial plan was to integrate SORTs with co-located surgical assets, such as an Army Forward Surgical Team (FST). However, this proved unrealistic for several reasons. The FST has a large footprint (20-pax) and is often unable to deploy within SOF-required time frames. They are not specifically trained to meet the needs of SOF. Because there are a limited number of FSTs in the Army's inventory, it is not possible to establish a habitual training relationship with an FST and they are often not available for SOF deployments or contingency operations.

By May 2004, a proposal was developed for a Joint SOF Role IIb package with robust Role II capability and a "plug-and-play" surgical component. The Army SORT teams would provide the Role II capability: Coalition sick call, trauma resuscitation, X-ray, lab, medical regulation, critical care patient hold, and en route care. The "b" component of the Role IIb package would be provided by an Air Force Special Operations Command (AFSOC) Special Operations Surgical Team (SOST) with resuscitative surgical ca-

pability and an AFSOC Special Operations Critical Care Evacuation Team (SOCCET) with the ability to provide en route critical care during flights to higher roles of care. The complete Role IIb package could provide care for up to ten urgent surgical patients in the first 24 hours. Additional assets from the 528th SB(A),

SORT Physician (EM or FM or Physician Assistant Nurse (ER or ICU) SOCM x2 LPN X-ray Tech Lab Tech Patient Admin

SOCCET

Physician (Anesthesiologist/EM Physician)

Nurse (Critical Care or Emergency)

Cardiopulmonary Technician

SOST

EM Physician

Orthopedic Surgeon

General Surgeon

OR Tech

Nurse Anesthetist (CRNA)

such as preventive medicine, veterinary support, medical logistics, and biomedical repair, would augment the capabilities of the Role IIb package as needed. This package could be transported on three pallet positions on a C-130. The capability would ideally function under the command and control of a Special Operations Task Force (SOTF) or Combined Joint Special Operations Task Force (CJSOTF). This C2 structure would allow the maximal potential from the team, encouraging Local National care and other "unconventional warfare" missions in which the team specializes. The boxes on the previous page show the personnel assets in each team. On the teams, the Officer in Charge (OIC) is typically the nurse. Each SORT team member is also tactically trained to be able to augment the ground force for missions well outside the Role II facility. The figure below shows the personnel assets in various teams.

The capability of the proposed Joint SOF Role IIb package was tested at two joint field

In December 2007, a panel discussion on "Current Controversies in SOF Medicine" was held at the Special Operations Medical Association (SOMA) Conference. The panel discussion was moderated by LTC Jim Czarnik, Office of the Command Surgeon, U.S. Army Special Operations Command (USASOC). Although a Joint SOF Role IIb package was already in existence and validated by field training, the panel yet again raised the need for SOF-specific Role IIb support in a light, fast, modular package. Follow-on dishighlighted the far-forward surgical capabilities of the AFSOC SOST but did not fully outline the robust Role II capabilities of the SORT, an integral component of the full Role IIb package proposed in 2004. This situation highlights the need to educate our community about all resources available for the medical support of SOF missions.

The table below lists the capabilities of selected medical teams that can serve as components of a full Role IIb package:

The state of the s	Army FST	AF SOST/SOCCET	SORT
of Personnel	20	8	8
Maximum Caseload/24 hours	10	10	10
Operating Tables	2	2	Supported
Postoperative Care (up to 8 patients)	6 hours	48-72 hours	72 hours
Critical Care Evacuation	No	Yes	Yes
ndependent Medical Logistics	No	Yes	Yes
Special Operations Tactical Training	No	Yes	Yes
Sick Call/Primary Care UW Mission Support	No*	Yes	Yes
Patient Evacuation / Administration	No*	Yes	Yes
(-ray	No*	No	Yes
Blood	Yes-50 units	Capable	Yes- 20-40 units
Iltrasound	No (per TOE)	Yes	Yes
General Surgery/Orthopedic Surgery	Yes/Yes	Yes/Yes	No/No
relies on supporting medical company			

training exercises in December of 2004 and 2005 and during a combined rotation at the Army Trauma Training Center in Miami, FL, in 2006, where the full Role IIb team completed over 50 trauma resuscitations. Throughout the validation process, the teams performed well when faced with continuous operations for over 48 hours, including simulated mass casualty incidents (MASCALS), rotary and fixed wing evacuation followed by ongoing critical care transport, and "nation-building" medical operations.

The concept and capabilities of the Joint SOF Role IIb package was also validated in several joint deployments during 2008. The next section provides more detail of the teams' employment during these deployments.

EMPLOYMENT OF SPECIAL OPERATIONS RESUSCITATION TEAMS IN CURRENT OPERATIONS

To clarify the capabilities of the SORT, one must examine how these teams have been employed in recent years in several theaters of operation. One team is currently deployed in support of Combined Joint Special Operations Task Force – Afghanistan (CJ-SOTF-A). SORT #1 deployed to the austere environment of western Afghanistan in April, 2008. In four months, they resuscitated more than 80 trauma casualties. The team also provided Special Operations Combat Medic (SOCM) MEDEVAC/CASEVAC flight support, with medics logging over 30 combat missions in the first few months. The ability to provide lab support (including blood banking), X-ray, and ultrasound



Photo 1



Photo 2



Photo 3

diagnosis enhanced the quality and timeliness of interventions.

After two Special Operations Independent Duty Corpsmen assigned to the Marine Special Operations Teams (MSOT) became mission incapable due to battle injuries, SOCMs from SORT #1 augmented the MSOTs during patrols (see photo #1). The SORT members were also an integral part of base operations, including logistics and base defense, and provided sick call for all Afghan workers on the firebase.

In addition to providing medical care to Coalition forces, the SORT #1 participated in activities that supported the development of the local Afghan health sector. They treated more than 2,000 patients per month at the Special Operations Task Force Unconventional Warfare clinic (see photos #2 & 3); provided mentorship while supervising over 20 elective and emergent surgeries performed by Afghan physicians; and provided Advanced Obstetrics Emergency Certification to 16 Afghan midwives. It is hard to quantify the non-kinetic gains of these activities, but the efforts were repeatedly recognized by local Afghan leadership as beneficial to the advancement of healthcare in this region.

SORT #2 was employed in an unspecified operation last year, and went on to provide valuable health-care and veterinary support to 10th SFG(A) during their summer 2008 operations. In addition to covering trauma resuscitations, they actively engaged in MEDCAPs, VETCAPs, and mentorship of local national healthcare providers. The team, while deployed in support of the fall SOFFEX in Europe, had a dramatic effect on the life of a man who arrived at their location in prolonged cardiac arrest due to electrical injury. Following a successful resuscitation and hospitalization, during which the team employed their patient hold capabilities, this gentleman walked out of the hospital.

UNRESOLVED ISSUES: THE FUTURE OF THE SPECIAL OPERATIONS RESUSCITATION TEAM

The ever-changing face of SOF operations cannot afford to leave the medical aspect of planning behind. Today's Special Operations are often more prolonged and more resource intensive than ever and require organic, adaptable, SOF-trained medical support teams to provide the highest level of care as far forward as possible. We need teams that can enter an austere theater and then build systems for successful transition to conventional medical resources. In the future, SORTs must be able to provide robust Role II capability to an increasingly dispersed force. This requires transitioning SORT #3 from the National Guard to active duty in the 528th SB(A) to meet minimum operational require-

ments: one team deployed, one team training, and one team ready.

Planning for SOF Role IIb support must look beyond just "resuscitative surgery" and embrace the many other de facto requirements of Role IIb support: en route care, blood components beyond packed red blood cells (including plasma, Factor VIIa, and possibly platelets), prolonged patient hold while awaiting theater or strategic patient evacuation, coordination and regulation of patient evacuation, host nation medical cooperation and development, and medical logistics. While these roles are accomplished by a myriad of resources in the *mature* theater, the responsibility for them in an immature or austere theater must fall upon a SOF Role IIb team. This might also include unconventional warfare missions like host nation development. For example, the mission might include host nation clinic and healthcare provider mentorship in order to deny the enemy the opportunity to exploit local lack of medical resources or skills. If the people feel their health needs are met, they are less likely to turn to an enemy insurgent for those needs, which builds a sense of goodwill for the local government.

It is an Army service component responsibility to provide FSTs to ARSOF. However, experience has proven that it is difficult to establish any habitual training relationships with designated FSTs. In order to provide highly trained medical teams to ARSOF, the requirement exists to establish a habitual training relationship between 528th SB(A) and designated FSTs. If the AMEDD cannot meet these requirements perhaps the best future solution is one that provides ARSOF with the organic medical force structure required to meet this challenge. In the meantime, joint training must be pursued with any available assets that could fulfill the SOF Role IIb mission. Service component differences become less relevant once the teams have trained together and know each other's equipment and capabilities. Joint training will be time and resource intensive; however, and will demand that the Role IIb team's personnel are available for training and are able to quickly set aside duties at their home station medical facility. The greatest advantage of joint training may

lie in the familiarity with resources and capabilities that it provides to higher medical planners. As planners become more familiar with "who brings what" they will be able to more effectively leverage the SOF-oriented Role IIb capabilities to the mission at hand. Currently, the SORTs may be requested for missions via the US-ASOC G-3 Operations office.

The future of SOF Role II medical support holds many challenges. The present capability has proven proficiency and exhibits immense potential. Surgical support remains an issue, one which the AMEDD will no doubt continue to wrestle with for years to come. In an era in which joint operations are considered the norm, joint medical support should continue to be explored, enhanced, and streamlined. AFSOC's SOST has a proven battle-tested Role IIb experience that will continue to ensure successful surgical intervention far forward. The SORT provides robust, field-tested Role II capability. The SORT can integrate with surgical teams from both the Army and the Air Force to increase to Role IIb capability. The SORT can also serve as a stand-alone team in areas where rapid evacuation (using SORT's organic en route care capability) to surgical assets in the rear is possible. Due to their unique training, SORT also brings an unconventional warfare mindset to operations. Their ability to interface with the local healthcare system as trainers, mentors, facilitators, and negotiators contributes to improvements in the local healthcare sector and provides value added to SOF teams on the ground. Just as Special Operations personnel are constantly adapting to the changing needs of their environment, the Role II capability must adapt to future SOF medical needs. Let us work to meet the Role II challenge headon, so that critical medical support to our Special Operations Forces remains unsurpassed.

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SOCM Perspective of Flight for the SOF Role II

Antujuan Brown, SOCM

As a member of the first and only Role II medical team in USASOC, a Special Operation Combat Medic often does not experience all of the front line combat trauma action like our brothers in the Ranger Battalions do. At times we find ourselves stuck inside the wire waiting to get elbows deep in some trauma, doing some sick call for the local nationals, listening to some lectures by the Docs, or just sitting down and writing an article for the JSOM. But there are times when we actually do get outside the wire and experience the battle firsthand. Recently, with the help of having an Army MEDEVAC team co-located with the Role II Team, our out-of-the-wire experience became reality. The SOCM Medics, or Flight ATPs, of the Role II Team are specifically trained and equipped to provide en route care from point of injury on rotary winged aircraft and to sustain multiple critical post-surgical patients during fixed wing flights to facilities such as Landstuhl, Germany. Role II Flight ATPs are not only graduates of the Special Operations Combat Medic Course, but also complete the Army Flight Medic Course, the Joint En route Care Course, and the Air Force Critical Care Aeromedical Transport Team (CCATT) Course. There are few places in USASOC, besides the 160th SOAR, where SOCMs have the opportunity to fly with a MEDEVAC/CASEVAC team to pick up and stabilize the sick and injured.

I have had the opportunity to work with the Army MEDEVAC Team here at our location and have already provided en route casualty care on over a dozen combat flight missions. The flight crew, especially the conventional flight medic, are happy to have us on board to assist with the patient load, and the teams on the ground are confident handing their ill or injured teammate off to an ATP. Having a MEDEVAC crew co-located with the Role II not only provides the SOCMs an opportunity to fly, but it also increases our overall capability. Having reliable air assets, in an area where they were previously nonexistent, definitely lets the war fighter on the ground know that if something happens, somebody will be there to pick them up. In the event where the Medic on the ground gets wounded and requires evacuation, having this flight capability allows us to instantly infill a new SOF Medic to the team on the ground. Being a part of the Role II team is an honor, not only because it is the first and only in USASOC, but for the unique opportunities to train and then implement the training in a combat zone in a manner unlike any other SOCM.



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