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THE JOURNAL FOR OPERATIONAL MEDICINE AND TACTICAL CASUALTY CARE



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Dedicated to the Indomitable Spirit and Sacrifices of the SOF Medic

# SPECIAL TALK: AN INTERVIEW

## An Ongoing Series

# "It was a special, pivotal time; the stars were aligned."

—Rob Miller on Changing Trauma Care

Interviewed by John F. Kragh Jr, 8 December 2014, Tampa, Florida

"Rob loves dogs, rifles, and

colorful conversation."





Rob Miller then and now

## How did you come to Special Operations Forces (SOF) medicine?

I volunteered for the service as a medic, and went to Germany. A Special Operations recruiter came by and said, "Hey,

you know what? The Rangers may be a great opportunity for you." The next thing you know I'm in RIP [Ranger Indoctrination Program] getting the shit kicked out of me, not thinking I made the right decision. I realized that the

camaraderie and people who were there, I liked. I ended up going to 2d Ranger Battalion; it's where I kind of grew up, and from there it just changed my life. It really formed who I was because I went straight to a rifle platoon, Alpha Company, 2/75.

#### And how did you stay in it?

Just one opportunity after another. I came back and went to ROP [Ranger Orientation Program] into the regimental Headquarters' RRD [Ranger Reconnaissance Detachment] and spent about 4 and a half years. Then made E-7 and went over to 3d Ranger Battalion, and 3d Ranger Battalion . . . where things really changed. [Dr] Chris Pappas exposed me to an article that was written in 1996 called "Tactical Combat Casualty Care in Special Operations," and my socks were going up and down and my shoes were still on that the utilization of tourniquets was for first-line tool for hemorrhage control; don't fluid-challenge people—this kills people. So, suddenly it just resonated with me that we weren't doing things as good as we could do. And also what it did is it challenged us to look at ourselves: can we perform as advertised? Can we do the things that the command thinks we can do? Which is manage these casualties in the conditions in which we operate in-high noise, low light, physical fatique—and can we maximize their survivability?

You would ask guys about the medications they were carrying, the indications, the contraindications, and employment strategy for the demographic that we work with, which is Rangers—and thank God that guy [the Ranger] was tremendously resilient—you could do a lot of things to a Ranger and he's very resilient. Thank God. We realized that these guys couldn't answer some of these questions and we were still doing LTT [live-tissue training], the grandioso end-state. If you passed, you were good to go. Guys felt good, but the problem was that there weren't any metrics associated with that, so if the casualty was hypoxic, and he had a blast wound

> to the side of the face where he wasn't exchanging gas, with maxillofacial disfigurement, but by the time they got the airway, this guy was high-fiving others and you took that information and matched it against data like in the

he'd be dead or be in the VA hospital eating crushed apples in a diaper for the rest of his life. So "Don't be high-fiving your f\*#@ing buddy. You should have done this a lot quicker."

hospital, he would have an anoxic brain injury so bad that

[Cricothyrotomy], endotracheal intubation, needle thoracentesis—what we found out was they really couldn't do these procedures correctly—us, me included—in the conditions in which we operated. "You know what, we are not really as good as we thought we were." And that was tough for some people to swallow, because I got here E-6s and E-7s that are Ranger-qualified, 300F1[-trained], thinking that they are the shit. When you really boiled it down, it was we couldn't really do some of these things as good as we needed to maximize survivability.

## Drive on.

We decided to look at what they were doing like live-fire ranges, and everything was commander driven-warfighter driven—and so we tried to get a medical program together

that we could train on. We got a grant from the [US Army] Surgeon General to purchase some high-end simulators; we [at 3/75] took these and immersed [ourselves] inside a shed that we could make brilliant light, zero light, or in the middle. A guy would run 200m, breach two obstacles (agility, strength) then request permission to enter the simulation room, "Mike 03, coming in." He would start working on the simulator. What we found was that we couldn't just take a guy and thrust him into that. We had to stop, because guys were killing the manikin constantly. We had to start from the ground up which was tabletop. Can you do these procedures in ideal conditions? Can you do these procedures in lessthan-ideal conditions (which would be on the ground with all your equipment on, working out of your aid bag or assault vest)? Can you do these things in low light, high noise? What's feasible? What's not? We started to find out a lot of different things like you can't really do a venous cut-down. It's very difficult to do a surgical [cricothyrotomy] without a tracheal hook to anteriorly displace the cricoid cartilage, and make a draw bridge and open it up and put a tube in real easy. We learned not only about the procedures we could and could not do, we learned about how to pack equipment so that it was optimal when you got there.

The last thing we learned was that working in two-man buddy teams with guys that were trained the same; they complemented each other. Things went a lot faster versus the lone medic by himself. And then what we did was we pumped that lead—because we videotaped all these—so your peers would watch you go through these high-end trauma clinics. And them seeing you make a mistake—because we were all trained from the same core—for some reason, it resonated with them; they would not make the same mistakes going through the simulator themselves. We'd talk about it.

From there, what happened was that there were three programs that were born out of this thing—the Ranger First Responder Course, which focused on six critical tasks that had a direct correlation with decreasing potentially preventable death—those were owned by the individual warfighter because, as we learned, the medic can't be everywhere at the same time. And so the days of you kicking in the door and someone getting shot and lying in the doorway and yelling, "Medic!" are over. Those days were over. So we changed the way he did business. Every guy carried a bleeding-control kit.

Then we had the medics be ready to assume operational cycle. It was called Ranger Medic Assessment and Validation, and they had to have book knowledge and hands-on experience, go through an oral board, and they would be blessed off to go to that [cycle].

And the last thing we found was that infantrymen go through several pillars of education that are built around each other. Well, everywhere in there it was either they didn't deal with medical at all or it was extremely subjective like, "Check with Brigade Surgeon." So we went back and interviewed warfighters and leaders, and again we were able to confirm the hypothesis that everything was subjective. That was how he based his relationship to the medical stuff on what his relationship was when he first came in the Army and had contact

with the medics. Some captains, lieutenants, or platoon sergeants, they wanted their medic with them all the time; other ones said, "The hell with him; let's keep him at the flagpole. He can read magazines and eat until we get an injury." So some were integrated. So what we had to do was change that; it was too varied. So we developed the CRRL, the Casualty Response for Ranger Leaders. What we did was talk about the expectations, limitations, and employment strategies of your available assets.

#### Hooah on.

One of the biggest problems we had was that we medics had a different language than the tactical operator. We spoke transient brain injury, tension pneumothorax, cardiac tamponade; they don't give a shit about that. You know what they speak? Cost-benefit analysis, added value, risk management. So what we had to do was change how we did things to get them involved. So we started this course and, again, expectations, limitations, and employment strategies of all the assets you have available, but then how they are employed on the battlefield. What their capabilities are, what [medical] resources we have that are outside [the unit].

And the second part of this is an interactive, scenario-driven event. And that really gets their attention. One I remember was we picked out a lieutenant or a captain coming back to the [Ranger] Regiment and he's all motivated as shit: "Oh, we got dressings that instantly clot blood, they got these platforms and litters and, man, this is great!" And then OK, I could just tell they just clicked it out of their brain, you know, "Great, this is good stuff," but it wasn't really sticking.

So the second part of this thing was that I would pick one of them and say, "OK, now you are the Assault Team Leader for the initial breach. You're going in on a MH-47 [modified Chinook helicopter], you got 20 guys with you. You have two breaches to make. If you cannot make both those breaches in 35 minutes, you need to radio and [exfiltrate]. You will be picked up, cycled in and out on [MH-]60s [modified Blackhawk helicopters], and, if you can make it, then the remainder of the assault force will be coming in and will utilize the primary and alternate breach to [infiltrate] . . . the target. Do you understand your mission? Right. OK, do you want everyone to have their Bleeding Control Kit?" "Yes." Ding-ding-dingding: the number would go up because the individual had the stuff in there to decrease about 70% to 80% of preventable deaths inside the bleeding-control kit, which had chest seals, needles for [pneumothorax] decompression, nasal pharyngeal airway, and bleeding-control stuff—it was more than [just] a [bleeding-control kit]. "Do you want a Ranger Medic with you?" "Hell, yeah. I want the Ranger Medic." Ding-dingding-ding: the number would go up. "Man, we're close to 100%!" "So do you want to bring an extra medic who has two Pelican cases out of the 47 after we push the primary breaching package off, so he converts that [aircraft] to a casevac platform? You want that?" "Um, oh, er, I want to bring extra shooters; can I do that?" "Sure." "Here comes the 47."

It's zero-moon 30 in the morning. Everybody's standing up, getting ready to exit the aircraft, taking a knee, unhitching, to land and go conduct business. Next thing we know, [on

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the] left side of the aircraft there's a huge explosion by one of the engines and a hole ripped into the skin of the aircraft. Problem: your number one man, your leader, the E-7 you have in charge, is not unhitched anymore, he's on both of his knees at the tail of the aircraft with a hunk of flesh ripped out from his shoulder and a hunk of flesh ripped out from his face. He's holding what looks like the remainder of his face in his hands, screaming at the top of his lungs, shooting bright red blood through his hands. His primary weapon is on the ground. "Sir, I need a decision point from you right now: what are we going to do with this guy?" Holy shit, the game changed. All of a sudden you would see everybody started to get engaged at that point because they would get called on, but we brought them in with very real, graphic [descriptions]—this is what it would look like—and you could tell that now what they learned they were bringing it into perspective and they could move on with a small knowledge base until they got to their battalions.

This occurred in ROP [Ranger Orientation Program]. So we sensitized them after they got selected for the Regiment, not before, because we tried it doing it before and all they are keyed in on is getting accepted. You do it afterwards; they're looking for everything that they need to be successful in the Regiment. The second part was when communicating with them. No longer do we say, "Don't take our packages off [the aircraft]; don't do this," but "sir, based off S-2 [intelligence staff officer] analysis, there's a friction point right here where we anticipate that there could be casualties. Sir, do you want to assume or mitigate the risk?" "Well, if I assume the risk, could there be loss of life?" "Absolutely, without a doubt, or significant morbidity associated with that." "If I mitigate the risk, Rob, what does that mean?" "Well, that means, we have the following things in place. . . . " "Goddamnit, who taught you how to speak this language and everything?"

Believe it or not, it was a Spec-4 [Specialist, E-4] that brought it when we were in a roundtable [discussion] who did. If there was a Spec-4 that was super squared away, I referred to him in the same level of respect that [I] referred to a guy who was an E-8 or E-9. The level of competency came from the individual [not the rank]. We had a team of people at that time: Chris Pappas was a part of it, Russ [Kotwal] was part of it and, of course, our PA, John "the Cricket" Detro. And when we got [COL Stanley] McChrystal [Regimental Commander] to take a look at his Big 4, we changed "medical training" to "casualty response": that means more to the warfighter as it's in his language, his culture. So that's how we changed things.

## So you changed the ideas, the words, the policies, and the practices?

Absolutely. The 3d Ranger Battalion, if we went to war, we're f\*&#ing ready to go to war. I mean, we went through all of our kits, too, and packed based off of data, based off of historical Ranger missions, all of our Pelican cases, all of our sick call, all of how we treated patients, the knowledge level of the group was through the roof. What we did then was transferred responsibility into liability for the commander. He needed to assume or mitigate what he wanted to do. And I remember people like COL Allen, COL McChrystal, they were like, "This makes sense." And we executed that shit. We couldn't do

cut-downs anymore. We went to sternal intraosseous. We tried to prove doing these cut-downs and, in the conditions in which we operate, it was fruitless. You couldn't do it; it was fallacy. If it was freezing out, wind blowing, how do we protect people with hypothermia? We led the way at that point with hypothermia prevention and management. Russ was critical to that whole process. And Pappas. But the real thing came to admit that we were not as good as we thought we were, and we needed continuous training even though we thought we were at our best. We continuously needed to evaluate ourselves, be objective, and truthful to ourselves. And our peers needed to be there and evolve our program to meet the operational threats that were ahead.

## It seems that 3d Battalion was special place for a long time.

It was. If I look back at all the time that I spent in the service, the time in the 3d Ranger Battalion with those guys, with Rich Flores and Jim Gentry, and the things we were able to accomplish, and Mike Nesbitt was there, we would not have been able to do that, do those things, if we did not have those people in place and everybody kind of seeing it. It was a special, pivotal time; the stars were aligned. And we made some significant gains in managing our casualties for the Rangers. Because, until then, they used to piss me off because SF used to think Rangers had, like, calloused knuckles and thrusting mandibles. The next thing you know, we turned that whole f\*&#ing trauma management game around on them. It was ugly for a while.

## How did they react?

They didn't know how to f\*&#ing react. Those changes generated a shipload of money for us organically from the commander. He said, "Get the stuff to do the right thing for these people." We had the best equipment. Also, when we started doing these trauma lanes and the medic needed the ability to defend himself and patients and move on the battlefield, the medic needed to have situational awareness. That led to validation of guns, goggles, optics, lasers, communications, and a protocol that went with that on how we interfaced with the warfighters. The Ranger Medic functions as a defensive shooter. He is not really incorporated into the offensive fighting plan. So his function is to manage significant trauma on the battlefield. Period.

## Of those changes, what are you most proud of?

Probably Ranger First Responder. Until then, what we had [was] guys running around on the battlefield with a compass pouch with two first aid dressings—Vietnam-style bandages. Now they have a kit where if they employ it correctly, based on the threat as gunfight—I shoot at you, you shoot at me; I throw a hand grenade at you, you throw one at me—based off that, those guys can decrease about 80% of preventable death by themselves.

The second thing that I'm most proud of is the medics now—and [MSG Harold] Montgomery was instrumental in this—was getting them [qualified] before they got to the battalion. . . . We didn't get someone straight out of AIT [Advanced Individual Training], so we didn't have to completely train them from scratch. They were qualified and we built on those

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blocks until we had a trauma tactician. We were able to create a course for the warfighter that was focused directly on decreasing potentially preventable death, which has led to the Regiment, as far as I know in the data that have been published, not having any potentially preventable deaths. And that goes to all the work of Kotwal. And one of the things we did, too, was that we kept solid documentation. The Ranger Casualty Card was the stimulus for the card that's out there now. Kotwal was ruthless about if you had a casualty, you documented what was wrong with him.

#### Personal development thoughts?

For those medics, you must create a climate for lifelong learning. You cannot rest; you're not in this job to f\*&#ing rest. You're in this job to constantly get better. And if you're not doing that, you're going to get out-seated by people to your right and your left.

## The emphasis on training and skill level of the caregiver always seemed to be palpably high there.

That was because of the commander. Once we turned it over, the Ranger Medic Assessment and Validation became a commander's program, just like shooting your day and night live-fire [exercises] before you assumed ops cycle. COL McChrystal made it part of the Big 4. That cemented it. It was important to him. The stars were aligned. We were serious, too. If we were to go to combat when 9/11 happened, the only thing we didn't have was a suitable tourniquet. So we had to improvise at that point; all I had was Calkins's paper. So we sat down and made our own tourniquet with ratchets. I still see them out there once in a while. I try to cut them up when I see them.

## I still have one. It came in on a Blackwater guy's forearm; he was screaming.

That thing's not fun. It's all we knew that a mechanical [ratchet similar to those used on pallets in aircraft] device was best. A 1-inch strap that we had made in Texas. I had to convince the command to carry this 1-pound piece of kit based on the injury patterns. And they said, "Absolutely. We'll do it." They believed it.

# Was it important to get the right information to the right person to trigger the right decision?

Pappas was the one who triggered this whole thing. He started this whole thing. As soon as he dropped that paper in my lap, I went ballistic. Holy f\*&#ing shit. If they could have caught [authors] Frank [Butler] and [John] Hagmann, they would probably still be incarcerated because when that came out, that was like crimes against the Lord Himself. "Tourniquets as first-line hemorrhage control!? Who speaks these things?" I can remember them talking about it.

#### Your transition from military to corporate realms?

It was almost the same. The level of intensity—except for being scared when you go to combat—was the same. We have got to find solutions to these historical problems. I was resourced by [CEO Bob] Castellani to do what we needed to do. It was not a big change for me. It really wasn't.

Voice recording condensed and edited.

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