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Message From the President

“Going Leadershiping”



CDR Matt Hebert
SUSNAP President

Not many people know this fascinating fact about me, but up until last month, I had been serving as the President of my Homeowners Association (HOA) of 76 lots for the past two years. I didn't necessarily want

the job – I think it wanted me.

I had a natural aversion to HOA affiliation due to an unsavory experience of my past. In 1994-8 while living in Vista, California (the good 'ole MAG-39 days) my wife and I rented a home in an HOA-controlled neighborhood. We just didn't *know* it was HOA –controlled. Definitely nice digs for a lowly Lieutenant...our backyard was a golf course.

Towards the end of our tour, as my wife and I were getting ready to PCS to Okinawa, we conducted an “illegal” (fingers doing air quotes) garage sale to try and thin out unwanted and over-accumulated ‘stuff’. Of course, no one at the realty agency nor the homeowner provided us with a copy of the current HOA By-Laws when we first moved in, so we were initially taken aback when we received a letter in the mail stating that we were being fined...something like \$100. We were completely unaware that what we had done wasn't allowed without prior permission.

Due to some quick thinking, I fortunately talked my way out of this hefty fine by acting completely clueless (see it does work sometimes). I was being honest when I replied to the letter that we hadn't known better, but was thoroughly embarrassed nonetheless. Egads! I was no longer an upstanding member of the community! Who cares? We were moving anyway, but we weren't going to get away with such antics in the immediate future. The HOA had a death grip on the way in which we could live our lives. The incident left us never wanting to live in an HOA community again, and we quite frankly have despised the HOA ever since.

Fast forward almost ten years. Trying to be an up-

standing member of the community, I always made it a point to attend our community's HOA Annual Meeting (yes I still live in an HOA-controlled environment!). After all, I was interested in keeping our neighborhood a nice place to live since I would definitely need to sell my house sometime in the future. With no exception, I was also interested in my family's safety and keeping the crime rate low in the area. As always is the case at these annual meetings, several key Board of Directors (BOD) positions were up for election. Trying to be an upstanding member of the community, I raised my hand and said I'd “help out” with the BOD (the BOD does rock, paper, scissors to find out which unlucky soul gets what unlucky job). I didn't realize this meant that the quorum (if you can call 8 out of 76 lots a quorum-and they actually did) would end up ‘appointing’ me President! The homeowners knew the position had to be filled because of legal constraints according to the Maryland Homeowner's Act and the existing community Covenants and Restrictions and By-Laws...As I was going to find out, it apparently is not appointed as a position of respect and admiration, but one of cause - a warm body in a position. I was duped. That was it, simply duped. It was snipe hunting in the daylight...and I was holding the net waiting for the snipe as everyone disbanded from the meeting.

After the initial shock began to wear off, I thought to myself: “Well, at last! ...Here was my chance to ‘get back’ at all the atrocities of my HOA past!” Some have suggested that I never protested the position because I needed a FITREP bullet (maybe). Yet, two years after-the-fact, that bullet NEVER did appear on any of my FITREPS (right Jimbo?).

So why did I agree to do it? Didn't I already have enough leadership challenges in my professional life? Didn't I already have enough to do at home with an active family (the second job)? The reason, as you are going to find out soon enough, was simple.

Since I've lived in my neighborhood almost eight years now, I've seen a complete lack of interest in the current homeowners to better their community-and unfortunately that logic still holds true. By taking on this position, I thought I could ‘involve’ them...‘make’ them interested-hey I've got great leadership ‘skillz’(!) right?...help to increase their



property values by enforcing <finally!> the existing Architectural Guidelines...You know, strengthen neighborly bonds. "Communitify" (Google it) everyone. Community service! After all that IS a FITREP bullet, right?

It was a much bigger endeavor than I expected, and one I'll not soon forget. After a short period of time, I realized that the homeowners were going to need some "special treatment" to get them excited and "desire" (air quotes with fingers again) to become an integral part of the community. The challenge was much like a chess game-I had to think three, even four moves ahead to make it all work out. At first it was extremely frustrating- to the point that I simply wanted to quit. I remember constantly saying to myself, "why should I help you if you don't want to help yourself?"

However, in reflection, there were some small victories. I actually recruited an active Board of Directors (10% of the people do 90% of the work), coordinated Neighborhood Watch meetings with local law enforcement, Ice Cream Socials, Bicycle Rodeos for the kids, Yard-of-the-month competitions, Offered FOOD at meetings (yes bribery does work sometimes-I'm shameless!) I could go on. But you know what? The neighborhood came along slowly. Reeeeeaaaally slowly. But it did. We have much more participation by the community of homeowners now than ever in the past eight years since we moved in.

But what really is the moral of this rather long story?

The take home message is this: Don't wait for leadership challenges. Don't let leadership find YOU. YOU need to find ways to take on leadership roles. Maybe it is within your community, maybe it is within your professional life. But like the Nike motto: Just Do It. It will make you a better person, and a better Naval Officer. I promise.

Reflecting back to when I first was recruited into the Navy and Aerospace Physiology Community specifically, we didn't have the same recruiting standards as we have now, (I wonder if I would have made it in at all!?). I was content to think that I would be teaching Aerospace Physiology topics at the local ASTC pretty much my entire career. By virtue of wearing the uniform of a Navy Officer, and unbeknownst to me at the time, I also agreed to be a leader. So did you.

Take every opportunity you can to hone your leadership skills. Professionally, Junior Officers are expected to develop into hardened leaders. As you become more senior, you are no longer expected to be the action Officer. If you've made it to Lieutenant Commander, chances are that your FITREP bet-

ter be rife with leadership bullets or your chances to make Commander are slim. Leadership: It's the first bullet on your FITREP, and probably the most important as you become more senior. Take on the hard jobs. Volunteer for roles as a leader, and watch very carefully those leaders that you admire. Emulate their actions, but develop your own style.

In closing, I'd like to leave you with an insightful leadership quote from the legendary Vince Lombardi:

"Contrary to the opinion of many people, leaders are not born. Leaders are made, and they are made by effort and hard work."

Until next time, RATBOY out.

CDR Matt "RATBOY" Hebert
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Preventing Barotrauma During Hypobaric Chamber Training



LCDR Andy Hayes

AMSO MAG-29

With time off during the holidays, I caught up on readings from the December 2009 edition of Aviation, Space, and Environmental Medicine Journal. One article in particular, “Acute Otitic Barotrauma During Hypobaric Chamber Training: Prevalence and Prevention,” (1) caught my eye. It was written by six doctors from the Aerospace Medicine Department of the Italian Air Force Flight Test Center and the Department of Otorhinolaryngology and Audiology from University La Sapienze in Rome. Although barotrauma (i.e., “earblock”) is a well known adverse effect of flight and hypobaric chamber training, few studies have investigated the problem and reports of its prevalence. The Italians wanted to prevent barotrauma by using tympanometry as a screening tool on healthy military pilots preceding low pressure chamber training. Ironically, this is exactly what we were doing up at the Aviation Survival Training Center (ASTC) in Patuxent River this past spring. The following is a comparison of two studies that used tympanometry as a tool to identify subjects at risk of developing barotrauma preceding low pressure chamber training.

Methods: Prior to training, 335 pilots in the Italian study completed a questionnaire on their current physical condition, received an ear, nose, and throat examination, as well as a middle ear assessment with a tympanometer. In addition, pilots received a brief by a physician on how to manage altitude-induced gas volume changes which included explanation and demonstration of the Valsalva technique. No physical activity, including water survival, was permitted twenty-four hours before the hypobaric chamber training. Chamber profiles included a 5,000 foot sinus check, followed by ascent to 25,000, 35,000 or 43,000 feet and a sudden decom-

pression evolution. Pilots who did not pass the sinus check were removed from training. The maximum climb rate was 4,000 feet per minute with a maximum descent rate of 2,500 feet per minute.

The Patuxent River ASTC study included 1,146 United States Naval Academy (USNA) Midshipmen and inside observer staff members who, prior to training, completed a questionnaire on their current physical condition and a middle ear assessment with a tympanometer. In addition, a USNA flight surgeon provided physical examination on each Midshipmen approximately one week prior to training. All inside observers were in compliance with their annual physical completed by a local flight surgeon. All students received a brief on management of altitude-induced gas volume changes prior to training. Physical activity such as water survival training was completed on half the subjects prior to low pressure chamber training. Chamber profiles included an ascent to 8,000 feet with a maximum climb rate of 5,000 feet per minute and a maximum descent rate of 2,500 feet per minute.

Results: The Italian study did not specify the number of pilots that were rejected due to active middle ear pathology. All pilots cleared for training demonstrated normal clinical examinations and a normal tympanogram before altitude exposure. Incident of barotrauma was confirmed upon return to sight level in eight pilots who reported ear pain during descent (seven unilateral and one bilateral) resulting in a prevalence rate of 2.4%.

The Patuxent River ASTC study identified fifteen Midshipmen and two staff members between April and May 2009 with abnormal middle ear status. Otitis media was found in nine, Eustachian tube dysfunction in seven and a perforated tympanic membrane in one Midshipman (see Figure 1). All fifteen students were referred to their assigned USNA flight surgeon for medical intervention and the Naval Survival Training Institute (NSTI), Department of Safety and Standardization was notified in the form of a Near Miss Report. Midshipmen who returned to complete training post medical in-



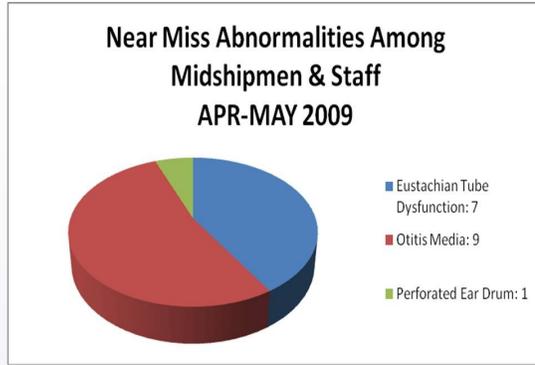


Figure 1

intervention were cleared to participate only with a passing tympanogram (i.e., Type A- normal middle ear and Eustachian tube status). No students or inside observers during this time frame requiring medical intervention after completing 73 low pressure chamber flights.

Discussion: Using tympanometry as a screening tool, the Italian study considered their low prevalence rate (i.e., 2.4%) of altitude chamber-related barotitis media as a “major finding”. In comparison, the Patuxent River ASTC study included four times the number of participants with no reported cases of barotitis media. Without the use of tympanometry as a screening tool, Al-Wedyan and colleagues reported a 3.5% prevalence of ear block (2) and Ohri and colleagues reported a prevalence of ear pain in 4.7% in a 39 year longitudinal study (3). Among our eight ASTCs, 60 students were injured out of 24,352 students trained during fiscal year 2008. Among these 60 students, ear block was the most prevalent reportable injury (i.e., 41%).

Although the use of tympanometry has significantly lowered the prevalence of ear block, it will not identify all cases. Type A tympanograms can be obtained in an otherwise healthy middle ear but still result in ear block due to undetected inflammation in the Eustachian tube or a delay in performing the Valsalva maneuver on descent. According to the Italian study, most Eustachian tube dysfunctions are associated with upper airway inflammation or allergic rhinitis.

The ASTC Patuxent River findings were shared this summer with NSTI’s Department of Safety and Standardization. LCDR Sather has since ordered

and shipped tympanometers to all eight ASTCs. To date, ASTC Patuxent River, Cherry Point and Pensacola staff members have received training on use and interpretation.

Recommendations: 1. Training Safety Officer contact their local active duty or civilian Navy audiologist to provide annual tympanometry (see Figure 2) training. 2. Obtain tympanograms on all pilot and aircrew students prior to low pressure chamber training. 3. Incorporate use of tympanometry in NSTI Standard Operating Procedures and local ASTC Emergency Action Plans. The use of tympanometry has proven to be an effective tool in the identification of students at risk of barotitis media before and confirmation of barotitis media following low pressure chamber training.

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Figure 2

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Anti-Exposure Suits:

Why commercial-off-the-shelf is the right answer



LCDR Brian Graves
VAQ-140
Safety Officer

Dry Suit. Certain things in our business cause a universal cringe at mere mention--the anti-exposure suit is one of them. Simply uttering the word causes aviators everywhere to scramble for water and outside air temperature charts, desperately looking for the loophole or waiver that will keep the dreaded suit at bay. CO's are, more often than not, quick to invoke that waiver. Even the most cautious of aviator will not hesitate to fly over 60 degree water without a dry suit. Have they ever felt 60 degree water? Why this nonchalance for safety?

They do so because current anti-exposure suits are uncomfortable. They overheat the body, constrict movement, and force the aviator to think about how the rubber seals constrict his hands and neck, how his feet are cramped and how he has difficulty reaching switches. They distract him from the business of flying multi-million dollar aircraft and are, as many will argue, an impediment to safe operation of those aircraft. So aviators take every opportunity to leave them in the locker.

Dry suits, like all survival equipment, are insurance against the "what if." And, like most survival equipment, dry-suits won't be missed until contact with that bitterly cold water, with injuries that prevent raft entry. As events have shown, rescue at sea might not be expeditious. A recent overwater nighttime SAR operation took over two hours--at no fault to the rescue crews. Depending on the conditions, if you took that CO waiver and left the dry suit back at the squadron, you might not live that long.

It doesn't need to be that way. Our squadron recently acquired the OTS (Over-the-Side)-600 anti-exposure suits: a commercial-off-the-shelf (COTS) product manufactured by Multifabs Survival Ltd. of Great Britain, imported by Aerostar Incorporated, and available through open purchase. It is currently

authorized by NAVAIR for use by TACAIR (male only) aircrew. As one of the first squadron's to acquire the new suit, we decided to run an informal evaluation under the mantle of a squadron Safety Department "cruise project." The results were surprising.

Currently, most TACAIR aviators are issued the CWU-62 anti-exposure suit. The suit consists of a coverall and undergarment ensemble, worn under a flight suit and equipment. While a marked improvement over its white-sealed predecessor, the CWU-62 still falls into the "dreaded" category. Most complaints center on the increased bulk the suit brings to the wearer, especially those confined to ejection seats in cramped cockpits. When properly worn with internal liner, the CWU-62 usually requires an oversized flight suit and considerable adjustment of flight gear for a proper fit. When fully outfitted, movement is noticeably constricted and man-ups become a physically tasking chore. And the suit is hot. While the coverall is constructed of breathable material, the required liner keeps the heat in. The wearer is overheated even when ambient temperatures are cool, with dehydration and fatigue becoming a problem for extended flights.

On the other hand, the OTS-600 is noticeably more streamlined. The coverall is fleece lined and requires no additional liner; when worn with issued "long johns," predicted survival time almost doubles. When donned, the suit fits comfortably under normal flight clothing and gear with little if any adjustment. Aircrew reported no restriction to movement with full range of motion available. Like the CWU-62, the suit is advertised as breathable. Unlike the CWU-62, wearers reported being comfortable and even cool while wearing the garment.

Survival times are comparable. Per a NAVAIR study, using a 175 pound (19.2 percent body fat) aviator immersed in 40 degree water as an example, the CWU series worn with "long johns" (CWU-43) and "shark skin" (CWU-23) liner is predicted to offer only 15 more minutes of protection than the OTS-600 with only "long johns"--or 220 minutes for the CWU versus 205 minutes for the OTS. The



OTS-600, with no additional undergarments, is predicted to offer 1 hour and 40 minutes of survival time under the same conditions.

The OTS-600 did not go without complaints. Like the CWU-62, most found the neck seal somewhat uncomfortable. In some instances, this discomfort was alleviated by additional trimming of the seal. The other main issue of discomfort involved the main zipper, which runs diagonally across the torso. A few aircrew (with longer torsos especially) found the zipper to bunch under the harness at the hip, causing discomfort. This issue would probably be solved by better interpretation of the fitting charts prior to ordering the suit from the manufacturer.

PR's found both suits to be comparable in maintainability, although the OTS-600 came ready for wear while the CWU-62 required assembly and leak checking prior to use. Periodic inspections of the suits are similar. Parts for the CWU-62 are more prevalent and, in the case of the OTS-600, dealing

with overseas manufacturers for parts support is a drawback. Cost per unit is comparable: OTS-600 costs \$831.89 when purchased from GSA Advantage while the CWU-86/P costs \$1014.21 through the supply system.

While the OTS-600 appeared to be a winner, the most telling--and ultimately important--piece of our evaluation concerned aircrew reaction to the new dry suit. When asked the question, "Would you wear the OTS-600 more often than the CWU-62 when conditions warrant it but are waiverable?" the overwhelming answer was "YES." And, as our recent deployment showed, they did just that.

What good does a piece of survival equipment do if never given a chance to work? In this instance, the COTS solution appears to be the right answer. Aviators will wear it, ensuring availability when most needed.

Makin' It Real



Grey Pickerill

Intern ASTC Lemoore

It was another predictably fine day of flying at NAS Lemoore. The sky was brilliant blue, the ground desert brown, and the air conditioning delightfully cool. As the LT was gliding through the sky at 29,000 ft, he heard the call he was expecting. "Viper 11, commit single group, bull 175, 25, 18 thousand, track northwest, bogey spades." The fighter was halfway through his turn before the controller was able to finish the call.

As the brave LT transitioned from an outside scan to inside, he began manipulating his radar page so he could pick up the opposing aircraft as far away as possible. However, he noticed that it became harder to see the text on the MFD. He tried to squint to bring it into focus. Thankfully muscle memory allowed him to press the right combination of buttons and soon he picked up a track indicating the radar had acquired the potential enemy. "Viper 11, single group 35 miles," came the call.

The LT started going through the mental checklists to ensure he was on timeline to employ his weapons soon. He was sure he had clearance to fire, didn't he? "Eagle, declare single group," he called to ensure the hostile identification matrix was completed.

"Viper 11, single group BRAA 170, 28, 22 thousand, hot, bogey spades, echo," came the reply.

Now the fighter became doubtful. What did bogey spades echo mean again? Surely echo meant he could fire, but bogey spades means he can't. He tried to remember what weapons/ warning condition had been briefed. He could ask his controller, but he didn't have much time nor did he want to admit he hadn't been paying attention in the pre-flight brief. Then he remembered he had written the weapons/ warning status down during the 7-line brief just 10 minutes ago. He looked down at his



kneeboard card and tried to find where it was. Shuffling through the three kneeboard cards he was given, he noticed that his hands felt cold and he was slightly shaky. Maybe he didn't get enough to eat before flying? The radio crackled something from the controller, but he didn't make note of what it was. Whatever was said had to wait until he could find his weapons/ warning status. Again, his vision was a little fuzzy but he could squint and concentrate enough to read, "yellow/ tight." Ok, so that meant he couldn't fire yet, but he still had to target. Did he ever make the targeting call? His thoughts were ripped apart by an urgent voice over the radio. "Viper 11, single group, threat BRAA 165, 16, 25 thousand, hot, hostile!"

What? Hostile? Sixteen miles away? When did that happen? Why wasn't his radar in the right mode? Quickly he fumbled through the radar controls to provide fire control guidance to his AAM-RAM. He knew the hostile was below him so he tried to train the radar directly onto the oncoming aircraft. "Viper 11, single group threat BRAA 160, 11, 28 thousand, hot hostile." Eleven miles? That's too close. How did the hostile get there so fast? The radar warning receiver was blaring in his ears. It's already time to execute an out maneuver. But did he shoot yet? "Viper 11, Fox 3, cheapshot single group" the now scared LT called and began to turn hard to distance himself from the potentially oncoming enemy missile.

Pull and dive, pull and dive. The LT started to giggle to himself. Man, he screwed this intercept up. That's what he gets for daydreaming up on CAP station, he thought. It would be so much easier if he could breathe. Maybe it was just the Gs, but he felt like he couldn't draw in enough air.

Suddenly the whole world turned red and his instruments stopped. For a moment, the pilot checked himself and then remembered where he was. He looked out the left side of the cockpit to the corpsman sitting there monitoring the new ROBD device. "Six-five percent on your O2 sats," the corpsman said, "You've also crashed into a mountain so you're dead, but other than that, you're flying great. You can do your EP boldface any time."

Of course the LT wasn't flying so well, since he had crashed in the simulator. He now thought to pull the green handle next to his left thigh. "You're now receiving 100% oxygen," the corpsman informed him.

This particular ROBD session began as any other conducted at NAS Lemoore's Operations Side.



Arranged and overseen by LT Corpus, HM2 Rivas and myself had helped the COMSTRKFIGHT-WINGPAC AMSO conduct ROBD training in the actual F-18 simulator, as others have done in Oceana. However, we decided to add a twist to make the environment more realistic. We decided to add air intercept control to the mix of usual emergency procedures. Knowing that task fixation is often one of the symptoms of hypoxia while in a flight environment, we wanted to see what would happen if robust control and intercept problems were given to the hypoxic pilot. It turns out that robust problems were not needed. Even simple AIC problems were enough to make three out of 15 pilots crash.

From those pilots, especially in the three that crashed, some trends were noted. The pilots often overlooked what would be considered common symptoms. They remembered that they felt colder but attributed to the air conditioning. They noticed trembling in their hands but were too focused on the fight to give it consideration. Their heart rates increased but they thought it was due to the excitement of the event. Air hunger in one pilot was attributed to the Gs he was pulling, even though he was in a simulator. The pilot described in the narrative above was given several "pull-up" calls but was unresponsive. He even swore that he had shot at the hostile contact even though he hadn't even armed his missile.

The bottom line the pilots often pointed out was that the symptoms they had in their last chamber flight were not the same they experienced that day with ROBD. One could argue they were having similar symptoms, but they were disregarding them or justifying them due to the flight conditions. It was almost like the intense athlete playing through the pain.

"You've also crashed into a mountain so you're dead, but other than that, you're flying great. You can do your EP boldface any time."



The pilots wanted to complete the AIC run completely and thoroughly. While this was definitely a great trend to see in a professional killer, those personality traits and drive obviously became a detriment. With the rising rate of reported hypoxia seen this year, that drive could lead to an increased number of deaths. Perhaps we could learn to harness the personality of the fighters. We could challenge them professionally by telling them how integral they are to the weapon systems and by not watching for the signs and symptoms they are failing in their mission. Maybe challenge their ego by having them actually lose some of the intercepts in the simulator to show them they are not at the top of their game under hypoxic conditions and it's not something

that can just be fought through.

ROBD as it is run in the ASTC with X-plane is a marked improvement over low pressure chamber operations since it brings in many of the piloting skills during the hypoxic event. However, the realism created in the Dynamic Module Trainer takes ROBD training up a notch and is only limited by the physiologist's skill and imagination. Many pilots we have debriefed feel ROBD in the sim is so valuable that it should be part of every annual NATOPS Standardization Check. While that would logistically be impossible for our community at present, we should make every effort to bring the device into the aviators' house for more accurate training.

Community Spotlight: LCDR Anthony "Gu" Artino

CAPT Patrick Malone, PhD

Asst Professor Dept of Preventive Medicine and Biometrics
Uniformed Services University of the Health Sciences



You may not know this, but MSC officers stationed at the Uniformed Services University of the Health Sciences (USU) in Bethesda, MD are conducting research that may someday fundamentally change education and training within Navy Medicine.

One such officer is LCDR Anthony Artino, an Aerospace Physiologist who recently earned his Ph.D. in educational psychology through the DU-INS program. LCDR Artino is an Assistant Professor in the Department of Preventive Medicine and Biometrics and holds a secondary appointment in the Department of Medicine. In his role as a principal investigator in the Performance Improvement and Learning Technologies (PILeT) laboratory, LCDR Artino leads an interdisciplinary team of researchers trained in psychology, physiology, and medicine. LCDR Artino and his PILET lab collaborators from around the world are studying various aspects of human learning and performance across diverse education and training contexts. Two of these areas are particularly relevant to Navy Medicine: physician training and online learning. Some

of the research conducted in these two areas, and its application to Navy Medicine, is described below.

Self-regulated learning across the medical education continuum. An important challenge for medical educators, including those charged with training military doctors, is to better understand how to develop self-directed physicians who possess the knowledge, skills, and attitudes required for competent medical practice. Research suggests that the high level of knowledge and skill required for expert performance (such as expert clinical performance) are the result of deliberate practice. Deliberate practice refers to intense, structured practice on essential aspects of a task being learned. Because deliberate practice tends to occur outside the presence of an instructor, it requires high levels of personal self-regulation. Self-regulation, or more precisely, self-regulated learning, is the degree to which individuals are cognitively, motivationally, and behaviorally involved in their own learning processes. The purpose of this program of research is to examine various aspects of self-regulated learning in order to gain more insight into how physicians self-regulate their learning and how such regulation connects to expert clinical practice in both military and civilian settings. Collaborators for this project include military and civilian personnel from USU, the University of Leeds in the United Kingdom, the University of Wisconsin-



Milwaukee, and the American Board of Internal Medicine.

Understanding student performance in online learning. In recent years, Navy Medicine has developed and fielded numerous online courses. Consider, for example, the Basic Medical Department Officers Course and the CBRNE course, both available online through NKO. Despite the dramatic growth in online learning within Navy Medicine, and throughout the Department of Defense, little is known about the personal attributes that contribute to student success in online situations. USU's program of research in online learning addresses this under-studied area by exploring military students' motivation, emotion, and behavior during web-based training. In doing so, this work is intended to supply military educators with a richer, more-

complete understanding of how students (including Sailors and Marines) learn most effectively online. Ultimately, such an understanding will provide military organizations, as well as institutions of higher education, with much-needed direction for the design, development, and implementation of instructional practices aimed at improving student learning and performance in online settings. Collaborators for this project include military and civilian personnel from USU, the Naval Operational Medicine Institute in Pensacola, FL, and Harvard University. If you have questions, or would like to learn more about these important research initiatives, please contact LCDR Anthony Artino. He can be reached at 301-319-6988 (DSN 285) or anthony.artino@usuhs.mil.
CAPT Malone

Community Biographies

ASTC Patuxent River Intern LTJG Dobbs

LTJG Phillip Shawn Dobbs enlisted in the Navy July of 2000 and graduated with division #942 out of Great Lakes, Illinois September of the same year. He began serving the fleet as an Operation Specialist and 2nd class Navy Diver in October 2001 stationed out of Pearl Harbor, Hawaii at Seal Delivery Vehicle Team One. His off duty time was shared among supporting his wife and daughter, the pursuit of a Bachelor of Science degree, and physical fitness training for multisport endurance events. Petty Officer Dobbs provided Navy Special Warfare support aboard 688 class fast-attack nuclear powered submarines to places such as Korea, Bahrain, Australia, and Guam. He received an early recommendation to 1st Class Dive-school in 2004 at the Navy Diving & Salvage Training Center, Panama City, Florida. In 2005 he completed the Journeyman Instructor Training (JIT) course and



reported to the Naval Survival Training Institute detachment Pensacola to provide support as a hyperbaric recompression chamber team member, Diving Supervisor, and Water Survival Instructor. During the summer of 2008 he completed the Master of Sports Science degree from the United States Sports Academy and became a commissioned officer in the United States Navy Medical Service Corps as an Aerospace Operational Physiologist. To date, LTJG Dobbs has qualified as a Diving and Salvage Warfare Specialist (DSWS), Submarine Warfare (SG), Naval Parachutist (PJ); completed the Florida IRONMAN triathlon, a 125 mile team-relay endurance run, 2 marathons, and most recently bicycled solo for 11 continuous hours as part of a fundraising event for a family in the local community. Currently, he is working on his internship at the ASTC in Patuxent River, MD.



SNOAP LT Jurczynski

Lieutenant Maresa Jurczynski was born in Niskayuna, New York, raised in the United States and overseas, and completed high school in Newbury, Massachusetts. In May of 2001 she received her Bachelor of Science in Human Physiology from Boston University and received her commission into the United States Navy. She began Flight School in July of 2001, to complete the syllabus and wing as a helicopter pilot in September of 2002. Her sea tour was with the HSL-45 Wolfpack, where she completed a CSSQT and is a plank owner on the USS MUSTIN (DDG 89), as well as a counter-



narcotics deployment on board the USS CURTS (FFG 38). From there, she moved to Annapolis, Maryland where she received her Masters in Professional Studies in Leadership, Education, and Development from the University of Maryland at College Park in May of 2007. She served at the 29th Company Officer and instructed at the United States Naval Academy from May 2007 to May 2009. She is currently a Student Naval Aerospace Operational Physiologist at Naval Air Station Pensacola. She lives in Pensacola with her two Jack Russell terriers, Piper and Penny.

SNOAP LT Dougherty

Lieutenant Patrick Dougherty was born and raised in Scranton, PA. He obtained his Bachelor of Science (B.S.) degree in Fitness and Cardiac Rehabilitation/Exercise Science from Ithaca College in 2001. He then completed a Master of Science (M.S.) degree in Kinesiology at Texas A&M University in December 2002. He then earned his Doctor of Philosophy (Ph.D.) degree from the Texas A&M Health Science Center College of Medicine in College Station, TX in August 2009. His dissertation was titled, "Unique Characteristics of Lym-

phatic Myofilament." At the time of graduation with his doctoral degree, LT Dougherty had contributed to the publication of five peer-reviewed journal articles.

LT Dougherty commissioned as a Lieutenant in the United States Navy on 18 June 2009. He graduated from Officer Development School at Officer Training Command Newport on 24 July 2009. He is currently a Student Naval Aerospace Operational Physiologist at Naval Air Station Pensacola. He and his wife, Elizabeth, live in Pensacola, FL.



Joining Our Professional Society

THE AEROSPACE MEDICAL ASSOCIATION (AsMA) AND THE AEROSPACE PHYSIOLOGY SOCIETY (AsPS)

LCDR Sean Lando

Why Join the Aerospace Medical Association as Your Professional Society?

The personal benefits of belonging to a professional society will become apparent from active participation. Personal growth and professional development are achieved by being an active participant and not a bystander. It is that commitment and perseverance that will challenge your outlook towards membership.

Membership in our professional society offers individuals the opportunity to support or be actively involved in applied research, communications and programs in the field. Meetings and conferences are held to provide a way to share information within your field. One of the most important aspects of membership that is often forgotten or not addressed is networking with your professional peers.

Aerospace Medicine is our profession! Aerospace medicine concerns the determination and maintenance of the health, safety, and performance of persons involved in air and space travel. Aerospace Medicine, as a broad field and, offers dynamic challenges and opportunities for physicians, nurses, physiologists, bioenvironmental engineers, industrial hygienists, environmental health practitioners, human factors specialists, psychologists, and other professionals. Those in the field are dedicated to enhancing health, promoting safety, and improving performance of individuals who work or travel in unusual environments. The environments of space and aviation provide significant challenges, such as microgravity, radiation exposure, G-forces, emergency ejection injuries, and hypoxic conditions for those embarking in their exploration. Areas of interest range from space and atmospheric flight to undersea activities and the environments that are studied cover a wide spectrum, extending from the



“microenvironments” of space or diving suits to those of “Spaceship Earth”. Listed below are two Professional Societies that we as Aerospace Physiologists should consider joining.

AsMA

The AsMA is the largest, most-representative professional organization in the fields of aviation, space, and environmental medicine. It is an umbrella group providing a forum for many different disciplines to come together and share their expertise. The Association has provided its expertise to a multitude of Federal and international agencies on a broad range of issues including aviation and space medical standards, the aging pilot, and physiological stresses of flight. The Association's membership includes aerospace medicine specialists, flight nurses, physiologists, psychologists, human factors specialists, and researchers in these fields. Most members are with industry, civil aviation regulatory agencies, departments of defense and military services, the airlines, space programs and universities. Approximately 25% of the membership is international.

Through AsMA, qualified aeromedical professionals can seek Board Certification in Aerospace Physiology. No other organization offers such an opportunity for recognition of professional achievement as aeromedical experts.

AsPS

The AsPS is a constituent organization of the AsMA. Members of AsPS must be AsMA members first. The majority of our Societies' membership is made up of active duty Navy and Air Force Aerospace Physiologist. The mission of AsPS is:

- To encourage, promote, and advance the science and practice of aerospace physiology by:
- Establishing and maintaining cooperation between aerospace physiology and other scientific disciplines
- Stimulating and accomplishing physiological



investigation, studying and disseminating pertinent knowledge and information through teaching and participation in scientific and technical meetings

- Increasing the professional stature of Aerospace Physiologists and associated disciplines within the Aerospace Medical Association

Providing a single unified voice within AsMA to present the views of the Society

The next annual AsMA scientific meeting will be held at the Sheraton Phoenix Downtown Hotel, Phoenix, AZ. May 9-13, 2010. For information regarding joining AsPS please contact LCDR Rich Folga, rich.folga@med.navy.mil or LCDR Sean Lando, sean.lando@med.navy.mil

“If you think you can offer something to this organization and membership is for you, I wholeheartedly encourage you to join”

Board Certification Announcement 2010

TROY P. FAABORG, Maj, USAF, BSC, CAsP

The Executive Council of the AsMA acting upon recommendations of the Aerospace Physiology Certification Board grants certification in aerospace physiology. Board certification in aerospace physiology was established by the Aerospace Medical Association (AsMA) to encourage the study, improve the practice and elevate the standards of excellence in aerospace physiology. Formal Board Certification provides an avenue for professional and peer recognition in aerospace medicine, and is a worthy goal for members to attain.

This year's certification examination will be offered at the 81th annual scientific meeting of the Aerospace Medical Association on Sunday, 9 May 2009 in Phoenix, Arizona (USA).

Board certification is for professionals with an abiding interest and demonstrated productivity in the field of aerospace physiology. Applicants must possess, as a minimum, a baccalaureate degree either in physiology, or a closely related science. A history of significant contributions to aerospace physiology is also required. Applicants should have five years of active professional experience in an aeromedical field.

The five-hour exam contains questions covering various areas relevant to aerospace physiology including, but not limited to general human physiology, acceleration physiology, decompression physiology, impact, hypoxia, vibration and noise, applied operational aspects, space physiology, and spatial orientation.

Applications and letters of reference are due to the Admissions Committee no later than the close of business, Monday, 01 March 2010. Applicants

should contact the Admissions Chair for an application form (available in English only). Applicants should also submit a suitable portrait photograph, a short professional biography of less than 300 words, two professional letters of recommendation submitted directly to the Board, and a one-time, non re-

**Deadline for Application:
Monday, 01 March 2010**

fundable Application Fee of \$25 (U.S). A non-refundable \$75 Examination Fee is due prior to the exam. Make checks payable to the Aerospace Physiology Certification Board. Applicants are encouraged to submit documents to the Admissions Chair in a digital format; MS-Word compatible for text documents, and high-resolution JPEG for graphics/photos.

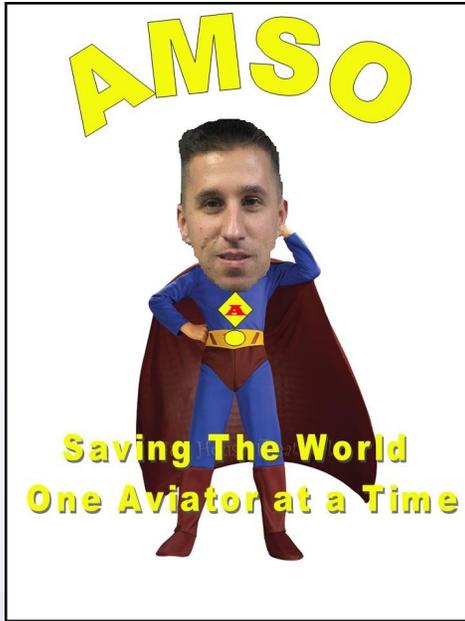
Applications for Aerospace Physiology Board Certification are available from the Admissions Committee Chairman:

TROY P. FAABORG, Maj, USAF, BSC, CAsP
502 Westgate Drive
Warrensburg, MO 64093

Email: troy.faaborg@whiteman.af.mil (professional), or faaborgs@msn.com (personal)

Deadline for Application: 01 March 2010





COMTRAWING SIX AMSO LT Welsh displays his proposed AMSO working uniform



ASTC Miramar Intern LT Gobrecht on vulture's row aboard the USS John C. Stennis in September

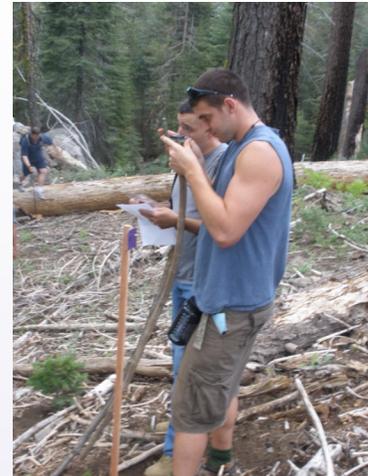


ASTC Miramar Intern LT Gobrecht in the hangar bay aboard the USS John C. Stennis in September





ASTC Lemoore staff practicing survival training in Yosemite



ND2 Eisenbarth practicing land navigation in Yosemite



ASTC Lemoore staff at the start of the Half Dome Trail.

Announcements

CONGRATULATIONS

Angie Baker and family
on the birth of their new baby girl:
Riley Grace Baker
Born: 14 Jan 2010 @ 1640
20 in, 7 lbs 11oz

CONGRATULATIONS

CAPT (sel) Rich "Pyro" Jehue
for his selection to be the next
Commanding Officer of 1st Medical Battalion

CONGRATULATIONS

CDR Yniguez ran the Marine Corps Marathon in
4:10:05

Mark These Dates:

IMP/FMC and FAILSAFE Conference

April 12-15, 2010 in Phoenix, AZ

For details, contact:

LCDR Schoonover at

Ronald.schoonover@navy.mil

81st Annual Scientific Meeting of the Aerospace Medical Association

May 9-13, 2010 in Phoenix, AZ

For additional information go to: www.asma.org

Naval Aerospace Physiology Program Awards Nominations

Due by March 3, 2010

For information contact CDR McAllister at:

DSN 224-2423 Ext 2593

James.f.mcallister@usmc.mil

