



The Society of U.S. Naval Flight Surgeons Newsletter

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<http://www.aerospacemed.org>

January 2001

President's Column

The recent terrorists attack on the USS Cole has changed the way we look at our security, both overseas and at home. Deployed medical assets must be ready to respond to such an act in order to provide emergent response, medical evacuations and coordination with Host Nation, Allies and US Medical Treatment Facilities. Everyone in these positions needs to avail themselves of all Medical Intelligence at their disposal. I recommend working closely with your Type Commanders, Fleet Surgeons, and area MTFs.



to respond to rapidly changing conditions, my staff Flight Surgeon was the first to volunteer. I continue to be proud of our current and previous Flight Surgeons and I know each of you is having the same experiences.

In closing, both Deb and I hope that each of you have had a joyous, peacefully and safe holiday season. As always take full advantage of the situation you find yourself and remember to.....
“GET’EM UP, KEEP’EM UP”.

CAPT Fanancy L. Anzalone, MC, USN
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As a new overseas MTF commander, I now appreciate the level of regional understanding of the medical capabilities that a MTF can offer. Over the last month we have been validating the available medical resources in ports of call in my area of responsibility. This action has been taking place by all overseas MTFs and the new information is available through the cognizant fleet medical departments. I know most of you, as I did in the past, do not look at the overseas MTFs as more than a place to send sailors and marines for specialty care. Take advantage of all the resources we can offer, I know you will be pleasantly surprised.

Over this time of increased awareness of force protection, our Flight Surgeon community has once again stepped forward to take on more responsibility. When I needed to identify a physician to be part of the port assessment team, I looked at the list of previous Flight Surgeons working in my hospital. Again, when temporary medical coverage was needed

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The Society of U.S. Naval Flight Surgeons is a non-profit organization. Its purpose is to advance the science, art, and practice of aerospace medicine and the mission of the U. S. Navy and the U. S. Marine Corps; to foster professional development of its members; and to enhance the practice of aerospace medicine within the Navy and the Marine Corps.

Membership is open to all flight surgeon graduates of the Naval Operational Medicine Institute. Subscription memberships are available. Dues are \$20.00 per year, or \$300.00 for a lifetime. Contact the Secretary or Treasurer for more information or a membership application form.

From the Secretary

Captain Valdez and I thank the membership for the tremendous response to our request for articles for the January newsletter. In this issue you will note a wide variety of articles ranging in length from a few sentences to pages. This was precisely the response that we had hoped for. This newsletter should prove to be informative and interesting as well. Please keep the newsletter inputs coming!



The Aerospace Medical Association annual convention in Reno, Nevada is coming up in May, so if you haven't signed up yet, it is time to do so. The rooms are a bit pricey, but there is good scuttlebutt that there are military rates available for the rooms, so check early for this as well.

SUSNFS is planning on co-hosting the all Navy luncheon with the Aerospace Experimental Physiologist Society, so it should be an outstanding luncheon. There are some issues on the cooker for this year's annual SUSNFS meeting and AsMA convention. As more information on the convention becomes available, I will pass it on through the newsletter or by a batch e-mail.

Regarding e-mail, I have been having trouble with some of the members e-mail addresses and contact information. Every time a newsletter is forwarded by the Postal Service, there is a charge for it. It would really be beneficial to the organization to email me your name and e-mail address so I can keep up with you. Secondly, PLEASE keep SUSNFS in mind when you PCS with a short e-mail with your new Snail Mail address. Every dollar we spend on postage is one less we have to cover cost.

Now for a few updates on those working issues for the Society. Lcdr Hohman is working the web site issue. Lcdr Kleinberg and LT Webster inform me that we are temporarily out of the "pocket mishap guides". Lcdr Umlauf is attempting to complete a revision of the mishap guide by this spring with the help of the Safety Center. In the mean time, we are trying

to get a small batch of the older versions printed to keep the membership all supplied.

Once again, Kudos to LCDR Bill Padgett for spearheading the editing work of this newsletter for Captain Valdez. Without LCDR Padgett's dedicated and detailed work ethic, we wouldn't have gotten this newsletter put together in the timeframe that we did. Please keep e-mail addresses and changes of Snail Mail addresses current. Let's save the society some cash.

Very Respectfully,

LCDR David K Weber, MC, FS, USNR

weber@nomi.med.navy.mil

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From the Treasurer

Greetings! The winter is colder than we expected here in "Sunny" Florida so, I hope all of you are keeping warm. Christmas is rapidly approaching and we have been busy as usual. The Society remains in good financial health due to the change in dues that we voted on in May. Unfortunately, some folks are unaware of the change to \$20 per year for the Society dues.



Those of you who have been patronizing our "Shameless Commerce Division" continue to show preferences that will reflect our choices of merchandise in the future. We will probably discontinue some of our products that don't seem to attract your attention. Jewelry continues to be our best product. We have been working with the jeweler to keep the prices down. We are also looking into the possibility of a belt buckle. CDR Dudley and I are looking at that concept now. The most popular items continue to be the Ultimate Flight Surgeon CD and the Mishap Reference guide, but we have sold out of the Mishap Reference Guide and are waiting for the Safety Center to issue the changes they have enacted

before we print a new version. Hold on to the old ones, because it will be a while before we get the new edition. Hopefully this will happen before the AsMA conference or even possibly for the COAP.

No tee shirt design recommendations have been sent to us thus far, so I am assuming that the present inventory satisfies the demand. We will be discontinuing the sweat clothes once these are sold out.

It is time to begin the process of choosing the officers for next year so be thinking about who you want to help lead us, particularly when it comes to the financial picture. I will tell you that the office of treasurer is quite an involved and complicated process. We operate the Society's finances with QuickBooks. This program allows us many advantages not found in other software, but is a rather complex program and requires some familiarization before getting started. If any of you have recommendations for the next treasurer, let us know!

Best Wishes for a Happy and Prosperous New Year from all of us at the Cradle of Naval Aviation. Keep 'em Flying, Safely...

LCDR David C. Kleinberg, MC, USNR

NOMI, Physical Qualifications

Code 42 (MED-236)

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UH-1N Huey landing on USS New Orleans,

Specialty Leader (MED-23)

Current Milestones/Issues:

- MED-23 welcomes CDR Ed Feeks, MC, USN, to BUMED as Deputy Director, Aerospace Medicine. CDR Feeks completed a successful tour as Senior Medical Officer (SMO) on the USS ENTERPRISE (CVN-65)—the best and fastest ship in the Navy! You can reach CDR Feeks by calling (202) 762-3457 or email efeeks@us.med.navy.mil.
- Military Health System Optimization (MHSO) Plan. CAPT Dean Bailey, MC, USN, current AIRPAC surgeon and chair of the Operational Medicine MHSO Access and Enrollment Tiger Team, announced at the recent Nov 1-3 MHSO Conference a plan to enroll all active duty Sailors and Marines into TRICARE. The team's plan proposes that every Sailor and Marine be automatically enrolled into TRICARE when they go to PSD to have their pay initiated. The proposal will be taken forward by Navy Medicine leaders for DOD level consideration. For further general information about MHSO activity go to <http://bumed.med.navy.mil/med03/optimization/Default.asp>. If you are not able to bring the page up, there should be some prompts requiring certain information that will allow you access to the page.
- Graduate Medical Education Selection Board (GMESB) received ten applications for the Residency in Aerospace Medicine. Current precept allowed for 8 selections. Selection Board met Nov 27-Dec 1. We received 86 applications for Flight Surgery training for FY 01-FY02. Current operational requirements call for 75 trainees for this period. The selection message was released in mid-December. **One thing that became crystal clear during this year's selection process is that aerospace medicine must do a better job in recruiting RAMS. Strategic planning is in progress**

and everyone will be called upon to help in our recruitment program.

- The Dual Designator Program Advisory Committee met recently to consider over 15 applications for the program. The Selection Board met in mid-December to make final selections based on Naval Aviation need. The selection message is available on the MED 23 website. Applications were received from Flight Surgeons, Aerospace Physiologists, and Aerospace Experimental Psychologists.
- BUMED 101244Z OCT 00 message announced the Aviation Photorefractive Keratectomy (PRK) Accessions Study. The message can be reviewed at http://navymedicine.med.navy.mil/PRK/Aviation_study_clarification_msg.txt. For questions concerning this study, contact LCDR Anna Stalcup, 850 452-2257, Ext 1052, or LCDR Ken Uyesugi, 850 452-2257, Ext 1018.

ORM used in the FNAEB Review Process. IT WORKS!!!

I recently participated in final review of a Field Naval Aviator Evaluation Board (FNAEB) of a young, inexperienced F-18 Naval Aviator who was having significant problems in performance of flying duties. Those problems led to a FNAEB and the process was at final BUPERS review and disposition. Final review usually focuses only on process issues rather than on substantive issues of the case. The primary questions asked by BUPERS were: Was the process conducted appropriately? Did it follow instruction? Was the pilot given every opportunity for success? Were the boards at the various levels of review properly constituted? Were the board's recommendations consistent with level of review? These questions were asked in this case, but there were also several substantive issues of concern with this pilot and the board addressed those as well. Of specific concern was that all boards prior to BUPERS review had recommended a Type B(1) classification, which meant the pilot would

discontinue flight status. However, at the TYCOM level the commander had superseded the board by recommending Type A(3) classification, a recommendation that only the TYCOM level review can make. If approved by BUPERS, a Type A(3) classification would return the pilot back to flight status but move him to another platform different from the F-18 community. This discrepancy between board and TYCOM recommendations was of special concern to our board in light of a number of substantive issues.

The original FNAEB recommended Type B(1) classification because of consistent and significant poor basic airwork, poor flight preparation, poor aircrew coordination, poor situational awareness, and poor self-evaluation, all of significant degree and consistency that the board felt the pilot should be discontinued from flight status. Based on these issues, the original board felt Type B(1) classification was justified. There was no indication in the record that if the board had the authority to use the Type A(3) classification, they would have done so here. In many cases the board will make that statement if they really felt the pilot should remain in flight status, but move to another aircraft type. The subsequent TYCOM board concurred, but the TYCOM recommended Type A(3) classification. Normally, BUPERS concurs with the TYCOM recommendation unless there are compelling reasons not to. In this case, the BUPERS board unanimously recommended Type B(1) to CNP, but needed to justify the recommendation. The F-18 member and the aeromedical member both strongly supported the B(1) recommendation. Indeed, the young pilot did demonstrate all the flying deficiencies noted above. Of particular note was the fact that the pilot had dropped mock bombs inappropriately on two different training flights, and in both cases unloading was not coordinated with air traffic control (ATC) as standard operating procedures direct. The pilot was properly debriefed after each episode and knew the critical need to coordinate with ATC. When asked why this had happened and what he could have done differently to prevent it in the future, the pilot could not give specific reasons or remedies for either episode. This same response was received when the pilot was questioned on a number of other problems. The pilot used unrelated excuses to explain what he could not

answer by critical self-analysis. It was this inability to critically self-analyze with subsequent correction of deficiencies that concerned the board the most.

In justifying the board's recommendation of B(1) to CNP for final decision, application of Operational Risk Management (ORM) analysis was helpful. In this case, the hazard severity of inappropriate release of bombs is "I" – dropping bombs inappropriately can cause unintended death, facility loss, or grave damage to national interests. Here, mishap probability is "B" – given that the pilot had dropped mock bombs inappropriately twice indicates a high probability that it will occur again in time. Thus, overall risk level is "I"—High. By applying ORM, we certainly gave more objective justification for the recommendation to discontinue F-18 flight status. This in conjunction with the pilot's inability to critically self-analyze with subsequent correction of deficiencies supported the board's position for B(1)—the pilot is probably high risk in any aircraft platform. He would have the same kinds of problems with airwork, preparation, aircrew coordination, and decreased situational awareness—given the basic fatal flaw of not being able to critically self-analyze—no matter what aircraft platform.

As N78, OPNAV Air Warfare, recently said to a group of us, "We are not in the business of risk avoidance. We are in the business of risk management." Bottom line: ORM helps. It's a great tool. Use it!!

Until next, keep the faith...Godspeed!

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Student Flight Surgeon Recruiting Update

As the new Medical Corps, Program Director for the Student Flight Surgeon Course, I wanted to give you some feedback that I received both directly and indirectly from the upcoming selected flight surgeons for FY-01/02. I just came back from the Graduate Medical Education Selection Board in Washington, D.C. where the flight surgeons were selected and was pleased to see a good “crop-o-doc’s” to choose from. Yes, we filled every student flight surgeon training position that was allowed by the naval component of the GMESB. This was despite the fact that there was a tremendous amount of negative issues regarding PGY-1 shortages, which could have significantly impacted our candidate pool from which to choose.

I came to NAMI in late summer of 2000 and was almost immediately sent out on the road as part of the annual recruiting effort for the next year’s flight sur-

geons. Almost every intern I talked with was interested in the flight surgeon course due to the DIRECT INFLUENCE of a prior/current flight surgeon practicing in the field of aerospace medicine. YES, you are the key to recruiting the best physicians for your squadrons. If they had not heard about positive experiences and opportunities, they would not have been asking me about specific issues and would have been talking to other recruiters. Please continue the extremely positive influence you have on the PGY-1 community and also talk it up to your Claimancy-18 staff personnel.

Thanks again for your great assistance with the recruiting effort and for your continued contribution to naval aviation safety. Without your efforts, we would not be as “healthy” as we are today.

CDR Jay S. Dudley MC, USN (FS)
Medical Corps, Program Director



UH-46D Sea Knight from the "Bayraiders" of Helicopter Combat Support Squadron Eight (HC-8) delivers a pallet of powder charges to the destroyer USS Deyo (DD 989). (DVIC Photo)

Physical Qualifications and Standards (Code 342)

Holiday greetings from the entire Code 342/BUMED 236 gang. I have some further information to discuss on the use of the Aeromedical Summary (AMS). First, I would like to report the vast majority of AMS's submitted have been outstanding, both in detail and content. Keep up the good work. If you need information concerning the submission or format of the AMS, please refer to the NOMI website:
<http://www.nomi.navy.mil/code04/wavrnf.htm>

To ensure the best turn-around time for a waiver and to avoid confusion, please ensure the member's Unit Identification Code (UIC) and the examining facility's UIC are included. Also, please don't forget the member's SSN and name. We are good but not psychics! We try to provide both the examining facility and member's command notification of waiver recommendation either by BUMED 236 or medical record SF507 electronic letter. Many facilities have yet to give us military e-mail addresses for correspondence of waiver letters. To keep up with the electronic age and have the ability to impress your squadron commanding officer in your prowess to obtain waivers, give us an e-mail address that will be constant for your command. This will be even more invaluable during the next year as we transition to a "paperless" process. Remember, for security purposes and patient confidentiality, "Yahoo" and personal "Hotmail" addresses are not allowed. Please send all e-mail addresses with command UIC's to HMC Tony Rock at: code427@nomi.med.navy.mil

Submission of an AMS is preferred as a fax to DSN 922-3883 or commercial (850) 452-3883. Also it may be sent as an e-mail to: code427@nomi.med.navy.mil. I recommend if sending by e-mail to have read receipt active on your e-mail to verify receipt. Please send a separate cover sheet for each member to include: Name, SSN, date of physical or AMS, number of attached pages including cover sheet, and finally a point of contact. This will allow my data entry clerk to keep each faxed or e-mailed AMS separate. Snail mail is the least preferred and should be used primarily if supporting documentation can not be faxed (i.e. color photos, radiographs, etc.). As an ex-

periment, please attempt to send scanned images as e-mail attachments and we will see if the quality is sufficient for processing.

Other helpful tidbits to help us help you:

- a) TriMEP 1.E is available for download from the NOMI website: www.nomi.navy.mil/code04/foreword.htm Download and use NOW! It is the best we have until our new web-based software comes online.
- b) AMS required commanding officer endorsements: Local C.O. for Navy personnel, Local C.O. for USMC personnel with chop through the MAG and MAW Senior Flight Surgeon before Code342 review. The USMC has decided tighter control is needed. Both C.O. endorsements may be stated in the AMS as "Commanding Officer concurs" or similar verbiage, or may be hard endorsed via paper endorsement.
- c) Do not FEDEX! Only flag officers or packages needing special handling (WITH JUSTIFICATION!) will be accepted.
- d) Remember ALL aviation applicants must have a complete SF88/93 submitted with appropriate documents for medical review.
- e) Code 342 has been very successful in having AVT's spend a week with us TAD to update on recent changes and see firsthand the inner workings of this auspicious group. These members have returned to their commands (alive!) and have greatly improved their local command processes. Error rates have substantially decreased and process time shortened. This is a win-win situation all around and I extend a welcome for any interested AVT to contact HMC Rock (code427@nomi.med.navy.mil) for details.

Lastly, I have included the latest AMS description and template for your information. Enjoy your tours and keep 'em flying.

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Aeromedical Summary (AMS)

The AMS refers to the paperwork replacement for the Local Board of Flight Surgeons (LBFS). The Aeromedical Summary will be used for submission to Code 342 (BUMED 236) to summarize the findings of the LBFS. See the template below for information required in the AMS.

The LBFS is a process. The Board must still meet to issue an Aeromedical Clearance Notice following the traditional process of a LBFS. If the local Flight Surgeon issues an Aeromedical Clearance Notice for a condition which requires a waiver, and for which a waiver has not yet been granted by BUPERS/CMC, two Flight Surgeons and one other physician (who may also be a Flight Surgeon) signatures are required on the AMS for initial waiver application. If an Aeromedical Clearance Notice is not issued, only one Flight Surgeon signature is required on the AMS for initial waiver application.

An AMS is required for an initial waiver for designated aviation personnel and members currently in aviation training. However, alcohol abuse and alcohol dependence waivers come under the specific guidance of BUMEDINST 5300.8 and are handled differently. For these two waivers only, an SF88 and SF 93 are still required with submission of the initial waiver application and with waiver continuation during the three year aftercare period. Put another way, with the exception of ETOH abuse and ETOH dependence waivers, the only item required for initial waiver application is the AMS. Therefore, care must be taken to ensure that the AMS is thorough, complete, and accurate. Submission of administrative data will be required via TriMEP (see below).

Submission of the AMS does not release the Flight Surgeon from the regular physical examinations required by BUMED (Annual Short Form or Q5year SF88 and SF93). The Flight Surgeon shall ensure that the Annual Short Form or the Q5year Long Form examinations are placed in the member's medical record. For all waiver requests for aviation applicants, a complete SF88 and SF93 with supporting documentation is required to be submitted to Code 342/ BUMED236. Waiver continuation requests for des-

ignated personnel and members currently in training may be submitted as an AMS, an Abbreviated Aeromedical Evaluation (a.k.a.-the short form physical), or a SF88 and SF93, with appropriate flight surgeon's comments recommending continuation and commanding officer's concurrence.

Code 342 (BUMED 236) Submission Requirements

Submission of the complete SF88 and SF93 (including TriMEP full electronic transmission) is required for:

1. All aviation applicants (including those applying for a waiver)
2. ETOH Abuse/dependence waiver (first three years of aftercare)
3. Separation/retirement physical exams.

Submission of administrative information from TriMEP is required with the AMS.

Submission of the Annual Short Form is no longer required.

Submission of the Q5year Long Form physical exam is no longer required.

Only copies of the AMS, SF 88 and SF 93, or an electronic version (e-mail, fax, or scanned and sent as an e-mail attachment) shall be submitted for review. **DO NOT SUBMIT ORIGINAL PAPERWORK TO CODE 342 (BUMED 236).** Originals are no longer required for endorsement and will not be accepted. Do not submit originals of the SF 88, SF 93, or the AMS. Originals shall be placed in the member's health record. All original commissioning physical exams must be forwarded to BUMED 25 for commissioning endorsement first. Only copies of physical exam with BUMED 25 endorsement may be submitted to BUMED 236 for aeromedical endorsement.

The electronic AMS should be submitted to code427@nomi.med.navy.mil.

TriMEP administrative data, or the complete SF 88 and SF 93 (when required), shall be submitted

electronically. A password issued by NAMI is required to permit transmission through the NOMI firewall. Passwords may only be obtained by telephone. NAMI: Comm: 850-452-2257 (ext. 1068) or DSN 922-2257 (ext. 1068). Faxed information should be submitted to DSN 922-3883, or COMM (850) 452-3883.

Administrative Data required for submission with the AMS

All facilities submitting an AMS for review are required to obtain the TriMEP 1.0e version and send an electronic administrative data submission (from the 1.0e version) to Code 342 (BUMED 236). This electronic submission will automatically load administrative data into the NOMI database. The TriMEP administrative data should be sent prior to AMS submission, or at the time the AMS is submitted. Specifically, the items requiring submission are:

Social Security Number
 Name (last, first, middle)
 Sex
 Review Type
 Class of Physical
 Purpose of Exam
 Exam Facility UIC
 Organization UIC
 Rank/Rate
 Component/Service (USN, USNR, USNR-R,
 USNR-TAR, USMC, USMCR, USCG)
 Birth date

Other information on the TriMEP physical examination is not required for submission with the AMS.

PLEASE NOTE that AMS packages submitted with or after electronic submission of TriMEP administrative data will receive priority processing at BUMED 236.

For any questions, call Code 342: Comm: 850-452-2257 (ext. 1073) or DSN 922-2257 (ext. 1073). E-mail questions can be addressed to: code427@nomi.med.navy.mil.

ALCOHOL WAIVER Requirements:

Initial waiver:

1. AMS (format replaces the flight surgeon narrative assessment, but must include same information)
2. Complete SF88 and SF93
3. Commander's endorsement.
4. Psychiatric evaluation by a privileged psychiatrist or clinical psychologist
5. DAPA's statement to document aftercare including AA attendance
6. Copy of Level II or III Treatment Summary
7. Internal Medicine consult (as indicated)

Continuance of waiver (for first three years of aftercare)

1. AMS. Must document visits to Flight Surgeon (monthly for first 12 months, then every three months for remaining two years)
2. Complete SF88 and SF93
3. Psychiatric evaluation by a privileged psychiatrist or clinical psychologist
4. DAPA's statement to document aftercare (monthly visits for the entire 3 years with documentation of AA attendance)

Continuance of waiver after the first three years of aftercare:

1. AMS (must document abstinence)



(LCAC-75 arriving on USS Pearl Harbor, LSD-52
 DVIC Photo)

Aeromedical Summary (AMS) Template

DATE:

Patient Identification: LT John Doe, 000-00-0000/XXXX(designator), (ensure that member is USN, USNR, USNR-R, USNR-TAR, USMC, USMCR, USCG) is a XX y/o Caucasian male aviator, with 3000 flying hours in the F14, P3, etc. Current job is flying F14s and he has flown 100 hours in the last six months. Member is stationed at _____. The purpose of this AMS is to request a waiver for _____ (diagnosis).

Member's Organization's name and UIC/RUC: _____
Medical Treatment Facility name and UIC: _____
Aeromedical Email point of contact: _____ with phone _____
Member's designation code is: _____
Purpose of exam (as in TriMEP): _____
Class of exam (as in TriMEP): _____
Member's date of birth: _____

Previous Waivers and status: Please give the status of all previous waivers and updated required information (i.e., member has a previous waiver for HTN granted in 1995. Member is stable on HCTZ and blood chemistries were normal on 14 May 99).

Significant Medical History: same as History of Present Illness.

Consultant reports: Need dates, consultant diagnosis, prognosis, treatment, and follow-up. In some cases (high risk, high profile waiver requests) NOMI Code 42 may ask for copies of consultant reports.

Physical Examination: Include vital signs, and a targeted physical exam that focuses on the waiver(s) requested (i.e., neurology exam for migraine headache waiver).

Lab test: Review lab tests that are pertinent to the evaluation of the disqualifying diagnosis.

Information required: Consult the ARWG for required medical tests and consults for both the waiver requested and any previous waivers. Review all prior SF88 and SF507 for required information to be included from a previous waiver.

Diagnosis: (ICD-9:) Use current ICD-9 diagnostic terminology only.

Aeromedical recommendations: Include appropriate aeromedical justification for each recommendation.

Command endorsement: The member's commanding officer is aware and concurs with this member's diagnosis, prognosis, waiver requirements and waiver recommendation in this Aeromedical Summary. Official command endorsement is required for alcohol waivers (with SF 88 and 93 as per BUMEDINST 5300.8).

FS signature *** FS signature *** Physician signature***
***Read note on previous page on AMS signature requirements

Psychiatry (Code 321)

First, we are very pleased to welcome CAPT Myron Almond, MC, USN to the Department. He recently completed his psychiatry residency at NMC Portsmouth. He also has a lifetime of experience in operational medicine (at least the length of some of our readers' lifetimes) from his time as a line officer on subs to his SMO tours, RAM training, head doc at the Naval Safety Center, etc. Most of you may already have heard of his infamous "Dr. Death" lectures where he provides you with an unforgettable presentation about how active duty members die.

In this edition we have several items including information about one of your favorites (yes, I'm being facetious), the "Boxer" procedures; a submission from a flight surgeon, and when and when not to refer substance misuse evals to psych.

And as always, please call us or email us with any questions you may have.

CDR Ellis – code216@nomi.med.navy.mil

CAPT Wear-Finkle - code211@nomi.med.navy.mil

CAPT Almond - code210@nomi.med.navy.mil

850-452-2257 ext 1081 (DSN: 922)

GUIDELINES FOR PSYCH REFERRALS FOR PATIENTS WITH POSSIBLE ALCOHOL MISUSE DISORDERS

We at NAMI, and psychiatrists/psychologists elsewhere, at times receive consults that state something like:

"24 year old male with DUI last month. Please evaluate for possible alcohol abuse. . ."

Referring this kind of question to psych is just like if you had a patient with an initial presentation of a twisted ankle and referred them to Ortho, an initial headache eval and referred them to Neuro, a patient with a poor valsalva and referred them to ENT, etc. In each of these cases it is the responsibility (and within your privileged scope of practice) to do a full initial assessment and then contact the specialist if

there are further questions.

The initial assessment and diagnosis of any individual who presents or is referred with a possible alcohol misuse disorder is made by the GMO or FS. Gather the information, check with collateral sources, pull out your aviation psych handbook and DSM-IV, and make the correct diagnosis. Please see the last SUSNFS (Fall 00) for a handy-dandy chart that you can copy and keep at your desk.

If you are not comfortable that you have made the correct diagnosis, you may send them to the alcohol treatment center or facility for an evaluation (which you will probably do anyway as part of the assessment/treatment process).

There are two times that it *IS* appropriate to refer an individual with an alcohol misuse disorder to Psych; if you are concerned that he or she may have a concurrent AXIS I diagnosis or following their alcohol treatment as part of the waiver request process as delineated in BUMED 5300.8.

If you need more experience in the assessment of substance use disorders please contact your local alcohol treatment facility and schedule yourself for their Visiting Professional Course that usually takes 3-5 days. This experience will be invaluable for your effectiveness as a flight surgeon, and as a physician regardless of eventual practice environment.

(continued on page 12)



(Santa using the C-130

DVIC Photo)

(continued from page 11)

FLIGHT SURGEON VIGNETTE

The following story was provided to me by one of your colleagues. He said he had read both the recent articles on both ORM and OpMed Ethics in recent SUSNFSs and thought you all could benefit from his personal story. Many thanks to him for his honest disclosure about a situation he wished he had handled better. We have ALL been there at some time and hindsight is indeed 20/20. The important thing is to LEARN from our mistakes. . . Maybe you can learn from this without having to go through it yourself.

If you have been following CAPT Wear-Finkle's articles in the SUSNFS's you will have noticed a few recurrent themes; alcohol, integrity, and ORM. The following case history illustrates the importance of keeping these issues in the conscious part of your gray matter. The names and details have been changed to protect the guilty, author included. If the story is familiar, it may be because these events are too common.

"Al" was diagnosed as Alcohol Dependent at NAMI a while ago. The event that brought him to this diagnosis was a bout of alcohol-induced stupidity followed by unconsciousness at a command sponsored event. The sequelae included UCMJ charges which one only can see in a training command. The charges were eventually dropped, but the referral resulted in a diagnosis of Alcohol Dependence. [*Mental note to self:*] this diagnosis requires a pattern. Al successfully completed six weeks of inpatient alcohol rehabilitation, followed by completion of flight training. Al transferred lots of times, and his diagnosis and WAIVER were largely forgotten.

I met Al in the "O" club at NAS while I was checking in as the flight surgeon to his squadron. We had a few beers together, along with the flight surgeon that I was relieving. Anything wrong with this picture? Later, as I was reviewing the medical records of my new squadron, I noted Al's alcohol waiver. I brought this to the attention of my predecessor, who assured me that he would "handle it." The result was that Al promised to comply, now that he understands that abstinence really means abstinence forever vice during the first three years. An indica-



(KC-130 fueling CH53E Super Stallion)

tion of the depth of Al's problem was that when confronted with the choice of alcohol or flying, he actually commented, "well, I could always go back to (fill a ground job held by aviators prior to flight training)."

Time passes, and Al appears to be behaving himself. Al also has a tendency to avoid me. At a command function, I arrive and head to the bar where Al is getting a beer. Al sees me and immediately hands the beer to a friend, who appears grateful and somewhat puzzled. More time passes and Al is passed over for promotion - twice. Al's marriage is not doing well. Al is going to get tossed, after quite a number of years of service. On a detachment, I notice Al drinking. Being a clever individual, I check BUMEDINST 5300.8 for the letter of the law in revoking Al's waiver. I take a grounding chit to the CO, realizing that revocation requires command endorsement. The CO determines that this is a discipline problem, and he will take care of it. "Doc, you don't need to ground him." No longer feeling very clever and not having learned about those ORM tools to help make my point, I give in. Rationalizing takes over, . . . I tell myself that I did my part and informed the CO. It turns out that the CO knew Al was drinking, but allowed him to do so discreetly. The CO was rather angry that Al was stupid enough to get caught. How does this happen? Remember the initiating incident? Al used the unimpressive circumstances of his alcohol-related incident to convince the CO, and many others, that those NAMI shrinks will diagnose anybody with any bogus incident as an alcoholic.

Al goes TAD, for a while waiting for his severance pay and eventual divorce, as his marriage has not improved through this. One weekday night, Al is returning to the BOQ and runs a stop sign on base. As one might expect, the base police are the only other ones awake, and they are bored. They pull Al over and note the strong smell of alcohol in the car, as well as an unexplained enlisted type person in the passenger seat. Next event is Al discovering just what a flag officer can do under article 15 of the UCMJ. Al lost half his severance pay, and his wife left shortly afterward.

The point of this is for you to learn from my mistakes; there are many alcoholics out there just like Al. They are very convincing, they really believe that they do not have a problem. Does denial sound familiar? Use the ORM tools to help others see the problem, and remind yourself that this is a matter of personal integrity. I never thought of it that way, but that was my mistake.

[Note: no one can blame another person for taking the easy route in any situation. But be careful that perhaps there may be more at stake than you initially think. As a physician you have a duty to provide the standard of care. For aviation medicine the written policy establishes the standard of care and it is very explicit about when you are required to ground individuals. For failing to follow the standard of care you may risk an adverse privileging action or even risk losing your medical license in certain situations]

The "BOXER"

The following is another excellent email from a flight surgeon who has several good questions about when to use and how to apply SECNAVINST 6320.24A, better known as the "Boxer."

Dear Capt. Wear:

I have a question for you about subject referrals and applicability to Boxer procedures.

One of your predecessors at NOMI wrote an article published in SUSNFS a few years ago, advising that Boxer procedures be followed even when the patient wanted the referral if the referring FS was in same chain of command as the patient. This is an interpretation of the Boxer Instruction and not something specified in the Instruction itself.

(continued from page 13)

The difficulty I have with this recommendation is that the procedures have the potential to stigmatize the patient and discourage others from seeking help. The work-around I have used is to refer the patient to another FS not in the chain, and let him make the referral. The trouble with this route is that the patient came to me because of rapport we developed in the squadron.

Some patients who could benefit from mental health services are reluctant to repeat the evaluation with someone they don't know in order to get the referral, and some become lost to follow-up.

I am shore-based, and, as you can imagine, the situation becomes even more unworkable for people embarked on a vessel or deployed squadron, where patients and physicians are even more likely to be in the same chain of command.

A different physician feels that Boxer procedures should only apply if the patient does not want the referral, regardless of who is sending him, unless they are on a limited duty board for their psych diagnosis, in which case he feels Boxer does not apply, even if the patient doesn't want mental health services.

I would like to know your feelings on this subject, since all Flight Surgeons operate under your cognizance.

Thanks,
LT XXX

This is an excellent query on a very elusive subject and one that I'm sure many of you share. Following is a brief summary of what is an absolute requirement of the Boxer and what is OUR recommendation. As we teach in class, we strongly recommend that you err on the conservative side when referring someone to mental health. There are many "bad things" that can happen from *not* using the Boxer notification procedures and very little risk from using them.

There are several reasons why the Boxer Law is

"good." It ensures that anyone referred to psychiatry clearly understands the potential repercussions. If someone is referred to a civilian psychiatrist, they can refuse to go. In the military they can't refuse (actually they can initially refuse, but will eventually need to appear before the psychiatrist – even if they refuse to talk), but they at least have the right to be fully informed. Also, if they believe they are being referred to psychiatry in retribution for some action they have taken, or for any other inappropriate reason, they can report this concern to several specific persons/entities. The law also requires that the mental health professional agrees that the evaluation is warranted, and provides guidance for emergencies and hospitalizations.

The practical concern voiced by the LT is that they think the Boxer letter in some way will stigmatize the patient and discourage others from seeking help. Remember, that if someone comes to you and asks for a referral to mental health, your CO does not need to do a Boxer notification. This is considered a self-referral. But if they come on the recommendation of someone else or you think they need a referral (even if they agree) it is NOT a self-referral. The reasoning behind why you need to "Boxer them" even if they agree is based on the following:

I would bet that many of your squadron members who initially may agree if you recommend a mental health referral, might change their tune if you were to ensure they gave full informed consent for the eval. For example, do you tell someone who you think is mildly depressed and agrees when you recommend a mental health referral the following?

1. There will be a full psychiatric report made good and it becomes a permanent part of your medical record.
2. If you are diagnosed with a condition that is considered disqualifying you will be NPQ and may not be able to get a waiver until one year after you are off medication, symptom-free, and out of treatment - and there are no guarantees of a waiver at that point.

3. If you are diagnosed with a condition that is considered disqualifying with no waiver recommended your military flying career will be over and you may never get an FAA certificate.
4. The CO, XO, NCIS, and other physicians have access to your full psychiatric report.
5. If you have a secret clearance or undergo a background investigation in the future this psychiatric report may have an effect on this.
6. You will need to check "yes" on any future employment applications that ask if you have ever received psychiatric evaluation or treatment? (picture the times that you as a physician have this sort of question posed when applying for privileges and licensure!)

Nope, I expect you don't.

Trust me, the rapport you have with your squadron-mate will *definitely* be shattered if they go blithely to an eval and don't expect the above whereas it may be maintained if they are fully informed.

So here is the recommendation. Be very careful before sending someone for a mental health evaluation. If you have made them NPQ and believe they *must* be evaluated by psych because they have a disqualifying condition, then do the Boxer and refer. If, on the other hand, they are NPQ from some symptoms but you do not think they have a serious underlying condition, then start with a referral to the Family Services Center or to a chaplain to receive some counseling. The majority of military mental health centers are focused on making diagnoses and dispositions, not treating. Most treatment is supportive treatment for those members who are on a LIMDU Board or awaiting administrative separation. The formal evaluation and counseling of those who are just having marital, occupation, or other minor issues are best served by the FSC.

Please do NOT try to "game" the system by having your colleague not in your chain refer the patient. Either the patient came asking for a referral or they did not.

Regarding the opinion of the MHU you mentioned,



(CH-53 Rotor

US Navy Photo)

different psychiatrists and lawyers interpret the Boxer very differently. At NAMI we are admittedly more strict about its use than most other clinics for several reasons; first, we believe that doing the Boxer protects the rights of the individual *and* protects the CO from subsequent allegations of covertly influencing the referral. Even though this almost never happens, it is the underlying personality traits of some persons who are referred that tend to become enraged and project blame when there is a recommendation with which they disagree. And second, in the aerospace field the potential for outcomes that may have severe effects on careers is very real and more pronounced than in other arenas. The referral is really between you, the patient, and the psychiatrist. Even if the psychiatrist says they don't need the Boxer letter there is nothing that says your CO cannot send one. Your call. Again, I know we are more conservative about this than most, but it comes from seeing many of the unfavorable outcomes.

Here are the times you do *not* need to ensure the
(continued on page 16)

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member has received their Boxer rights:

1. If they are in a different chain of command, you are making the referral for medical reasons, and they agree with the referral.
2. If the evaluation is a required part of a waiver request which is initiated by the member.
3. If the evaluation is part of follow up initiated by a military mental health professional or part of a medical board (PEB, LIMDU, or TDRL). Each of these situations indicates the person is already in the mental health system.
4. If the referral is recommended as part of a Family Advocacy Program assessment or as part of the evaluation process from an alcohol treatment facility.
5. It is a true self-referral (with the patient present-

ing with, "I want a mental health referral" – NOT you saying "I think you would benefit from seeing the psychiatrist - is that OK?")

It is *always* best to err on the conservative side. A good way to assess this is to wonder if there is ANY way that someone might perceive there to be a conflict of interest (remember your role is both in the service of the individual and of the Navy), undue influence, or other underlying reason for referral. If not initially, can you see this coming up a week or month down the road? How about the case of an aviator who was very earnest with you and expressed that he wanted to get some help for the depressed feelings he was having in the context of marital discord? He agrees to the evaluation. He is diagnosed with Major Depression, is grounded, and started on medication which he does not want and subsequently complains through the IG that he was never told about the possible outcome of the eval. Having someone receive their notification of rights ensures that this scenario will not happen.

Rather than try to find a reason to NOT do the notification of rights, just do it. You can easily download it from the instruction or use the Go-By we have on our website at www.nomi.navy.mil. From the main page scroll down and click on "Departments and Directorates" then to "Psychiatry" and then on "Lectures." Scroll down and you can click on the two required letters.

Also, please call us if you have any questions.

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(So that is a Gosport... DVIC Photo)



NASA
News



Many of you know that there are presently four active-duty Navy Flight Surgeons who are astronauts. Three of them were chosen in the class of 1996: CAPTs Lee Morin and Dave Brown, and CDR Laurel Salton Clark.

CAPT Morin, not surprisingly, is deeply involved in development of computer-based training programs. This work centers around lap-top applications to provide Orbiter cockpit simulation, and is intended for use in cockpit resource management training. In addition to the computer work, he is also developing on-orbit exercise equipment, which will be vital for preserving bone and muscle strength in microgravity. The types of gear include both resistance as well as aerobic exercise devices. The challenge, in each case, is to develop equipment that is strong enough, light enough, and anchored to the spacecraft, yet isolated from it. The resistance equipment, for instance,

must provide loads on the order of 500 lbs., yet be designed so that, while using it, the astronaut doesn't cause the spacecraft to wobble around. And a treadmill wouldn't be welcome if the vibrations imparted by the runner were transmitted into the ship, either.

CAPT Morin's classmates, CAPT Brown and CDR Clark, have both been selected to fly in STS 107. The medically-oriented mission will launch in the orbiter *Columbia* for a sixteen-day flight in August 2001. As you would expect, they are both in intensive training for the mission already.

NASA's next biennial selection board for astronauts will meet sometime after 15 June 01. The board to select Navy candidates will convene 30 Apr 01. Applications are due to PERS-446B NLT 1 Mar 01. See CNO Washington DC 201807Z NOV 00 for details. If you don't have a copy, e-mail me and I'll send you one!

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(Space Shuttle Columbia Lift-off

Defense Visual Information Center)

FY-02 SELECTION BOARDS

EXCERPT FROM ALNAV 090/00 (SECNAV WASHINGTON DC//SN//082036Z DEC 00):

THE FY-02 SELECTION BOARDS FOR PROMOTION OF OFFICERS ON THE ACTIVE DUTY LIST WILL BE CONVENED AS FOLLOWS:

22 JAN 01 - STAFFCORPS CAPTAIN
 17 APR 01 - STAFFCORPS COMMANDER
 14 MAY 01 - STAFFCORPS LIEUTENANT COMMANDER

CAPTAIN

MEDICAL CORPS (210X)

SENIOR IN-ZONE - CDR D. C. COMBEST	008479-35	01 OCT 95
JUNIOR IN-ZONE - CDR T. A. SNEAD	008623-35	01 SEP 96
JUNIOR ELIGIBLE - CDR C. J. KANE	009013-40	01 SEP 98

MEDICAL SERVICE CORPS (230X)

SENIOR IN-ZONE - CDR C. L. MCDONALD	008674-80	01 FEB 97
JUNIOR IN-ZONE - CDR D. O. WALKER	008822-95	01 DEC 97
JUNIOR ELIGIBLE - CDR P. A. BUDIN	009041-10	01 JAN 99

COMMANDER

MEDICAL CORPS (210X)

SENIOR IN-ZONE - LCDR A. P. WASHINGTON	025728-80	01 OCT 95
JUNIOR IN-ZONE - LCDR L. C. CHAN	026030-40	10 SEP 96
JUNIOR ELIGIBLE - LCDR E. C. BROWN III	026581-00	04 SEP 98

MEDICAL SERVICE CORPS (230X)

SENIOR IN-ZONE - LCDR E. S. BYE	025593-65	01 JUL 95
JUNIOR IN-ZONE - LCDR W. F. PRESCOTT	025958-45	01 AUG 96
JUNIOR ELIGIBLE - LCDR M. S. CURNOW	026435-05	01 JUN 98

LIEUTENANT COMMANDER

MEDICAL CORPS (210X)

SENIOR IN-ZONE - LT W. T. LENNARD	082700-85	01 OCT 95
JUNIOR IN-ZONE - LT A. S. MARTIN	083568-94	19 SEP 96
JUNIOR ELIGIBLE - LT A. B. BERRY	084537-17	14 JUN 98

MEDICAL SERVICE CORPS (230X)

SENIOR IN-ZONE - LT D. W. HARDY	082246-65	01 APR 95
JUNIOR IN-ZONE - LT J. F. MCALLISTER	083226-92	01 JUL 96
JUNIOR ELIGIBLE - LT B. R. HARMON	084258-55	23 JAN 98

Alternative Medicine

Use of dietary supplements is not authorized in Naval flight personnel. This information is provided for educational purposes only. For additional information on the risks of dietary supplements, see "Dietary Supplements", The SUSNFS Newsletter, October 2000. Vol XXIV, Number 4, pp. 25-26. Additional information can also be found at <http://www.med1.com>

Welcome to what I hope will become a regular series of articles regarding the aeromedical implications of "Alternative Medicine". Alternative medicine and complementary therapies are clearly growing in popularity. The general public is being encouraged to discuss these therapies with "their doctor", so all flight surgeons need to become better educated on these alternatives. Earlier this year I was named the "Subject Matter Expert (SME) on Use of Alternative Medicine modalities in Naval Aviation Medicine". As the SME, I've had to try to answer questions about various alternative medicines from flight surgeons in the fleet. In these articles, I'll try to provide information about common "alternatives" you may run into.

GLUCOSAMINE

Common Uses:

- Relief of pain, stiffness, swelling of knees and other joints.
- As a supplement to protect cartilage and prevent overuse injuries.
- Increasingly recommended by orthopedic specialists for knee and other joint pain.

What is it?

- A fairly simple molecule containing glucose that is found in high concentrations in joints and connective tissue. Reputed to stimulate proteoglycan production and cartilage healing.

- Sold in a variety of forms including glucosamine sulfate, N-acetyl-glucosamine (NAG), and in combination compounds with chondroitin sulfate.

Claimed Benefits:

- Approved for use in 70 countries to ease pain, reduce inflammation, increase range of motion, and help repair aging and damaged joints in the knees, hips, spine, and hands.
- Some ortho specialists prefer glucosamine to NSAIDS, since glucosamine may "repair" damaged joints and NSAIDS may mask pain.

Dosage:

- The usual dosage is 500 mg glucosamine sulfate three times a day. Formulations vary, so use product label as a guide.
- Pain relief is usually slower than NSAIDS. May require 2-8 weeks to notice results.

Side Effects/Aeromedical implications:

- Glucosamine is a natural substance produced in the body, and is generally regarded as safe in the doses listed above. Side effects are generally GI effects such as heartburn or nausea. They occur rarely and can be minimized by taking the supplement with meals.

[I would appreciate feedback on alternative medicine from the fleet. Do you have any specific supplements (e.g. creatine) or treatment modalities (e.g., acupuncture) that you or your aircrew would like more information on? Send me an email.]

LCDR Paul Antony, MC, USNR
SME Alternative Medicine
paulantony@usa.net

Infectious Disease

Emergence of Rift Valley Fever outside Africa

Beginning on 10 September 2000, the Ministries of Health(MOH) of the Kingdom of Saudi Arabia and of Yemen reported an outbreak of severe hemorrhagic fever in humans that has been confirmed to be Rift Valley Fever(RVF). As of 19 October, the Yemen MOH had reported 653 suspected cases and 80 deaths. As of 23 October, the Saudi MOH had reported 443 cases with 85 deaths. This outbreak is the first documented occurrence of RVF outside of the African continent. Researchers have not determined if this outbreak represents recent spread into a virgin territory or the first detection of an endemic virus in the Arabian Peninsula. A Phlebovirus, a genus in the Bunyaviridae family, causes RVF. Other hemorrhagic fevers caused by Bunyaviruses are Crimean-Congo Hemorrhagic Fever, Hantavirus Pulmonary Syndrome, and Hemorrhagic Fever with Renal Syndrome.

Epidemiology

RVF is a zoonosis that affects domestic ungulates; sheep, goats, cattle, and camels. Spread of RVF virus among animals is by several species of mosquitoes, most notably *Aedes McIntoshi*. The virus is maintained in the mosquito populations by transovarial transmission. Epidemics occur after periods of heavy rainfall.

Transmission to humans occurs primarily by mosquitoes. Transmission can also occur by direct contact with the blood or other body fluids of infected animals, ingestion of raw milk, and inhalation of an aerosol. Nosocomial transmission to health care workers(HCW) has also occurred.

Clinical Manifestations

Most human infections with RVF virus are sub-clinical infections or mild self-limited febrile illnesses. In more severe cases, the incubation period is two to six days followed by sudden onset of fever, headache, myalgia, and backache. Retinitis (15%), hemorrhagic fever (1%), and encephalitis (1%) are

infrequent complications. The retinitis is macular or perimacular. The case-fatality rate for patients developing hemorrhagic fever is approximately 50%.

The screening CDC case definition for RVF includes unexplained illness of 48 hours or longer duration associated with one of the following syndromes:

1. Transaminase elevations three times normal or clinical jaundice
2. Abortion or hemorrhage manifestations (ecchymosis, petechiae, purpura, gastrointestinal bleeding, menorrhagia)
3. Unexplained visual loss or scotoma; neurologic manifestations (vertigo, confusion, meningismus, ataxia, seizures, coma, etc.)
4. Fever, diarrhea, nausea, vomiting, abdominal pain and one laboratory abnormality (anemia, thrombocytopenia, elevated LDH, elevated CPK)
5. Unexplained death preceded by fever lethargy, diarrhea, abdominal pain, nausea, vomiting, or headache.

Diagnosis is made by serum enzyme-linked immunoassay (EIA) for IgM and antigen, polymerase chain reaction, viral isolation, and immunohistochemistry. Treatment is primarily supportive. Intravenous ribavirin may be considered, as it is effective against other viral hemorrhagic fevers including those caused by other Bunyaviruses (hemorrhagic fever with renal syndrome and Crimean-Congo hemorrhagic fever).

Prevention

A sustained program of animal vaccination can be used in endemic areas. US Naval personnel deployed to Africa and the Arabian Peninsula should use standard personal protection to prevent mosquito bites. Unnecessary contact with livestock should be avoided. Standard barrier precautions should be used by HCW to prevent nosocomial transmission and by veterinary personnel to prevent transmission from infected animals.

Summary

Severe Rift Valley Fever has recently been detected for the first time outside of Africa. In addition to being aware of known endemic infectious diseases when we deploy, we should also be prepared for cases or outbreaks of previously undetected or recently introduced infectious diseases. Personal protective measures against vector borne infections or infections spread by direct contact should be standard procedure, as medical intelligence cannot detect all of the risks that are present in an area.

References

1. CDC. Outbreak of Rift Valley Fever- Saudi Arabia, August- October, 2000. MMWR 2000;49:905-8.
2. WHO. Disease outbreaks reported. www.who.int/disease-outbreak-news 18 SEP 2000- 26 OCT 2000.
3. WHO. Rift Valley Fever. Fact sheet no 207. www.who.int/inf-fs/en/fact207.html SEP 2000.

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(A different kind of Mosquito, DeHavilland...photo from Wings for Freedom, The History of the Royal Canadian Airforce at www.rcaf.com)

MED-231

Current Milestones/Issues:

- MILCON construction for new water survival training facilities broke ground at NAS Pensacola, NAS Norfolk and MCAS Cherry Point. The NAS Patuxent River project is still under review due to construction and material costs, and the NAS Whidbey Island project has been slid to FY02.
- Naval Aviation Schools Command (NASC) and the Marine Corps Combat Development Command (MCCDC) have requested existing billets be re-designated as Aerospace Physiologists (AP). Each command is submitting a manpower change request to bring APs onboard to better meet their mission requirements.
- The Anthropometry Working Group (AWG) met at Pensacola to address issues presented by new aircraft, new measurement technology, and new aircraft coding methodology. Efforts are currently directed at updating guiding instructions, including data for new aircraft and incorporating the Digital Anthropometric Video Imaging Device (DAVID) for collecting human data. DAVID systems are presently being used at NAMI and the USNA for collecting anthropometric data on aviation candidates. Aeromedical Safety Officers (AMSOs) at TRAWINGS 5 and 6 are performing aircraft 'fit-checks' on candidates that the measurement data cannot definitely include or exclude from aviation duties. Digital cockpit mapping and digital 'human' mapping is the new technology that we expect to minimize the need for 'fit-checks'. Validation of the new technology is currently in progress. Information on Digital Cockpit Mapping can be found at: <http://pma202.navair.navy.mil/accom.html>

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Internal Medicine (Code 324)

The Flea Bag

Happy Holidays to all! I hope the excess tryptophan and fat calories have not dulled your taste for some good bread and butter Internal Medicine. As promised, no bizarre diagnosis or unusual cases this time, just some good teaching points about a common diagnosis:

Asthma

CW is an 18 y/o Caucasian male with several year h/o shortness of breath, wheezing and chest tightness with exercise. CW rarely participated in strenuous exercise growing up secondary to these symptoms. At boot camp he fell out of PT on multiple occasions with wheezing and shortness of breath. His symptoms resolve within 20 minutes of rest. CW was never seen by a physician for these symptoms before entering the Navy. At boot camp CW was seen in sick call and diagnosed with an upper respiratory infection. When his symptoms worsened despite antihistamine therapy he was re-evaluated and diagnosed with acute bronchitis. He was treated with azithromycin and managed to complete boot camp though he reported persistent difficulty with running. When CW arrived in Pensacola for Air Crew School he was unable to participate in the run. He began to have daily episodes of shortness of breath, chest tightness and subjective wheezing. Symptoms even began occurring on slow walk from barracks to the chow hall. CW was seen by two physicians in Pensacola who both diagnosed probable asthma which prompted a referral to Internal Medicine for evaluation. CW was not started on any medication for asthma prior to his IM evaluation. Past medical history is notable only for some mild SAR treated with OTC antihistamines. He has no known drug allergies, does not use tobacco, alcohol, illicit drugs or dietary supplements. His mother has "breathing problems" but he does not know if she has been diagnosed with asthma. CW's exam revealed a normotensive BP of 122/78, respiratory rate of 22, heart rate of 74 and temperature of 97.5. His examination was notable for clear auscultation and no wheezing. CXR performed at boot camp and in Pensacola were both normal. Baseline PFTs revealed a normal FVC of 5.37 Liters (97% predicted), normal FEV1 of 4.46 Liters (99% predicted), and nor-

mal FEV1/FVC of 83% (102% predicted). Post bronchodilator studies were performed yielding an increase in FEV1 of 15% from baseline though because of technical difficulties with the study further testing was performed. Patient was prescribed a rescue inhaler (albuterol MDI 2 puffs q 4-6 hours prn) before leaving the office to use while awaiting further testing. An exercise challenge test was scheduled but was not performed because of facility limitations so a methacholine challenge test documenting a 26% decrease in FEV1 confirmed the diagnosis. Patient was diagnosed with Reactive Airways Disease by methacholine challenge and clinical asthma, exacerbated by exercise, by history. He was continued on the prn beta agonist and processed for administrative separation for an EPTE diagnosis as he had only three months of active duty at the time he was diagnosed. Chronic therapy (long acting beta agonist, leukotriene antagonists, inhaled corticosteroid) was deferred to the patient's primary care physician as there are several appropriate regimens and his PCM should decide with the patient what regimen will work best for them. Of note, CW reported excellent symptom relief with the short acting beta agonist and said he was breathing easier than he had in years.

There are several important take home messages demonstrated by this case. Asthma is a diagnosis that is almost always made by history. This patient told several physicians at boot camp and in Pensacola that he had shortness of breath, chest tightness and wheezing with exercise. Although no physician heard wheezing on exam, the patient had not been seen after exercising. Listen to the patient and modify how you examine them to assist in diagnosis. Have the patient run on a treadmill or even run outside and then listen to them. Be careful not to confuse stridor with wheezing, but if exercise induces wheezing you have your diagnosis. Physical examination and pulmonary testing are useful adjuncts and can help confirm the diagnosis but the diagnosis in this case was clear by history. If you do need to confirm the diagnosis remember that baseline PFTs can be completely normal, as they were in this case, and do not rule asthma in or out. A post bronchodilator increase in FEV1 of 15% is the cut off for diagnosing reactive airways. CW had a 15% change but the baseline was performed separately from the post bronchodilator testing. Given the career ending implications of his diag-

nosis I felt that further testing was appropriate. While a post exercise PFT would have been the most appropriate, it was not available at the time that CW was sent for testing so a methacholine challenge was performed. The criterion for a positive methacholine challenge is a decrease in FEV1 of 20%. CW decreased 26% confirming reactive airways. Reactive airways is a diagnosis made by objective testing. Asthma is a clinical diagnosis. You may have reactive airways without asthma but you can't have asthma without reactive airways. Last, and most importantly, when you are entertaining the diagnosis of asthma you need to prescribe a rescue inhaler for the patient until the diagnosis is firmly ruled out. No matter how mild a patient's asthma may be they always need to keep a short acting bronchodilator available to use as a rescue inhaler. There is no way to predict when a patient with asthma will have their first serious attack requiring an ER visit and possible hospitalization. A rescue inhaler may help prevent that if the patient is educated on its use and knows to carry it all times so that their symptoms do not worsen in the time it

takes them to get to medical attention. Two physicians diagnosed possible asthma in this case but did not prescribe a rescue inhaler. Fortunately he did not have acute worsening of his symptoms prior to being given an Albuterol MDI during his IM evaluation.

That's all for now. Remember; send any comments/questions/suggestions for future cases to me at:

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(18 F-14A from CVW-17 and CVW-3 coming home from the Gulf

DVIC Photo)

Safety Center

Flight Surgeon Responsibilities in Mishap Investigations

Through the years, Flight Surgeons have played a pivotal role in investigation of Aircraft Mishaps. They have been involved with analysis of minor “crunches” and catastrophic high profile events. Their work has been and is now being used to prevent further mishaps. This article is presented to provide Aircraft mishap investigation boards and flight surgeons with information to help define the role of the flight surgeon during the investigation.

Human factors have been found as causal in about 80% of all aircraft mishaps. However, simply reporting that 80% of all Naval Aviation mishaps are due in part to human error is akin to identifying that a patient is ill without investigating why. Using the Human Factors Analysis Classification System (HFACS), a more detailed analysis of human error can be performed on post hoc mishap data revealing previously unidentified trends and hazards. Naval Aviation can now examine trends at any one of four levels of human error: 1) unsafe acts, 2) preconditions for unsafe acts, 3) unsafe supervision, and 4) organizational influences. The data revealed several adverse trends that represent hazards for Naval Aviation. Intervention strategies are under development to eliminate or mitigate these hazards.

With this in mind, the gathering of accurate data falls squarely on the shoulders of the human factors expert on the AMB, the squadron/wing Flight Surgeons. Flight Surgeons have been key in analyzing all class A flight, flight related and ground mishaps but have not been tasked by the Aircraft Mishap Board (AMB) to conduct an in-depth Aeromedical Analysis (AA) on many of our Class B and C mishaps. OPNAV INSTRUCTION 3750.6Q states that a flight surgeon will be a designated member on all AMBs and will participate in all board deliberations. The Flight Surgeon will submit an AA for all mishaps in the case of suspected human error as a mishap causal factor. It is a rare aircraft mishap that does not have a human factor component. Human factors do not

stop at the level of the pilot, they extends to the maintainers, Air Traffic Controllers, Squadron chain of command through the Airwing to the TYCOM and above. The role of an investigating flight surgeon is to take a close look at the individuals directly involved in the mishap but also look at the macroscopic picture that caused the events in the mishap chain to line up. The Aeromedical Analysis conducted using the HFACS format is the key to accurate data collection.

I think the reason that we do not always receive an AA in a class B and C mishaps comes from the feeling that the “Doc” is in the squadron to take care of the pilot. If the mishap did not directly involve an error on the part of the pilot then the flight surgeon is not needed. I believe AMB senior members have overlooked the multiple levels of human factors that are present or do not realize that a flight surgeon is capable of looking at more than the aircrew. One recent example of an AA not being submitted was a Class B mishap that involved an Aircraft running over a sailor’s foot resulting in a permanent partial disability. The AMB failed to submit an AA since no pilot was involved.

All mishaps have a chain or stack of isolated events that have to line up “just so” to allow the mishap to occur. An intervention at any level in the chain could interrupt the flow of events and stop a mishap. Part of the job of the flight surgeon, a required member of the AMB, is to educate the AMB that isolated events are seldom the sole contributor to a mishap. If the AMB feels that they have the rare mishap that has absolutely no human factor at any level, it is the responsibility of the flight surgeon to call the Aeromedical Division of the Naval Safety Center and discuss the mishap.

The Naval Safety Center Aeromedical Division has been teaching the use of HFACS in Aircraft Mishap investigation for the past four years and has seen a tremendous improvement in the usefulness of the AA. The AA has changed from a document that reports the number of cuts and bruises and includes the toxicological screens to a document that identifies in-depth causal factors that can be targeted for corrective action. With the help of dedicated flight sur-

geons we are now making tremendous inroads into prevention of human factors mishaps but we need more help. We need every flight surgeon to make a concerted effort to conduct thorough human factors in-

vestigations of all aviation mishaps so that we can gain greater insights into exactly what is causing our mishaps so we can proactively work to prevent them.

FLIGHT SURGEON GUIDANCE FOR MISHAPS			
	CATEGORY FM	CATEGORY FRM	CATEGORY AGM
CLASS A	FS is AMB member *Biological Samples Required AA Required	FS is AMB member *Biological Samples Required AA Required	FS is AMB member *Biological Samples Required AA Required
CLASS B	FS is AMB member *Biological Samples Required AA Required	FS is AMB member *Biological Samples Required AA Required	FS is AMB member *Biological Samples Required AA Required
CLASS C	FS is AMB member *Biological Samples if indicated **AA Required unless no human factors at any level	FS is AMB member *Biological Samples if indicated **AA Required unless no human factors at any level	FS is AMB member *Biological Samples if indicated **AA Required unless no human factors at any level

*Biological Samples will be obtained from personnel directly involved in a mishap. These personnel include; Pilot and aircrew, passengers that may have contributed to the cause of the mishap, ground crew who may have had a causal role in mishap, Air Traffic Controllers for all mishaps that their control instructions may have directly contributed to the mishap.

** If the AMB concludes that they have the rare mishap that has absolutely no human factor at any level, it is the responsibility of the flight surgeon to call the Aeromedical Division of the Naval Safety Center and discuss the mishap.

Note: The flight surgeon should be involved early in all mishaps. Information whether from biological samples or human interview is fragile and often changes over time. Gather all information early, regardless of Class of mishap.

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Marines Seek Lejeune Residents for Health Survey

By Jim Garamone
American Forces Press Service

WASHINGTON, Nov. 7, 2000 — If your children were conceived or born at Camp Lejeune anytime between 1968 and 1985, the Marine Corps needs you to participate in an environmental health survey.

Marine officials said they are trying to reach about 10,000 former residents to participate in the survey. They have already contacted 6,500 people.

The Marines are working with the U.S. Public Health Service's Agency of Toxic Substances and Disease Registry to determine if low-level exposure to two cleaning compounds — tetrachloroethylene and trichloroethylene — can cause certain health concerns in children.

"There have been several studies that have looked at the health effects of these two chemicals on unborn children and have been linked to specific birth defects and childhood cancers, such as leukemia," said Dr. Wendy Kaye, chief of epidemiology and surveillance at the agency.

Officials determined the two chemicals were present in drinking water on base from 1968 to 1985. One came from an off-base dry cleaners. The other chemical came from run-off associated with the Camp Lejeune industrial area.

Marine officials said they discovered the chemicals in the water supply in the early 1980s. "The testing indicated we might have a quality concern with the water from both the Tarawa Terrace and Hadnot Point water distribution systems," said Marine Col. Michael Lehnert, head of Marine Corps Facilities and Services Division.

"When we confirmed the contamination of the water, we took the necessary steps to close the wells and notified the appropriate authorities," he said. "News of the situation and what the Corps was doing

to guarantee quality water for the residents was carried in the base paper and the local media."

The Marines capped the wells in 1985. No federal or state laws were violated and no health effects were known from the chemicals.

However, in 1997 an ATSDR study in Woburn, Mass. showed health effects from high levels of these chemicals. Because of that study, scientists wanted to see what the effects were from low-levels of contaminants. The ATSDR scientists came to the Marine Corps to continue their study.

"We are estimating that there were between — about 16,500 children born or conceived at Camp Lejeune who lived in base housing between 1968-1985," Kaye said.

All families whose children were born or conceived at Camp Lejeune from 1968 through 1985 are encouraged to participate in this survey, whether or not the child has exhibited any health concerns, Marine officials said. To participate, call the National Opinion Research Center at (800) 639-4270. NORC is conducting the survey for the ATSDR.

For more information about the ongoing study, call the ATSDR at (888) 42-ATSDR, extension 5132. The Marine Corps has also established a toll free number at (877) 261-9782 and a website, <http://www.usmc.mil> for general information.



(Marines out of CH-53)

RAM Corner

Postcoital Contraception

In the United States Navy, typically, about 10 percent of a ship's company are female. Aircraft carriers are no exception. A recent study of pregnancy rates on aircraft carriers found 15.4% of the female enlisted ship's company was transferred off the ship per year due to pregnancy. The average age of these women was 21.6 years. This resulted in an unexpected loss of over 30 women per year for the carrier. During a typical 3-year assignment, the risk of unexpected loss for any given female sailor due to pregnancy is over 46%. Aircraft carriers currently have between 175 – 300 enlisted females. Oral contraceptives, IUD's, barrier methods and Norplant are widely available for sexually active women. However, postcoital contraception (the morning after pill) is an additional method providers afloat can use to enable women to prevent an undesired pregnancy.



(CVN-73 taking on fuel

DVIC Photo)

In a recent article in the American Family Physician, Emergency Postcoital Contraception (EPC) was discussed as a method of preventing unwanted pregnancy following unprotected intercourse. The FDA released two dedicated products marketed specifically for EPC this year, stimulating discussion and awareness of this well established birth control method. Underutilization of EPC is thought to have contributed to possibly as many as 1 million abortions and 2 million unintended pregnancies per year in the U.S. The author of the article recommends that EPC should be considered as a primary preventive health service to women in the childbearing ages.

Postcoital contraception has been used for over 20 years. Current options available in the U.S. in-

clude an estrogen-progestin combination pill and estrogen alone. The precise mechanisms of action of these hormone contraceptive agents are not completely known. Estrogen and progesterone alone or in combination inhibit or delay ovulation. Histologic alterations and biochemical changes are demonstrated, although they may not be significant enough to prevent pregnancy at any given point in the cycle. These hormones will not dislodge an implanted embryo.

The probability of conception when EPC is implemented is dependent on the average fertile period of a woman and the timing of intercourse. On average, the fertile period lasts only 6 days per menstrual cycle. Unprotected intercourse 3 days before ovulation re-

sults in an estimated 15 percent pregnancy rate, 1-2 days before ovulation, a 30 percent pregnancy rate and on the day of ovulation, an estimated 12 percent pregnancy rate.

The timing of EPC administration with respect to the patient's episode of unprotected intercourse is very important. Best results, pregnancy rates less than 1%, are achieved when the first of 2 doses are given within 12 hours of unprotected intercourse. Delaying the first dose by 12 hours increased the odds of pregnancy by 50%. Statistically significant reductions in pregnancy rates are achieved up to 72 hours following unprotected intercourse. While no studies have investigated EPC beyond 72 hours, EPC can be administered after 72 hours with the understanding that efficacy is reduced.

The reported efficacy rates of EPC are 75 – 85 %. The regimen consists of 2 doses of hormone, 12 hours apart. Emergency oral contraceptive regimens currently used in the U.S are listed in Table 1. Common side effects include nausea (50%) and vomiting (20%). Repeat dosing should be considered if vom-

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iting occurs within 1-2 hours of ingestion. Menorrhagia and mastalgia may also occur. Withdrawal bleeding occurs within 3 weeks treatment, typically. Thirty-eight percent of women bleed before their menstrual period is due. There is no reported increase incidence of deep vein thrombophlebitis. While the only absolute contraindication to postcoital contraception is pregnancy, there have been no complications or teratogenic effects associated with administration of other oral contraceptives during pregnancy.

When patients seek EPC, a history should focus on LMP, contraceptive history, dates of unprotected intercourse and relative contraindications to OCP use.

If pregnancy is suspected, it should be ruled out. Appropriate care for any patient at risk for STD's should also be implemented. If bleeding fails to occur within 4 weeks after treatment, a pregnancy test should be completed. Alternative contraceptive methods should be considered for any patient requesting this form of contraception. The medical department afloat can provide the appropriate medication for EPC with medications typically found in the ships AMAL.

LCDR Jon Umlauf, MC, FS, USNR

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Resident in Aerospace Medicine

Table 1. Emergency Postcoital Contraception Regimens

Trade name	Pills/dose	Combo/Progestin only	Cost
Ovral	2 white pills	combo	\$47
Alesse	5 pink pills	combo	\$29
Levlite	5 pink pills	combo	\$28
Nordette	4 orange pills	combo	\$30
Levlen	4 orange pills	combo	\$30
Levora	4 white pills	combo	\$27
Lo/Ovral	4 white pills	combo	\$31
Triphasil	4 yellow pills	combo	\$29
Tri-levlen	4 yellow pills	combo	\$28
Trivora	4 pink pills	combo	\$28
Ovrette	20 yellow pills	Levonorgestrel only	\$31
Preven	2 blue pills	combo	\$20
Plan B	1 white pill	Levonorgestrel only	\$20

Note: Course of therapy is one dose taken within 72 hours of unprotected intercourse, second dose taken 12 hours later

RAM Corner

Operational Risk Management for the Flight Line Aid Station

Naval medicine has begun to use formalized operational risk management (ORM), particularly in its larger institutions. However, ORM is only slowly coming to smaller treatment facilities such as aid stations and clinics. The flight line aid station (FLAS) at Marine Corps Air Stations and branch medical clinics at Naval Air Stations are small, minimally-staffed facilities designed to handle routine sick call, initial emergency resuscitation, and minor surgical procedures, such as suturing. The quality and capability of the FLASs and clinics varies throughout the Navy and Marine Corps. The tenets of ORM are already used in the flight line aid station, just not in a well-defined format. For example, the hazards associated with handling biological materials have been identified for years. Better and better biohazard controls have been implemented, and supervision of these controls is in place. Another example is risk control for poor medical practice via monthly quality assurance reviews of medical records. However, this is a reactive rather than a proactive process. On the other hand, ORM is seldom formally used before conducting minor surgical procedures, or writing the call (duty) schedule. Proper crew rest is a concept that has yet to be embraced by the medical community! Formalizing and expanding ORM practices in the FLAS should only improve the care given to our Sailors and Marines. Introducing operational risk management to the aerospace medicine community should not be too difficult. Flight surgeons and aerospace medicine specialists are already being exposed to the concepts of ORM at their squadrons, the Naval Aerospace Medical Institute, and the Aviation Safety Officer School. Many hospitals, both civilian and military, are also adopting formal ORM programs. The concepts of ORM are not radically different from those already practiced by health care providers during most of their activities. When seeing patients, physicians already identify the hazards and risk of treating, versus not treating, illness or injury. The hazard and risk of the treatment itself is also assessed. This risk/benefit assessment is documented in the medical record for surgical proce-

dures as part of informed consent. Therefore, it should be easy to explain ORM to medical officers in terms they already understand and already practice, but do not recognize as ORM. Explaining ORM to the FLAS corpsmen will take more time, because they may not have been exposed to ORM previously, but it should not be any more difficult (maybe even easier than teaching a bunch of doctors!).

There are myriad areas for ORM implementation in the FLAS. Delivery of patient care has been mentioned above. ORM is already used, although not formally recognized as such, before any anesthesia and surgical procedures. However, even less complex patient encounters may benefit from a rapid ORM assessment of the situation. The risks, benefits, and alternatives of simple prescriptions (such as Motrin[®] for muscle pain) are not often thoroughly explained or analyzed. The FLAS also contains many occupational hazards, which would benefit from formal ORM analysis. Potentially infectious biological materials, such as blood, are frequently encountered in the clinic. Needle sticks can and have occurred in medical facilities and from handling medical waste. Senior medical officers have even lost their jobs because of inappropriate disposal of medical waste at sea. Some of the drugs and gases used in the FLAS can be toxic after inappropriate exposure. ORM should be used to examine the storage, security, distribution, and disposal of such materials. Scheduling of physician duty hours has not changed much even after some high-profile civilian cases involving fatigued doctors. There are few medical facilities or programs that enforce a concept of crew rest. ORM can be used when writing the duty schedule to minimize or eliminate back-to-back on-call duties. ORM can also be used to assess the wakefulness/fatigue of a physician before he/she performs an operation or procedure. Training evolutions such as mass casualty drills should be analyzed with ORM tools, especially if real persons will be used as pretend casualties. Corpsmen training such as intravenous line placement or hangnail removal should also be analyzed. The FLAS is often called upon to provide medical support for airshows, 10K runs, or PRT/PFTs. Hopefully the sponsoring organization has already applied ORM to these large events. The FLAS can help with

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ORM analysis of the medical support for these events.

In the above examples, ORM will ideally be applied before an event occurs to determine the risk/benefit analysis. However, if any accidents do occur, whether medical errors or falls on the clinic floor, they should be thoroughly investigated. ORM tools, such as the ORM matrix, should be applied during the mishap investigation to determine risk assessment codes, just as in an aviation mishap. ORM analysis can ensure that the hazards and risk that led to the accident are well controlled to prevent future similar accidents.

Implementation of ORM practices has already begun in naval medicine. Some facilities have robust ORM programs, whereas smaller facilities such as flight line aid stations need to formalize their risk management programs. ORM training is a logical place to begin implementation. Corpsmen, doctors, nurses, and medical service corps (MSC) personnel need to receive indoctrination into ORM. They should recognize that many of their already established programs are ORM. ORM-trained aerospace medicine specialists, who have attended the ASO School, and MSC personnel, who also have frequently received formal ORM training, are ideally suited to introduce FLAS Sailors to ORM. This should happen as soon as possible, ideally within a month of any qualified instructors arriving at a FLAS. Once all personnel understand ORM, ideas will be solicited for further use of ORM in the FLAS. FLAS personnel should be able to recognize many hazards within the FLAS and can likely suggest ways to manage the risk. For example, the FLAS pharmacy technician and OIC can analyze medication storage, security, and distribution with an ORM matrix. The X-ray technician can formulate an ORM matrix for radiation exposure and handling of developer waste. The current biological hazard plan, including required training, should be re-examined with ORM in mind to ensure risks are reduced. Simple rules can be introduced into scheduling to ensure overly fatigued or unqualified corpsmen or physicians do not stand duty. The training of officers and chiefs should begin analyzing all training with at least an ORM matrix. These policies should all be completed within sixty days. The base industrial

hygienist can be called upon to visit the FLAS and provide an occupational survey. This should help identify additional hazards, and he or she may even be able to offer some help with controls such as ventilation, sound reduction, or biohazard exposure reduction. It should be possible to have an industrial hygiene survey completed within 90 days to six months.

Most FLASs have a quality assurance (QA) officer whose job it is to review medical records to ascertain quality of care, record keeping, and performance of procedures. Because these duties already entail hazard identification and risk reduction, the QA officer is ideally suited to take on the role of ORM officer. For example, the QA officer can collect the data to determine if there are excessive infection rates from certain procedures like suturing. ORM can be used to determine the hazards that may be influencing infection risk and controls implemented in the FLAS (or discontinue suturing altogether in the FLAS if there is a nearby clinic with less risk of infection). The QA/ORM officer can also supervise all the other standard operating procedures, from the pharmacy to biohazard management. At least annually the QA/ORM officer can review these procedures with ORM tools such as the risk matrix to ensure benefits continue to outweigh risks and that the appropriate controls are in place or determine if newer/better controls are available (in order to avoid paradigm paralysis).

The benefits of formally introducing ORM to the delivery of aerospace medicine in the FLAS should result in an improvement in the care of Sailors and Marines. The safety of FLAS personnel should also be improved with ORM analysis of hazards and implementation/review of controls. Many programs and standard operating procedures are likely to remain the same, but at least they will be formally assessed and reassessed. The FLAS will now also be using the same tools that the squadrons are using. This should facilitate communication, understanding, and perhaps beneficial interactions between the medical staff and the line regarding ORM practices in the fleet.

LT Christopher Lucas, MC (FS), USNR
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Resident in Aerospace Medicine

Letters to the Editor

Letters to the Editor is an editorial column that permits readers to comment on newsletter content or other topics of general interest to the Navy flight surgeon community.

Your comments are welcomed. Letters should be succinct and of *reasonable length*, signed, with position and duty station information, telephone number, and e-mail address. Letters will be verified before publication. We reserve the right to edit and condense all letters submitted. Letters should not address private disputes and should not contain comments denigrating or impugning the character or reputation of individuals or organizations.

To the SUSNFS Editor,

Shrouded back in the mists of antiquity when the great luminaries founded SUSNFS in 75, I was one of the hangers on. I am a lot older but still mediocre.

Kit Lavell, who has flown with Frank Austin, has written a book just published by Naval Institute Press - **The Flying Black Ponies**. It's the history of VAL4 that flew OV10s in Viet Nam. I'm not certain I like all that it reveals about me since:

- a) the older I get the better I was
- b) I never was the man I used to be.

It does touch on what flight surgeons did in the good old days when the likes of Dully and Austin were senior flight surgeons and role models.

It might be of interest to the members.

Steve Rodgers
(CAPT MC USNR-R)

From Amazon.com 17 DEC 00:

Foreword by Stephen Coonts. The tragic, the comic, the terrifying, the poignant are all part of the story of the Black Pony pilots who distinguished themselves in the Mekong Delta between 1969 and 1972. Flying their Broncos "down and dirty, low and slow," they destroyed more enemies and saved more allied lives with close-air support than all the other naval squadrons combined during the three years they saw action. Author Kit Lavell was part of this squadron of "black sheep" given a chance to make something of themselves. The U.S. Navy's only land-based attack squadron, Light Attack Squadron Four (VAL-4) flew support missions for the riverine forces, SEALs, and allied units in borrowed, propeller-driven OV-10s. For fixed-wing aircraft they were dangerous, unorthodox missions, a fact readers quickly come to appreciate.

After two years of research, Lavell has been able to match many of the air operations to those on the ground and tell the dramatic story from both perspectives. One of several offered in the book is the bringing together of SEAL Barry Enoch, a Navy Cross recipient, and Black Pony pilot Larry Hone, a Distinguished Flying Cross recipient, whose encounter is stunningly described in chapter 14. Lavell also provides vivid scenes of life and love away from combat and gives a concise history of the squadron along with details of its unique use of the OV-10.



(OV-10 Bronco off USS America CV-66
Defense Visual Information Center)

Letters to the Editor

In response to Herbal Supplements article October, 2000 by LCDR Paul Antony, MC (FS), USNR

In the October, 2000 issue of the Newsletter, you mentioned that Chromium has no toxic effects noted below 1,000mcg. Back in 1995, when Chromium was being hyped as a supplement to weight loss and for turning fat into muscle, I saw five patients who exceeded 200 mcg. of Chromium, usually in the range between 300-600, and who experienced frequent PVCs (premature ventricular contractions).

When Chromium was stopped, the PVCs disappeared. I am sure few or no clinicians will pick up on this, because it was initially discovered only upon routine treadmill stress testing in my preventive medicine practice.

Joseph Arends, M.D.
Captain, MC (FS), USNR,
NARA Selfridge
Mt. Clemens, Michigan

Editors note: CAPT Arends makes a valid point that herbal supplements are still an understudied form of therapy. The medical community must be diligent in documenting the side effects of these supplements to further the knowledge of these highly used agents.



Regarding Naval Flight Surgeon Display at Naval Aviation Museum October, 2000 by LT Lucas, MC (FS), USNR

I noted in the SUSNFS Newsletter that you are “working on ideas” for an exhibit at the National Museum of Naval Aviation.

I don’t know whether you are aware that there is a museum exhibit committee within the framework of SUSNFS. Charlie Barker, Jerry Pattee, and I, along with others, have been involved for quite some time in attempting to set up an aviation medicine exhibit at the new museum. The committee has met several times with Vice Admiral Jack Fetterman (CEO, Museum Foundation) and Captain Bob Rasmussen (Museum Director) relative to getting something going.

Unfortunately Captain Rasmussen feels that our proposed exhibit would not be of “public interest”; thus we have not reached an agreement and things have bogged down. I feel that aviation medicine per se should be the theme and that is where we have disagreed.

Apropos of memorabilia and artifacts, I have a copy of the original circular letter establishing the physical standards for naval aviation, dated 8 October 1912, and photographs of the first five flight surgeons, who graduated 29 April 1922; also other historical pictures and items.

Finally, I would like to see some new blood get into the act. I have been involved with trying to get something going since the museum was established back in the 1950s and have had minimal success. Possibly some new people, like yourself (LT Lucas), would be able to accomplish something. It is long overdue!

Sincerely,
Robert E. Mitchell, M.D., C.M.

Editors note: CAPT Mitchell continues to be an active member of the SUSNFS and an outstanding advocate of Naval Aerospace Medicine. If any of the membership would like to be more involved with this worthy venture, please e-mail me and I will forward it to those involved.

Selected SUSNFS Merchandise Items Catalog



T-Shirt: SUSNFS "FS - Yesterday and Today"



T-Shirt: FS Wings



Tank Top Shirt: SUSNFS "Leonardo"



Running Shorts



Sweat Shirt: SUSNFS "Leonardo"



Sweat Shirt: FS Wings

Selected SUSNFS Merchandise Items Catalog



Sweat Pants: SUSNFS Logo, NAOMI Logo, FS Wings



Polo Shirt: FS Wings



FS Wings 'Skrunchie', Bow Tie, Tie; SUSNFS Patch



Pocket Reference, Travel Mug, CD: Ultimate FS



Sweetheart FS Wings Necklace, 14K Gold/Diamond Chip



Full Size 14K Gold Flight Surgeon Wings



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Address Change, Subscription/Membership Renewal, Price List, and Order Form (Jun 2000)

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___	T-shirt: SUSNFS "Leonardo" (M, L, XL, XXL)	24.00	19.00	_____
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___	Sweat Pants: NAOMI Logo (S, L, XL)	5.00	5.00	_____
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___	Sweetheart FS Wings Necklace, 14K Gold/Diamond Chip	200.00	160.00	_____
___	Petite Sweetheart FS Wings Necklace, 14K Gold/Diamond Chip	150.00	120.00	_____
___	Sweetheart Physiologist/Psychologist Wings Necklace, 14K Gold	75.00	65.00	_____
___	Full Size 14K Gold Flight Surgeon Wings	240.00	200.00	_____
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___	Refrigerator Magnet: FS Wings (price includes shipping)	2.00	1.50	_____
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MED-233**Current Milestones/Issues:**

- Search and Rescue Medical Technicians (HM NEC 8401): Action Memorandum to stand-up SAR Med Tech "C" school at Naval Aerospace Medical Institute, Pensacola, FL, has been approved conceptually by BUMED. Curriculum and program implementation plans will be developed with NOMI/NAMI training programs directors.
- Marine Corps issued a Universal Needs Statement (UNS) requesting an en route care system for casualty evacuation which would establish approximately 30 Type II Sea billets for SAR HM's to be used for casualty evacuation on the V-22 Osprey.

HMC(FMF) Tom Schaefer, USN

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