

Society of U. S. Navy Flight Surgeons



NEWSLETTER

---

Vol. I, No. 1

Washington D. C. 20372

December 8, 1977

---

8 Decemeber 1977

*Dear Members,*

*This letter is being written after much deliberation to inform you of my desire to resign the office of President of the Society, effective 31 December 1977. I have tried to find time to function as your President, and representative to the Aerospace Medical Association during my residency in psychiatry. However, I find it impossible for me to do so.*

*I have long felt that the "can do" attitude in an environment of lack of sufficient energy resources and interest to do the job correctly only leads to further deterioration of the situation. Therefore, I believe it to be in the best interests of the Society, my patients, and my residency program to stop spreading myself so thin.*

*I hope you will accept this resignation in the interest of the Society. My best wishes for your continued progress under the leadership of Captain Gil Webb your Vice President.*

*Regretfully,*

*WW Simmons*

W. W. SIMMONS

Captain, Medical Corps

U. S. Navy

NOTE FROM SECRETARY-TREASURER

In the past, a Flight Surgeons' Newsletter has been officially published for a time, and then cancelled because of funding constraints. They have always been read with interest by Flight Surgeons in the field, and served a useful purpose in transmitting information.

This newsletter, published through the Society of U. S. Navy Flight Surgeons, is intended to accomplish a similar purpose, to provide a means of passing information of professional interest to members in the field.

As members of the Society, your inputs are solicited for future issues of this publication. Through your interest and contributions, the content can be made of interest and value to individuals working in the field.

Your participation and contributions to the newsletter will be gladly received. Send them to me, the Secretary-Treasurer, or to Ms. Linda Roth. We request submissions be typewritten and double-spaced.

|  |   |
|--|---|
| Captain R. Paul Caudill, MC, USN<br>Force Medical Officer, Code 018<br>COMMNAVAIRLANT<br>Norfolk, VA 23511<br>Phone:Autovon 690-7028<br>Area Code (804) 444-7028 | Ms. Linda Roth<br>Bureau of Medicine & Surgery<br>Code 51<br>Navy Department<br>Washington, D.C. 20372<br>Phone:Autovon 294-4361<br>Area Code (202)254-4361 |
|--|---|

-----  
AEROSPACE MEDICINE DIVISION  
ROSTER

|   |                                      |
|---|--------------------------------------|
|   | Autovon 294-<br>Area Code (202) 254- |
| Aerospace Medicine Division.....  | Capt M.G.Webb...4361                 |
| Aeromedical Safety Operations<br>Liaison/Aerospace Medicine Physiology..... | Capt J.Wenger...4359                 |
| Aerospace Medicine Operation/Detailing....                                  | Capt G.Matthews.4390                 |
| Physical Qualifications.....  | CDR J.Black.....4297                 |
| Aerospace Psychology.....   | CDR F.Gibson....4236                 |
| Aerospace ?????? .....  | Capt .....4767                       |

## C.M.E. Quiz

The following brief exercise is meant to function as a trial balloon, a "test-hop", if you will. Reader's inputs are desired, and will determine whether this C.M.E. effort is continued, expanded, or eliminated. So let's have at it, pro or con. Our desire is to provide a useful service. Send replies to Dr. Caudill. Quiz answers on page 7.

1. Directions: Match the lettered heading to the most appropriate numerical phrase.

- |  |                               |
|--|-------------------------------|
| 1. Shipboard void                            | A. Beryllium                  |
| 2. Hepato-renal toxicity                     | B. Chlorobromomethane ("CBM") |
| 3. Degreasers' flush                         | C. Mesothelioma               |
| 4. Cellulube                                 | D. Anoxia                     |
| 5. Thick, orange liquid                      | E. Chlorinated Hydrocarbons   |
| 6. F-14 Tomcat                               | F. Tetrachloroethylene        |
| 7. Asbestos                                  | G. Trichloroethylene          |
| 8. Pyrolization hazard                       | H. CI-2                       |
| 9. Aircraft engine fire                      | I. Styrofoam                  |
| 10. Fatality in freshly cleaned sleeping bag | J. Phosphate, ester base      |

II. Multiple Choice: Choose one response.

11. Myocardial irritability is a recognized hazard of
- (a) Toluene diisocyanate
  - (b) Halogenated hydrocarbons
  - (c) Irritant inorganic gases
  - (d) Metal fumes
  - (e) CI-2
12. Naval aircraft fire extinguisher pyrolization products are apt to include all the following except
- (a) Phosgene
  - (b) Hydrogen Cyanide
  - (c) Hydrogen Chloride
  - (d) Carbon Monoxide
  - (e) Hydrogen Bromide

13. Aviation toxic effect is a function of its
- (a) high vapor pressure
  - (b) low vapor pressure
  - (c) flash point
  - (d) renal toxicity
  - (e) neurotoxicity
14. Smoke additive (CI-2) is not presently used in naval aircraft due to its ability to induce
- (a) delayed pulmonary edema
  - (b) hemolytic anemia
  - (c) bone marrow depression
  - (d) tremors, staggering, incoordination
  - (e) acute pneumonitis
15. Presently used naval aircraft finishes are largely
- (a) phosphate, ester base
  - (b) teflons
  - (c) borane compounds
  - (d) polyurethanes
  - (e) polystyrenes
16. Acute Beryllium pneumonitis
- (a) usually progresses to chronic, progressive pulmonary disease
  - (b) is associated years later with a high incidence of lung cancer
  - (c) usually resolves spontaneously in several months
  - (d) is frequently associated with nasal septal perforation
  - (e) is frequently complicated by delayed pulmonary edema
17. Severe bronchospasm frequently occurs with repeated challenge by
- (a) beryllium salts
  - (b) free silica
  - (c) diisocyanates
  - (d) tricresyl phosphate
  - (e) cellulube vapors
18. Chronic exposure to free silica ( $\text{SiO}_2$ ) results in
- (a) diffuse pulmonary fibrosis
  - (b) delayed pulmonary edema
  - (c) increased incidence of lung cancer
  - (d) nodular pulmonary fibrosis
  - (e) a recurrent asthma-like syndrome

19. Carcinoma of the upper respiratory tract is a recognized hazard of
- (a) Nickel carbonyl
  - (b) TCE
  - (c) Welding operations involving chromium
  - (d) Asbestos fibers larger than 3 microns
20. Lead toxicity is associated with all of the following except
- (a) colic
  - (b) arthralgia
  - (c) pulmonary edema
  - (d) encephalitis
  - (e) RBC stippling

---

Aeromedical Safety Officer (AMSO)

The AMSO program has been established by means of BUMEDINST 5100.11. This program is designed to provide additional expertise to support the Naval Aviation Safety Program.

Operational experience and graduation from an Aviation Safety Officer course at the Naval Postgraduate School, Monterey, CA, are requirements for officers participating in this program. The AMSO team: flight surgeons, aviation physiologists, and aviation experimental psychologists, provides to major commands and sub units the framework for an overall aeromedical safety program with the primary emphasis on aircraft accident prevention. This will be accomplished by means of improved aeromedical surveillance, correlating and integrating training, and acting as facilitators for improving aviation life support systems. The program provides an advanced level of aircraft accident investigation and analysis expertise for use by local aircraft mishap boards, and board membership when no local flight surgeon assets exist. AMSO officers will be available for consultation for aeromedical problems of flight personnel.

Further information may be obtained by contacting Captain J.E. Wenger, MC, USN, Head, Aeromedical Safety Program, BUMED, Code 51A, autovon 294-4359

---

FLIGHT SURGEONS' MANUAL

A revision of the Flight Surgeons' Manual has just been completed and is in the final editing phase. It is expected that the revised manual will be ready for distribution within the next several months. Anyone who wishes the manual to be sent to other than your official address, please notify NAMI

## VULNERABILITIES IN MEDICAL PRE-ACCIDENT PLANS

Capt E. J. Colangelo, MC, USN

I'd like to share with you some interesting perceptions gained from reading Medical Officer's Reports at the Naval Safety Center. At times there are indications that the initial phases of the medical investigations of aircraft mishaps are disjointed and sporadic, if not frankly confused. Occasionally records suggest that the Flight Surgeon was not notified of the accident early enough to make essential observations. Difficulties in transportation, coordination, and administration prevent the Flight Surgeon member of the aircraft mishap board from fully participating in the investigation, especially when travel or other obstacles arise.

Safety surveys confirm the impression gained from the Medical Officer's Reports that at times medical portions of preaccident plans fail to provide remedies for these problems. Reporting custodians sometimes note that their understanding of the procedure to obtain a Flight Surgeon member of the board is simply to call the closest dispensary where the medical member is promptly assigned. It may be hard to find an identifiable mechanism for providing a Flight Surgeon when the dispensary staff is depleted and unable to respond. The remedy of requesting assistance from the chain of command to whatever level controls the Flight Surgeon assignments is seldom invoked. There are instances when the name submitted to the Safety Center as the Flight Surgeon board member (to satisfy the requirements of the telephone report) does not truly identify the functional medical member of the board. The Navy's intent is to have a comprehensive medical investigation which takes priority over all other assigned duties for the medical member. This does not always happen.

Incomplete or compromised medical studies limit the effectiveness with which the Navy can act to solve human error problems. "Garbage in means garbage out." It's a vicious circle.

This situation must be corrected. The following suggestions will yield great benefits if heeded and implemented.

a. Each aviation unit's pre-accident plan must be reviewed carefully. Medical deficiencies must be identified and corrected.

b. The appropriate line commander must be apprised of the predictable difficulties that will ensue if the problems defined are not remedied.

c. We, as practitioners of aviation medicine, must act to insure that our "patient", (the aviation mishap), is examined thoroughly and completely as soon after the acute episode as is practicable.

d. This examination, as in good clinical practice, must consider the history and overall environment of the "patient" as well as the acute episode itself.

e. The continuity of the medical study must be maintained within the purview of the assigned Flight Surgeon board member. A better result is likely to ensue from a study which is conducted by the Flight Surgeon member of the board who will generally be the most knowledgeable Flight Surgeon (with respect to that unit's operational aviation medicine).

f. A feedback loop exists which must be exercised. It is between the medical member of the accident board and the Safety Center. Each Flight Surgeon is invited and encouraged to call the Naval Safety Center, Autovon 690-7343, to discuss problems relating to accident investigation or prevention. This should provide a better opportunity to gain any understanding that other similar cases may have provided and to enlist other support as needed from the Safety Center.

Let me submit that the medical investigation of aircraft accidents and the interpretation of the findings respect to performance factors, injuries, and life support equipment represent the few truly distinctive activities that characterize the specialty of aviation medicine. To allow this to be taken lightly or done in other than our best professional form is a disservice to the specialty and the Navy.

#### NAMI NOTES

By the time that this initial issue of the resurrected Flight Surgeons' Newsletter hits the streets, Student Flight Surgeon Class 77-3 will be well into the final phase of its training and attemptin to master the systems and controls of the T-2C Buckeyes of TRARON FOUR at Sherman Field. Having finished land and sea survival in later October, the class completed its operational field trip in early November, visiting the following locations: NATC Patuxent River, NADC, Warminster, USS EISENHOWER (CVN-69), NAS Oceana, EPMU-2, Norfolk, and MCAS Cherry Point. Regretfully, engine trouble in our C-131 precluded our scheduled visit to the Naval Safety Center.

Shortly before the field trip, the class received and selected billets, and the newly designated flight surgeons should be reporting for duty soon after their 21 December 1977 graduation. The breakdown is as follows:

LT Carol Algier--VP-18, Moffet Field  
LT Richard Carpenter--2nd MAW, Cherry Point  
LCDR Ivan Choi-- VP-40, Moffett Field  
LT Rebecca deVillers--VP-23, Brunswick  
LT John Gibbs--CVW-7, Oceana  
LT Kieth Haden--1st MAW  
LT William Hamilton--CVW-3, Cecil Field  
LT Bob Kendrick--1st MAW  
LT Booker T. Keyes--CVW-1, Oceana  
LT Thomas Kitts--1st MAW  
LT Kim McMillin--VRF-31, Norfolk  
LT Richard Pantera--CVW-9, Lemoore  
LT William Schaffer--CVW-6, Oceana  
LCDR Bob Skipworth--USS Lexington (CVT-16)

LT Ziaul Haq, Pakistani Navy, and LT Arthur von der Harten, Royal Netherlands Navy, will be returning home for assignment.

Recent information from TRAWING-SIX, confirmed by NATC, is that SFS 77-3 may be one of the last classes to train in the T-2C aircraft. The new T-34C turboprop trainer is close to joining the Training Command and could be with us shortly after the first of the new year. This development is seen as a definite plus, for it would once again allow our student Flight Surgeons the opportunity to solo, a milestone virtually impossible to attain in the T-2C given the syllabus time allotted. Thus it would appear that the necktie trimming ceremonies will once again be in vogue.

Speaking of VOGE (actually "vozh), second year Aerospace Medicine Resident, Vicki Voge, completed testing and interviews at NASAs Manned Spacecraft Center in Houston for Mission Specialist selection in late August of this year. Of the 20 candidates in the Life Sciences group, Vicki was one of the eight ladies. The several groups of Mission Specialists have, to this point, been narrowed down to 140 candidates, from which fifteen will make the final cut in January 1978.

During the weekend of 4-5 November 1977, NAMI hosted fifty-one G.M.E. I Medical Officers from east and west coast hospitals who had expressed interest in Naval Flight Surgeon training. Following an official welcome by CAPT H. S. Trostle, C.O. NAMI, the group was introduced to the NAMI staff, residents, and members of SFS Class 77-3. During subsequent tours of TRARON 10, TRARON 4, Land and Sea Survival, the staff and students mingled freely with our guests, answering questions and giving personal assessments of Naval Flight Surgeon training and practice. Saturday evening was highlighted by a seafood buffet, for which our guest speaker was RADM Paul Rucci, MC, USN, CINCLANT FLEET Medical Officer, who spoke of the rewards and opportunities of early operational experience for all Medical Officers. Sunday morning was spent aboard LEXINGTON (CVT-16) following which the group boarded two C-118 aircraft for their long flights home. Accompanying the east coast contingent, in addition to RADM Rucci, were Captains M. G. Webb, and J. E. Wenger of BUMED. The west coast group was joined by Captain Jerald Felder and CDR Clyde McAllister, both of whom are Aerospace Medicine Residents in the M.P.H. program at U.C.L.A. The interest and enthusiasm by such a busy and informative weekend should have a very positive effect in future class inputs.

-----  
C.M.E. QUIZ ANSWERS

- |    |      |     |       |
|----|------|-----|-------|
| I. | 1. D | II. | 11. B |
|    | 2. E |     | 12. B |
|    | 3. G |     | 13. A |
|    | 4. J |     | 14. D |
|    | 5. H |     | 15. D |
|    | 6. A |     | 16. C |
|    | 7. C |     | 17. C |
|    | 8. I |     | 18. D |
|    | 9.   |     | 19. A |
|    | 10.  |     | 20. C |



To Captain:  
Dan Day  
Dean McKnight

To Commander:  
Lou Bernhardt

To Lieutenant Commander:  
Jim Gessler  
Pat Hutton

Many of our members were also selected for residency training. This year, 30 flight surgeons were selected for residencies and fellowships. Last year there were 22. Members of the Society who were selected are:

Lou Bernhardt - Radiology  
John Blanch - ENT  
Bill Buckendorf - Cardiology  
Bill Elam - Radiology  
George Hill - Aerospace Medicine  
Pat Hutton - Orthopedics  
Neil MacIntyre - Pulmonary Medicine  
Dean McKnight - Radiology  
Jane McWilliams - Pathology  
Bill Richmond - Internal Medicine  
Ken - Anesthesiology  
Dennis Wright - Neonatology

Selection opportunity varied greatly. The most difficult was dermatology, where there were 42 applicants for 8 positions. Jim Karr was selected as an alternate. Our congratulations to all.

*Gil*

Gil Webb

A T T E N T I O N

time is almost upon us again when our NROTC Midshipman will  
Acitivities for pre-commssioning and flight physicals.

midshipmen will be motivated towards a career in aviation,  
and should be questioned as to this possibility. Only those interested in  
aviation should have a flight physical examination. It is imperative that  
a complete and thorough flight physical examination and a complete history  
be taken and evaluated. An average of 50-60% if tge aviation physical  
examinations last year had to be returned for completion of the history  
form (SF-98). Statements of no use to this office are, "All positive  
answers reviewed - none considered disqualifying", - "Allergies, Hayfever,  
sinusitis - not disabling." These types of statements make it virtually  
impossible to evaluate a candidate for the aviation community.

Closer attention must also be made to the use of contact lenses by  
the candidates. Candidates for student naval aviator must read and sign the  
appropriate statement referring to contact lenses in block #8 of the SF 93  
(Report of Medical History). For the proper terminology of this statement  
refer to the Manual of Medical Department Chapter 15 article 67(2).

Your cooperation will be gratefully appreciated by this office,  
the candidates, NROTC units, the medical facilities that have to complete  
the incomplete physical. This procedure should not stop with the NROTC  
Midshipmen but be applied to all physicals leading to a designation in the  
aviation community.

BUMED, Code 511  
Physical Qualifications Section

---

BILLET AVAILABLE FOR FLIGHT SURGEONS

Any flight surgeon approaching his release from acitve  
duty date (RAD) or his projected rotation date (PRD) may  
request a permanent change of duty if he agrees to remain at  
his new duty station for at least one year in the continental  
United States of the BUPERS required tour at overseas bases.  
Many reserve flight surgeons in receipt of release from active  
duty orders are eligible for transfer to a vacant billet of  
their choice if they agree to extend their active duty in  
accordance with the above.

For specific details about any billet, all interested  
flight surgeons are encouraged to contact Capt G. W. Matthews,  
Code 511, BUMED, Washington, D. C. 20372 or call Autovon 294-4361  
or Area Code (202) 254-4361. Since this newsletter only goes  
to members of the Society, please feel free to show this list  
to fellow flight surgeons who are not members.

BILLETS AVAILABLE

, Quantico, VA.  
, Bremerton, WA.  
Hospital,

|                          |      |                                   |
|--------------------------|------|-----------------------------------|
| MAG-31, Beaufort, SC.    |      | 1st MAW, Okinawa                  |
| NAS Guantanamo Bay       |      | NADC, Westminster, PA.            |
| , Atlanta, GA.           |      | Naval Safety Center, Norfolk, VA. |
| Key West, FL.            |      | Oceana, VA - CVW-3                |
| Jacksonville, FL.        |      | CVW-8                             |
|                          |      | NAS, Norfolk, VA -       -12      |
|                          |      | EPMU #2 (AMSO)                    |
|                          |      | NRMC, Rota, Spain                 |
| Cecil Field, FL.         | CVW- | Miramar, CA. - VF-121             |
|                          | CVW- | VF-124                            |
|                          | CVW- | CVW-15                            |
|                          | CVW- | North Island, San Diego, CA.      |
| 3rd MAW, El Toro, CA.    |      | HC-3                              |
| VX-4, Point Mugu, CA.    |      | EPMU #5 (AMSO)                    |
| NAF, Sigonella, Sicily   |      | NAS, Cubi Point                   |
| NAS, New Orleans, LA.    |      | USS Eisenhower (CVN-69)           |
| Brunswick, ME. - VP-11   |      | USS Nimitz (CVN-68)               |
| VP-44                    |      | USS JFK (CV-67)                   |
| Moffett Field, CA. -VP-8 |      | USS America (CV-66)               |
| VP-44                    |      | USS Independence (CV-62)          |
| Lemoore, CA. - VA-122    |      | USS Forrestal (CV-59)             |
| VA-127                   |      | USS Constellation (CV-64)         |
| CVW-11                   |      | USS Midway (CV-41)                |
| NAS, Fallon, NV.         |      |                                   |
| MCAS, Futema             |      |                                   |

-----

Bob Hughes reports a couple of "saves" in RAG training. Within a short period of time two RAG students were before Field Naval Aviation Evaluation Boards because of inability to perform safely in night CARQUALS. Each had 20/20 vision, but with small refractive errors. Although advised by his consultant that correction of the small errors would probably not help, he insisted on these two gents getting spectacles. Each subsequently was top man in his CARQUAL group. Bob feels that although each was able to pick up the ball, the glasses converted a fuzzy ball to a clear one, eliminating preoccupation regarding a clear ball, and resulted in a better scan and a much smoother approach. He now screens all new students for small refractive errors, and prescribes spectacles for 15-20%.

\*\*\*\*\*

Please notify the Society of any change in address.  
Send changes to BUMED, Code 51. Attention: Ms. Roth.

\*\*\*\*\*