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MARINE CORPS ORDER 3750.2

From: Commandant of the Marine Corps
To: Distribution List

Subj: USMC AEROMEDICAL SAFETY OFFICER (AMSO), AEROMEDICAL SAFETY
CORPSMAN (AMSC), AND AEROMEDICAL SAFETY PROGRAMS

Ref: (a) OPNAVINST 3750.6Q
(b) OPNAVINST 3710.7Q
(c) MCO 3750.1A
(d) CNO ltr Ser 505F/OU603546 of 30 Aug 1990
(e) BUPERSINST 1610.10

1. Purpose. To provide policy and assign responsibilities and duties for AMSOs and AMSCs assigned to the Marine Corps and to provide information concerning Marine Corps aeromedical safety program management.

2. Scope. The provisions of this Order are applicable to all Marine Corps aviation commands operating aircraft.

3. Background. The purpose of the USMC AMSO program, and its corollary AMSC program, is to counter all physiological threats facing today's combat aircrew. A physiological threat is defined as any environmental characteristic or self-imposed limitation which would serve to diminish an individual's capability, thereby reducing his combat effectiveness. Per references (a) through (c), AMSOs and AMSCs counter physiological threats by providing the various aeromedical safety programs which offer specialized consultation, technical liaison, evaluation, and recommendations in all aeromedical aspects of aviation safety. This includes providing expertise in physiology and water survival training, aviation life support systems (ALSS), and flight operations to the local aviation communities and medical treatment facilities. AMSOs and AMSCs provide these services by interfacing with all of the departments at their local command.

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4. Aeromedical Safety Officer (AMSO)

a. An AMSO assigned to the Marine Corps is a designated Naval Aerospace Physiologist who is a graduate of the Naval Postgraduate School Aviation Safety Officer Course and currently serving in an identified AMSO billet on the table of organization (T/O).

b. AMSO billet structure parallels the Marine Corps aviation chain of command. Billets include CMC, Marine Forces Atlantic (MARFORLANT), all Marine Aircraft Wings (MAWs) and Marine Aircraft Groups (MAGs), Marine Aviation Weapons and Tactics Squadron One (MAWTS-1) and Marine Helicopter Squadron One (HMX-1). This provides a clear AMSO career progression path. Marine Corps aviation benefits by maintaining a cadre of AMSOs with higher experience level within it's structure. Usual assignment is within the Department of Safety and Standardization (DOSS) as outlined in reference (c).

5. AMSO Duties and Responsibilities. The AMSO shall:

a. Serve as the command's safety program advisor on matters pertaining to human factors analysis in mishaps, the aeromedical aspects of aviation life support systems (ALSS), emergency escape systems, and physiology and water survival requirements. Because aeromedical issues and subject matter is diverse in nature and broad in scope, the AMSO can only be effective by interfacing with all departments within an aviation command.

b. As a designated Aviation Safety officer (ASO), assist the command ASO in monitoring force protection initiatives designed to promote safe operation of aircraft.

c. Support the Fleet Air Indoctrination and Liaison of Survival Aircrew Flight Equipment (FAILSAFE) program by establishing liaison with local squadrons, monitoring usage of ALSS, identifying ALSS problem areas, serving as the coordinator and point of contact for ALSS fleet assessments, conducting ALSS surveys, and providing feedback to NAVAIRSYSCOM.

d. Establish firm liaison with intelligence and operations personnel in conjunction with safety and NATOPS personnel to ensure state-of-the-art, mission specific, and relevant

physiological threat briefs. The Training Exercise Employment Plan (TEEP) is a starting point in the formulation of physiological threat briefs.

e. Support aircraft mishap investigations as required by reference (c). This support is provided as either a full member or as a technical advisor to the Aircraft Mishap Board (AMB).

f. Per reference (d), coordinate and organize local ALSS mini-Operator Advisory Group (OAG) meetings for ALSS.

g. Continue professional development by attending training courses that improve knowledge, aid in the integration into the Marine Corps force structure, and enhance the overall performance of duties. While not an all inclusive list, the following suggestions for AMSO professional development are provided:

(1) USMC Amphibious Warfare School (Non-resident Program).

(2) USMC Command and Staff College (Non-resident Program).

(3) Laser Systems Safety courses.

(4) Medical Intelligence courses.

(5) Chemical, Biological, Radiological protection courses.

(6) Joint Service Night Vision Goggle conferences.

(7) Joint NITE Lab Instructor Certification Course.

(8) Department of the Navy Fundamentals of Total Quality Leadership course.

(9) USMC Medical Staff Planning Course.

(10) DSMC Fundamentals of System Acquisition Course.

(11) Survival Training Courses such as Cold Weather Survival Training Course(s)/ Jungle Essential Skills Training (JEST).

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g. Deploy when it is necessary to provide this specialized aeromedical support during actual contingency/combat operations. A quality safety program factors in AMSO involvement during operational deployments and AMSOs have already effectively deployed with Marine Corps units, both on land and at sea and use of the AMSO for this purpose is encouraged. Prior coordination within the chain of command can provide aeromedical coverage in garrison while the unit's AMSO is deployed.

6. Duties and Responsibilities of the CMC AMSO. In addition to the general AMSO duties and responsibilities herein and outlined in references (a-d), the CMC AMSO has the following specific duties and responsibilities.

a. Coordinate, manage and monitor the AMSO and AMSC program throughout the Marine Corps and act as the "MOS sponsor" for the AMSOs and AMSCs assigned to Marine Corps billets.

b. Represent CMC and Marine Corps interests on the Naval Aviation Physiology Program Planning Committee (NAP3C).

c. Represent CMC in all matters involving the Naval Aviation Physiology Training Program (NAPTP) and Naval Aviation Water Survival Training Program (NAWSTP).

d. Assist Marine Corps requirements officers with issues affecting NAPTP, NAWSTP, training/human factors issues, night vision devices (NVDs) and ALSS.

e. Represent CMC on BUMED's Trainer Management Team (TMT) for NAPTP and NAWSTP training devices.

f. Action officer for aeromedical issues at HQMC.

g. All additional duties as specified by CMC.

7. Aeromedical Safety Corpsman (AMSC) Program

a. An AMSC is a designated Aviation Physiology Technician (HM8409) assigned to the Marine Corps and currently serving in an identified HM8409 billet on the T/O. Primary assignment is at

the Marine Aircraft Group level, but AMSCs are also assigned to MARFORLANT, MAWs, MAWTS-1 and HMX-1.

b. The AMSC billet was created to support force protection programs, provide operational support for aviation safety and aeromedical safety programs, and to improve the command's quality of medical readiness. Marine Corps aviation units benefit from having their aeromedical expertise while the HM8409 community gains operational credibility for its enlisted instructors which makes them competitive for promotion.

8. Duties and Responsibilities of the AMSC. Assigned to the organization DOSS (or as determined by the unit commander), the AMSC is an aeromedical training asset who can provide direct support to the AMSO, and as such, is also guided by references (a-d) in the performance of duty. The following are additional ways in which local commanders can use this aeromedical asset:

a. Enhancement of organization force protection and safety programs by:

(1) Providing assistance to the AMSO and other members of the DOSS.

(2) Providing support to the NAVAIRSYSCOM FAILSAFE program.

(3) Providing and arranging for Naval Aviation Physiology and Water Survival Training.

b. Specialized aeromedical support includes:

(1) Laser safety and medical surveillance.

(2) Chemical, biological, and radiological defense.

(3) Certification as NITE Lab instructors for physiological effects of NVDs.

(4) Providing medical intelligence regarding health threats of all potential deployment sites.

(5) Assistance with the local Aeromedical Brief Program.

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(6) Local SAR corpsman program.

(7) All additional tasks as assigned by the local commander.

c. Enhancement of unit medical readiness by:

(1) Ensuring health records are up to date prior to deployment.

(2) Ensuring shot records are up to date.

(3) Ensuring physicals are obtained in a timely manner.

(4) Hearing conservation program.

(5) Providing medical presence at PFTs.

(6) Conducting medical training such as CPR.

(7) Maintaining a close liaison with the local medical treatment facility and providing technical expertise as assigned by the local commander.

d. Continue professional development by attending training courses that improve knowledge, aid in promotion opportunities, and enhance the overall performance of duties. While not an all inclusive list, the following suggestions for AMSC professional development are provided:

(1) Laser Systems Safety courses.

(2) Medical Intelligence courses.

(3) Chemical, Biological, Radiological protection courses.

(4) Joint Service Night Vision Goggle conferences.

(5) Joint NITE Lab Instructor Certification Course.

(6) Department of the Navy Fundamentals of Total Quality Leadership course.

(7) Survival Training Courses such as Cold Weather Survival Training Course(s)/Jungle Essential Skills Training (JEST).

(8) Survival, Evasion, Rescue and Escape (SERE) School.

10. Aeromedical Safety Programs. References (a-d) list several areas of cognizance in which the AMSO provides expertise to the operational forces in countering all physiological threats. This paragraph will describe the major facets of a quality aeromedical safety program.

a. Physiological Threat/Aeromedical Brief Programs. The major objective of the AMSO and AMSC programs is to counter all physiological threats. Training provided by the AMSO and AMSC must be more attuned to the operational needs of the service population. Quadrennial training as outlined in reference (b) does not seem to be as effective as mission specific training provided just prior to an operation. Adjunctive training or "just in time training", such as found in a Physiological Threat/Aeromedical Brief Program addresses physiological weaknesses and provides positive steps to offset this vulnerability.

b. Fleet Air Indoctrination and Liaison of Survival Aircrew Flight Equipment (FAILSAFE) Program. The FAILSAFE program is sponsored by Naval Air Systems Command (NAVAIRSYSCOM) and uses the services of designated naval aerospace physiologists and HM8409s. This program is intended to ensure that proper fleet introduction of new or modified aviation life support systems (ALSS) is effected by providing indoctrination on the item to fleet aircrew and maintenance personnel. This is critical to ensuring fleet acceptance, timely installation, and appropriate use of the equipment. The FAILSAFE program also provides a vehicle for feedback on inservice ALSS which makes USMC AMSO and AMSC involvement in all aspects of ALSS essential.

c. Aviation Life Support System Operator Advisory Group (ALSS OAG). The ALSS OAG, as established in reference (d), is an informal working group designed to enhance communication of ALSS requirements between aircrew and those who develop and procure

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flight equipment. The objective is to align ALSS funding priorities and ILS/AMP action items with the ALSS OAG priority list. Mini-OAG meetings are conducted by each Wing or Group to provide an accurate ALSS priorities listing with a strong aircrew input. AMSOs are key players in coordinating and organizing local mini-OAG meetings. Consolidated mini-OAG priority lists are often collated by the Wing AMSOs and provided to the Marine Corps' voting members.

d. Mishap Investigation/Aircraft Mishap Board Support. Use of AMSOs on mishap boards is strongly encouraged. If the mishap investigation involves ALSS issues or physiological threats/human factors, the Senior Member should request the assignment of a local AMSO to the AMB per reference (a). In this case, the AMSO is privy to all deliberations and is free to address all areas of the investigation with his area of expertise. The AMSO provides dual service as a full AMB member. As a designated ASO, he is a trained investigator, usually with many years in a safety billet. This provides the AMB with another set of trained eyes and ears. In some cases, the AMSO may be the most experienced mishap investigator available in the local area of operations. The AMSO can provide support to the flight surgeon. Being a Medical Service Corps officer, the AMSO is part of an aeromedical team with the flight surgeon. The AMSO or AMSC can assist the flight surgeon in the compilation of the aeromedical analysis information regarding flight equipment and physiology training in the course of an aircraft mishap investigation. This assures a thorough examination of all human factors put into their proper context within the airframe and flight environment.

11. Fitness Reports (FITREPS) and Enlisted Evaluations for AMSOs and AMSCs. Per reference (e), FITREPS for Navy personnel (such as AMSOs) are the responsibility of the supporting activity Commanding General or Commanding Officer. Enlisted evaluations are also the responsibility of the officers who closely supervise the duties of the AMSCs. The purpose and trend in the new Navy personnel evaluation system (for Navy officers and Navy enlisted personnel) is to have those evaluations written by superiors who have the most knowledge of the individual's performance. Since AMSOs and AMSCs are assigned to the DOSS by T/O, this responsibility should not be delegated to the local medical department (except for administrative support).

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12. Recommendations. Recommendations for changes concerning AMSO, AMSC or aeromedical safety programs are encouraged and should be submitted to CMC(SD) via the chain of command.

13. Reserve Applicability. This order is applicable to all Marine Corps Reserve organizations operating aircraft.



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