To: Holders of the Manual of the Medical Department

1. **This Change**
   a. Completely revises Chapter 14, Special Activities.
   b. Renames Section III from Aerospace Medicine to Aviation Physiology Program.

2. **Action**
   a. Remove Chapter 14 and replace with new Chapter 14.
   b. Record this change 114 in the Record of Page Changes.

D. C. ARTHUR  
Deputy Chief, Bureau of  
Medicine and Surgery
SPECIAL ACTIVITIES

TRANSPANTATION SUPPORT

NAVY BLOOD PROGRAM

AVIATION PHYSIOLOGY PROGRAM
Chapter 14

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Section I

TRANSPLANTATION SUPPORT

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14-1 Support

(1) Organ and tissue donation is encouraged and supported. There is no objection to an active duty Navy member executing a declaration of intent to donate organs or tissues after death under the Uniform Anatomical Gift Act. Coercion or the appearance of coercion of donors or their next of kin will be avoided.

14-2 Organ Procurement Organization

(1) A formally constituted civilian organization created to coordinate and recover organs and tissues for a specific type of transplantation or a special geographic area.

(2) Navy military treatment facilities (MTFs), through military transplant centers, will participate in the congressionally established National Organ and Tissue Procurement Network that facilitates and coordinates organ and tissue donation, the recovery of donated organs and tissues, and the matching of donors and recipients.
14-3 Procedures

(1) See BUMEDINST 6300.8 for specific procedures.

14-4 Living Donors

(1) Active duty Service members may donate, but there are criteria that govern this. Refer to section 14-3 above for specific information.

14-5 Point of Contact

(1) The Army/Navy Transplant Team is available to answer any questions concerning the Organ and Tissue Donor Program and can be reached at Commercial: (202) 782-6462 or DSN: 662-6462. The address is:

Walter Reed Army Medical Center
ATTN: MCHL-RMA
6825 16th Street, NW
Washington, DC 20307-5001
### Section II

**NAVY BLOOD PROGRAM**

#### Article 14-6 Mission

1. The Navy Blood Program manages the collection, production, distribution, use, and disposition of all blood products within the Navy Medical Department.

#### Article 14-7 Organization

1. **Bureau of Medicine and Surgery.** The Chief, Bureau of Medicine and Surgery directs the Navy Blood Program.
2. **Worldwide Navy Blood Program.** The Navy Blood Program is organized into regional area blood systems. The structure of these area blood systems is based on blood donor availability, blood product demand, and shipping distance factors. The configuration of these systems is unique to the blood program and should not be confused with other medical department regional organizations. One MTF within each area blood system is designated as the system director.

#### Article 14-8 Key Functions

1. **BUMED-273**
   
   (a) Serves as executive agent for coordination and management of all Navy blood banking matters.
   
   (b) Serves as Navy representative to the Armed Services Blood Program Office.
   
   (c) Serves as liaison to the Food and Drug Administration (FDA) for the Chief, BUMED and Navy facility MTFs. Reviews and prepares FDA correspondence, annual reports, and new blood product application packages.
   
   (d) Directs the distribution of Navy blood resources to support local emergencies, as well as mobilization and contingency requirements levied by the DoD Armed Services Blood Program Office.
(e) Directs and monitors readiness capability of blood donor centers to collect, process, and distribute blood for contingencies. Evaluates personnel staffing and donor base capabilities and initiates organizational and manpower changes to improve readiness posture.

(f) Coordinates the review of all blood program agreements for collection of blood aboard Navy and Marine Corps installations to ensure reciprocity, legality, propriety, and adequacy of exchange rates.

(g) Reviews and takes appropriate action on all contractual agreements for exchange of unexpired blood products.

(h) Reviews all Navy and Marine Corps Authorized Medical Allowance Lists having blood program elements and makes recommendations for updates or changes.

(i) Manages pre-positioned frozen blood deployment and inventory aboard casualty receiving treatment ships and Navy blood depots worldwide.

(j) Initiates and maintains directives related to the managerial aspects of the Navy Blood Program. Develops and disseminates policy to MTFs on changes with Federal regulatory requirements and national standards. Writes and develops standard policies and procedures.

(k) Performs public information functions for Navy blood banking.

(l) Monitors Navy R&D projects and coordinates special studies on the preparation and use of blood components. Coordinates with FDA to obtain approval and licensure of new products, technologies, and equipment and manages the implementation within the Navy.

(m) Serves as referral agent and coordinator for technical blood banking matters.

(n) Coordinates maintenance of the Navy Blood Establishment License with FDA to manufacture blood products.

(o) Directs and monitors compliance of Navy blood banks with policies, requirements, and standards of the Navy Blood Program, Armed Services Blood Program, Federal regulatory agencies and national accrediting agencies. Ensures the safety, purity, and potency of blood products is maintained in fixed facilities and aboard ships via report reviews, technical assist visits, on-site audits, and personnel interviews.

(p) Maintains and monitors Navy Blood Quality Assurance Program and Plan. Analyzes tracks, and trends root cause and statistical data on FDA error and accidents occurring at MTFs. Monitors blood product manufacturing process to ensure compliance with good manufacturing practices required by Federal or State law and industry standard.

(q) Manages the Navy Transmitted Disease Look Back Program. Serves as liaison with naval facilities, blood donors, transfusion recipients, civilian blood agencies, and other service blood programs to collect and evaluate look back information.

14-9 Related Information Sources

(1) Blood Bank Operational Report, NAVMED 6530/1 or appropriate DoD equivalent. Submit quarterly.

(2) Related Publications

NAVMED P-5101, Technical Manual of the American Association of Blood Banks

NAVMED P-5120, Standards for Blood Banks and Transfusion Services

NAVMED P-5123, Operational Procedures for Military Blood Donor Centers and Armed Services Whole Blood Processing Laboratories

CFR, Title 21, parts 600-799 and parts 200-299 Food and Drug Administration, Department of Health and Human Services

(3) Related Directives and Instructions

DoD Directive 6000.12, Health Services Operations and Readiness

DoD Instruction 6480.4, Armed Services Blood Program (ASBP) Operational Procedures

OPNAVINST 6530.2 series, Donor Support of Department of the Navy Blood Program

OPNAVINST 6530.4 series, Department of the Navy Blood Program
### Section III

**AVIATION PHYSIOLOGY PROGRAM**

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### 14-10 Naval Aviation Physiology Program (NAPP)

1. **Purpose.** BUMED directs the NAPP. The provisions of this article and the following articles are applicable to all commands and personnel who administer or participate in the NAPP or any of its elements.

2. **Background.** BUMED established the NAPP in 1978 to comply with the Chief of Naval Operations (CNO) task to provide support to the Aircrew Survivability Enhancement Program. Aerospace physiologists and their assistants had historically participated in the aeromedical/survival training of naval aviation personnel, and in the development and introduction of aviation life support systems (ALSS) (particularly aircrew personal protective equipment). In the late 1970s, the role of the aerospace physiologist expanded to provide support to the Naval Aviation Safety Program, primarily through the establishment of the Aeromedical Safety Officer (AMSO) Program. The NAPP provided the central management necessary to support these diverse functions. The Naval Aviation Physiology Program Planning Committee (NAPPC) was established in 1981 to provide a steering council of senior aerospace physiologists for strategic planning and program management. In 1994, the CNO appointed BUMED as the training agent for the Naval Aviation Survival Training Program (NASTP).
14-11 Mission and Elements of the NAPP

(1) Mission. The mission of the NAPP is to support operational readiness through education, training, aeromedical support, and research, development, testing and evaluation (RDT&E).

(2) Program Elements. The NAPP consists of five major elements, each providing key support to the operational readiness of the fleet.

(a) NASTP. The purpose of the NASTP is to prepare all prospective and designated aeronautical personnel, selected passengers, project specialists, and other authorized individuals in the aeromedical aspects of flight and survival. These aspects include human factors and physiological threats related to the flight environment, physiological elements to enhance flight mission performance, mishap prevention, mishap and hostility survival, ALSS applications, and correct emergency egress and rescue procedures. NASTP requirements are CNO directed, BUMED is assigned as the training agent. Implementation follows the BUMED NASTP Standard Operations Procedures Manual.

(b) Quality Assurance and Revalidation (QA&R) Program. The QA&R Program establishes a process of inspection and testing of the Naval Air Warfare Center, Training Systems Directorate, managed equipment and other associated NASTP training devices and equipment. This process confirms device performance as prescribed by technical acceptance criteria and provides for evaluation of the technical and integrated logistics support elements required to assure the training devices and equipment continue to perform satisfactorily, safely, and effectively throughout their life cycle. A trainer management team is chartered to prioritize resources to meet fleet training requirements.

(c) AMSO Program. The purpose of the AMSO Program is to provide specialized consultation, assistance, technical liaison, evaluations, and recommendations directly to and working directly with the aviation community.

(d) Fleet Air Introduction and Liaison of Survival Aircrew Flight Equipment (FAILSAFE) Program. The FAILSAFE Program augments and facilitates the introduction of new and modified items of ALSS to Fleet aviation. FAILSAFE encompasses all facets of ALSS acquisition including requirement identification; design research, development, testing and evaluation; and, introduction, modification, maintenance, and use. A memorandum of understanding exists between BUMED and NAVAIR governing this program.

(e) RDT&E. RDT&E is supported by NAPP’s efforts in both the human performance and survival equipment arenas. Aerospace physiologists are detailed to medical research and NAVAIR ALSS laboratories to facilitate research required to meet operational requirements.

14-12 Implementation and Management of the NAPP

(1) Implementation. The mission is accomplished by means of:

(a) Management and implementation of the components of the NAPP in compliance with CNO (N889) policies through AMSOs, aerospace safety corpsmen (AMSCs), and aerospace physiologists and their assistants at aviation survival training centers (ASTCs) throughout the Navy and Marine Corps.

(b) Implementation of the Naval Air Systems Command sponsored FAILSAFE Program through the assigned Naval Air Systems Command Air Tasking is issued annually.

(c) Support of aeromedical and ALSS RDT&E programs.

(d) Professional and technical career development of officers, enlisted personnel, and civilians assigned to support the NAPP. Naval aerospace physiologist officer career progression goals are established and
available, as is a formalized BUMED approved Aerospace Physiologist Preceptorship Program for mentoring first tour officers.

(e) An NASTP standard of procedures manual and job qualification requirements for all training evolutions have been established and are in place ensuring safe implementation of high risk training. Established NASTP safety, standardization, and QA&R Program of inspections for aviation survival training centers.

(2) Management. The NAPP is managed by BUMED (MED-02T/231).

14-13 Responsibilities for the NAPP

(1) Chief, BUMED. BUMED is assigned as the NAPP manager and by CNO as the NASTP training agent. To fulfill responsibilities it shall:

(a) Coordinate the implementation of training requirements with the CNO, Commandant of the Marine Corps, NAVAIR, and Chief, Naval Education and Training.

(b) Sanction training, prioritize the major claimant’s requirements, and expedite programs for all NAPP elements.

(c) Act as the central point of contact in matters pertaining to program policy and safety.

(d) Approve the curricula developed for training aerospace physiologists.

(e) Assign a specialty leader for matters pertaining to the personnel required to support the NAPP including acquisition, education, officer and enlisted billet distribution, and officer billet nominations.

(f) Advise CNO (N889) on the impact of new systems and technology on aircrews in areas such as night vision devices, light amplification by the stimulated emission of radiation (LASER) devices and weapons, chemical, biological, and radiological threats, Gravity-Tolerance Improvement Program, (G-Tip), anthropometry, etc.

(2) Naval Operational Medicine Institute (NAVOPMEDINST) is assigned training responsibilities by BUMED and is assigned by CNO as the NASTP model manager. To fulfill these responsibilities, NAVOPMEDINST shall:

(a) Develop and issue policies and procedures for safe and efficient implementation of the NASTP.

(b) Develop and maintain NASTP curricula.

(c) Compile and analyze data relating to training workload and safety.

(d) Conduct annual safety, standardization, and QA&R inspections of aviation survival training centers.

(e) Provide professional training for officers leading to designation as an aerospace physiologist (SUBSP 1B36).

(f) Provide professional training for enlisted (Corpsman) leading to designation as an aerospace physiology technician (NEC HM-8409).

14-14 NAPP Planning Committee/Executive Steering Council (NAP³C)

(1) Purpose

(a) Implement the principles and processes of continuous quality improvement within the NAPP using participatory management tools. Specifically, the NAP³C shall serve as the executive steering council for the NAPP. Members shall serve as assigned by the chairman.

(b) Improve communications within the subspecialty by serving as a conduit of information and status reports for programs and projects to the specialty leader.

(c) Refine career pathways for aerospace physiologists. Coordinate with commands in reviewing billet requirements, distribution of billets,
and career progress offered by each billet. Provide counsel to the specialty leader on the personal and educational requirements, as well as the career development for all aerospace physiologists. Periodically review the established career progression pathway for aerospace physiologists.

(d) Review requirements for full-time outservice training (FTOST). This would include the number of aerospace physiologists in FTOST, types of degrees considered appropriate, and recommendations to the FTOST board and specialty leader.

(e) Recommend standardized preceptorship training requirements for first tour aerospace physiologists. Monitor and periodically review the Preceptorship Program to ensure it is remaining responsive to the needs of the individuals, the NASTP, and the operational forces in developing high caliber Naval officers, Medical Service Corps officers, and aerospace physiologists.

(f) Make recommendations on the training and distribution of aviation physiology technicians (NEC 8409). Review job qualification requirements for all billets following the guidelines in OPNAVINST 1000.16 series.

(g) Provide criteria for screening applicants for the aerospace physiology subspecialty, i.e., minimum educational requirements, levels of experience, etc., to the specialty leader.

(h) Assist program or specialty leader in implementing and monitoring the QA&R Program. Provide the program manager or training agent with recommendations on the procurement, modification, and maintenance of all training devices used in the NASTP via the trainer management team.

(i) Assist the program manager or specialty leader in the management of the NASTP.

(j) Establish criteria for the awards provided by the NAPP and vote for recipients in recognition of superior contributions. Periodically review the established NAPP awards criteria and selection process procedures.

(k) Provide input on any other issues concerning the NAPP as requested by the program manager or specialty leader.

(2) Membership. The membership shall consist of senior aerospace physiologists assigned to key aerospace physiology billets within the NAPP and a junior officer representative.

(a) All members are full voting members.

(b) NAP³C members are designated by the aerospace physiology program manager.

(c) The NAP³C chairman shall be the aerospace physiologist assigned to a BUMED (MED-02T/231) billet.

(d) The junior officer representative shall be a lieutenant willing to serve (lieutenants in preceptor and OCONUS billets are excluded). The ten senior aerospace physiologist lieutenants present during an annual FAILSAFE meeting shall elect this individual for a 2-year term.

(3) Meetings. The NAP³C will meet formally at least three times annually and stay in communication via electronic means at least monthly.

(a) These meetings will be held in conjunction with other regularly scheduled meetings when possible.

(b) The junior officer representative serves as the recording secretary for the committee and will submit the minutes to the Chairman for approval and distribution to all active duty aerospace physiologists and other interested parties.