

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

AIR FORCE INSTRUCTION 48-112

27 OCTOBER 2014

Aerospace Medicine



USAF HYPERBARIC MEDICINE PROGRAM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available on the e-Publishing website at www.e-Publishing.af.mil for downloading or ordering.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: USAFSAM/FEEH

Certified by: AF/SG3
(Brig Gen Charles E. Potter)

Supersedes: AFI48-112, 17 November 2010

Pages: 15

This instruction directs requirements for the USAF Hyperbaric Medicine Program and implements Air Force Policy Directive 48-1, Aerospace Medicine Program. It applies to all personnel involved in the use of clinical, operational, portable and research hyperbaric chambers. It assigns management responsibilities and defines training requirements and duties of US Air Force hyperbaric medicine teams. The instruction also applies to Air Force Reserve and Air National Guard units and personnel when activated or engaged in the applicable activities. Send comments and suggested improvements on AF Form 847, *Recommendation for Change of Publication*, through channels, to USAFSAM/FEEH-Hyperbaric Medicine Dept, 2200 Bergquist Dr. Ste #1, JBSA-Lackland Air Force Base, San Antonio, TX, 78236-9908. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, Table 1.1 for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the Publication OPR for non-tiered compliance items. This publication may be supplemented at any level, but all direct Supplements must be routed to the OPR of this publication for coordination prior to certification and approval. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, Management of Records, and disposed of in accordance with Air Force Records Information Management System (AFRIMS) Air Force Records Disposition (RDS). The system of records covered by this instruction is authorized by 10 U.S.C. 133 and 8013. The DD Form 2005, Privacy Act Statement--Health Care Records, guides the use of each form required by this instruction that falls under the Privacy Act. In addition, relative information is HIPAA protected within DoD 6025.18-R, Military Health System (MHS) Clinical Assurance (CQA) Program Regulation. This publication requires the collection and/or

maintenance of information protected by Section 552a. Forms affected by the PA have an appropriate PA statement. The applicable Privacy Act System of Record Notices is F044 F SF 3, *Electronic Medical Records System*.

SUMMARY OF CHANGES

This instruction has been substantially revised and must be completely reviewed. Major changes are as follows: Verb tense throughout this document identifying tier requirements for wing compliance items has been modified. Guidance in reporting management of decompression sickness patients and the distribution and management of forms documenting Decompression Sickness (DCS) have changed. Staff requirements managing staffing and training of clinical and operational chambers, to include Mobile Hyperbaric Systems (MoHS)/Emergency Evacuation Hyperbaric Stretcher (EEHS) have changed. EEHS information for use has been modified. Disorders treated with hyperbaric medicine have been removed from this document. Land and air transport and transport decisions for DCS and Arterial Gas Embolism (AGE) patients have been removed from this document. Team member qualifications have been revised. Specific guidance for Hyperbaric Safety Officer/Safety Director Responsibilities has been updated.

Chapter 1

PROGRAM OVERVIEW

1.1. USAF Hyperbaric Medicine utilizes pressures greater than atmospheric pressure, typically in combination with pure oxygen for clinical and operational purposes. This treatment modality requires specialized training and equipment. Due to the specialized nature of the hyperbaric mission, treatment locations are limited. The Air Force Medical Service, School of Aerospace Medicine, Hyperbaric Division is the Department of Defense Lead Agent for clinical hyperbaric medicine.

Chapter 2

ROLES AND RESPONSIBILITIES

2.1. Office of the Surgeon General, Command Surgeons:

2.1.1. Headquarters United States Air Force Surgeon General (HQ USAF/SG). The USAF/SG shall establish policy for the Hyperbaric (HBO) Medicine Program throughout the Air Force.

2.1.2. Major Command Surgeon (MAJCOM/SG): Command Surgeons will provide medical, technical, fiscal, and administrative support for their fixed and portable hyperbaric chamber systems.

2.2. United States Air Force School of Aerospace Medicine (USAFSAM): shall develop and conduct specific instructional courses in manning, maintaining, and operating hyperbaric chamber systems (T-3). As such, USAFSAM is responsible for supporting the Hyperbaric Medicine Fellowship in accordance with Accreditation Council of Graduate Medical Education (ACGME) requirements. This includes, but is not limited to establishing memoranda of understanding with other supporting facilities, operational support, registration and curriculum support, and Graduate Medical Education/ACGME oversight.

2.3. USAFSAM Hyperbaric Medicine Department (USAFSAM/FEEH): USAFSAM/FEEH shall serve as the focal point for USAF hyperbaric expertise and central point of contact for all USAF worldwide consults regarding hyperbaric medical therapy or diving medical issues (T-3). The Chief, USAFSAM/FEEH, recommends and executes HQ USAF/SG policy and procedures for all Air Force hyperbaric systems. The Chief, USAFSAM/FEEH provides consultation to HQ USAF/SG for all USAF clinical, operational, and research hyperbaric facilities. As such, the Chief, USAFSAM/FEEH (or senior ranking hyperbaricist on staff) will be the USAF Surgeon General's Consultant for Hyperbaric Medicine (T-3). USAFSAM/FEEH will:

2.3.1. Recommend proper HBO treatment tables for all USAF hyperbaric treatment/chambers (T-3).

2.3.2. Collect and disperse information to USAF hyperbaric dive team members on current/evolving techniques and procedures that promote safe and effective chamber operation. (T-3).

2.3.3. Routinely review Occupational Illnesses related to Decompression Sickness/Illness events documented in the Air Force Safety Automated System (AFSAS), to include Altitude Chamber Induced DCS (T-3). This review provides a focused awareness of factors contributing to pressurization injuries that affect Air Force members.

2.3.4. Assist medical provider personnel to determine suitable referral of DoD beneficiaries to hyperbaric facilities for DCS treatments (T-3).

2.3.5. Guide, develop and provide advanced training in clinical hyperbaric medicine and physiology for physicians, nurses, and medical technicians (T-3). The Hyperbaric Medicine Fellowship supplies hyperbaric medicine trained physicians for the DoD and allied nations when approved on a case by case basis. Board certification is granted by the American Board of Preventive Medicine, as it does for Aerospace Medicine, following the successful

passage of the Board's annual examination. The AF Fellowship will follow ACGME requirements in curriculum development and execution including indications recognized by the professional organization, the Undersea and Hyperbaric Medicine Society (UHMS). As such, it will work closely with the ACGME liaison at USAFSAM.

2.3.6. Assist and coordinate with USAF site designated hyperbaric facility safety directors and medical directors to approve equipment and materials for use in, on, and around hyperbaric environments supported by Air Force personnel (T-3).

2.3.7. At the Commander's request of a hyperbaric facility, conduct a staff assistance visit every 3 years, or earlier as required, to validate the safety and operations of hyperbaric treatment and research chamber facilities supported by USAF personnel (T-3).

Chapter 3

GUIDANCE AND PROCEDURES

3.1. Clinical Hyperbaric Chamber Facilities:

3.1.1. Shall provide hyperbaric oxygen therapy for patients with disorders that are recognized as amenable for treatment by the Undersea and Hyperbaric Medical Society's Committee for Hyperbaric Oxygen Therapy (<http://membership.uhms.org/?page=Indications>) and other disease processes as deemed medically indicated (T-0).

3.1.2. Shall render 24/7 consultation as requested from DoD aeromedical and hospital services in selecting those patients likely to benefit from hyperbaric oxygen therapy (T-3).

3.2. Operational Hyperbaric Chamber Facilities: Fixed hyperbaric chamber facilities and mobile hyperbaric systems will support the DoD's operational flying and Special Operation missions by treating altitude or diving-induced Decompression Sickness (DCS) and other emergent disorders within operational capabilities that are amenable to HBO therapy (T-2).

3.3. USAFSAM Hyperbaric Medicine Department: USAFSAM/FEEH shall provide subject matter expert consultation to the Air Force Medical Service (AFMS) regarding the treatment of suspected DCS or AGE, and other illnesses considered amenable to hyperbaric therapy (T-3). When a hyperbaric procedure in an operational environment is considered necessary to emergently preserve life, limb or eyesight, treatment should not be delayed, but a fellowship trained USAFSAM/FEEH hyperbaric physician should be consulted as soon as feasible. An additional exception to making pretreatment contact is when radio or telephone contact would adversely compromise a combat, secure, or special operations environment. USAFSAM/FEEH Contact Information. Emergency Referral/Consultation: (DCS, AGE, CO), during duty hours (0700 – 1600 CST) call the Hyperbaric Medicine Department at 210-292-3483 (DSN 554-3483). After normal clinic hours, (1600-0700 CST and weekends/holidays) the Hyperbaric Medicine Physician On call can be contacted at SAMMC Call Center at 210-916-2500 (DSN 429-2500). Request the Hyperbaric physician on call. An alternate number is: 210-336-6167.

3.4. DoD Mobile Hyperbaric Systems: The option of utilizing a mobile hyperbaric system for emergency hyperbaric treatment for a patient with an indication for usage shall be considered for operational use only (T-3). USAFSAM/FEEH must be notified when USAF personnel are considered for treatment (if patient's condition will not be adversely affected by delayed treatment) in any variation of MoHS (T-3). The EEHS is available to sustain the High Altitude Reconnaissance Mission Support, High Altitude Mission Support and USAF Special Operations Command programs as well as other Joint Service expeditionary, rescue, pararescue, and contingency operations. The USAF will utilize the Emergency Evacuation Hyperbaric Stretcher (EEHS) as its mobile hyperbaric systems (MoHS).

3.4.1. EEHS Unit Administration: Each Medical or Operational Unit maintaining the EEHS will appoint in writing an EEHS Training Manager (UEEHSTM) and an EEHS Equipment Manager (UEEHSEM) (T-3). These appointments will be made by the applicable Medical Group Commander or the Operational Support Group Commander. The appointment will be routed through the pertinent MAJCOM/SGP and USAFSAM/FEEH.

3.4.2. Training: Formal training is required for all EEHS Team Members before conducting EEHS operations. Personnel operating the EEHS must complete the USAFSAM Emergency Evacuation Hyperbaric Stretcher Course (B3OZYEEHS 0A1A/ B7OZYEEHS 0A1A) and maintain operator currency (T-3) Additional information can be found on the AFMS KX. Course specifics can be found at the Air Force Education and Training Course Announcements (<https://etca.randolph.af.mil>) by entering the keyword “hyper” on the search page. Personnel requiring this course should contact their local formal training office to request a training quota. This course is normally taught at various locations, with instructors traveling to those locations. The requesting unit provides the funding for mobile classes. The curriculum and student objectives are standardized; however, adjustments to the class length may need to be made based on availability of equipment, number of instructors, and facilities. Training requests are sent from the requesting unit/CC in memorandum format to USAFSAMRegistrar@wpafb.af.mil.

3.4.2.1. Certification Requirements: EEHS Team Members supporting USAF Operations must complete the USAFSAM EEHS course outlined above in section 3.4.2 of this Instruction and maintain recurrent training requirements outlined in section 3.4.2.2 of this Instruction. Personnel are then qualified to operate and maintain the EEHS in the discharge of their official duties and within the scope of their assigned duties.

3.4.2.2. Recurrent Training: Must be completed every six (6) months and recurrent training will be proctored by the UEEHSTM and include a complete set-up and tear-down of the EEHS while conducting a “patient scenario” appropriate for use with the EEHS (T-3). Training will be documented in the individual’s training folder or AFTR as applicable with an AF Form 797 and a 623a comment (T-3).

3.4.2.3. Recertification Requirements: Personnel that have previously met certification requirements described in paragraph 3.4.2.1 of this Instruction and have not operated the EEHS (training or otherwise) for equal to or greater than seven (7) months shall not be an EEHS Treatment Team Member (T-3). To recertify, the member must accomplish a complete set-up and tear-down of the EEHS while conducting a “patient scenario” appropriate for use with the EEHS. Personnel will be observed by the UEEHSTM, who must be currently certified. Personnel who have not operated the EEHS for equal to or greater than three (3) years must attend the USAFSAM Emergency Evacuation Hyperbaric Stretcher Course (B3OZYEEHS 0A1A/ B7OZYEEHS 0A1A) prior to being utilized as an EEHS Team Member (T-3).

3.5. Hyperbaric Team Staffing: The composition of hyperbaric chamber staffing varies based on the hyperbaric chamber facility’s requirements. Basic team member training qualifications are identified in paragraph 3.5.1 of this Instruction. The selection of members to supplement hyperbaric chamber staffing is per the discretion of the Medical Group Commander. Hyperbaric team members have traditionally been utilized based on previous familiarity with the effects of pressure or due to possessing a background knowledge/certification to manage patient’s medical conditions in the hyperbaric environment. **Table 3.1** of this Instruction provides the suggested staffing models displayed by Air Force Specialty Codes (AFSCs) for the primary and supplemental staff members used in hyperbaric operations. USAF and DoD sister service equivalents, similarly experienced and trained in hyperbaric patient care as those listed in **Table 3.1** of this Instruction may apply to become supplemental team members (see paragraph 3.5.2 of this Instruction).

Table 3.1. Hyperbaric Medicine Team Member and EEHS Team Members Eligible AFSCs:

| Primary Team Members | AFSC |
|--|----------------------|
| Medical Officer | 48XX |
| Nurse | 46XX |
| Physician Assistants | 42GX (for EEHS use) |
| Medical Technician | 4N0X1 |
| Pararescue Specialty | 1T2XX (for EEHS use) |
| Supplemental Team Members | AFSC |
| Physicians | 44XX/45XX/48XX |
| Oral Surgeons | 47SX |
| Nurses | 46XX |
| Physician Assistants | 42GX |
| Podiatrists | 42FX |
| Medical Technicians | 4N0X1 |
| Respiratory Therapist | 4H0X1 |
| Note: The list of Supplemental Team Members is not intended to be all inclusive, but to suggest AFSC's that have skills, knowledge and attributes that will benefit the hyperbaric mission. | |

3.5.1. Team Member Qualifications: Primary and Medical Supplemental Team Members:

3.5.1.1. All hyperbaric treatment team personnel that will be compressed inside a chamber must be found fit for dive duty by a flight surgeon or by a physician who is trained in diving medicine /hyperbaric medicine, http://www.nbdhmt.org/position_statements.asp#h01 (T-0). Hyperbaric team member medical qualifications shall mirror the standards outlined in AFI48-123, *Medical Examinations and Standards*, section 6.24.2, Operational Support Flying (OSF) Duty. The member will require an initial and an annual AF 1042, Medical Recommendation for Flying or Special Operational Duty (T-2).

3.5.1.2. At a minimum, Clinical HBO Primary Treatment Team Members must obtain basic HBO training by attending an UHMS approved Primary Training in Hyperbaric Medicine Course (T-3).

3.5.1.3. Physicians working at USAF hyperbaric treatment facilities must have completed a Fellowship in Hyperbaric Medicine and have board eligibility or board certification in hyperbaric medicine (T-3). Physicians who have completed a 40-hour hyperbaric medicine primary training course sponsored by the UHMS may be considered on a case by case basis for assignment to supplement the provider staff of a USAF hyperbaric treatment center. This will require approval by the USAF Surgeon General Consultant for Hyperbaric Medicine (T-3). A non-hyperbaric fellowship trained physician treating a USAF member in any hyperbaric capability will do so under the direction of USAFSAM/FEEH throughout the treatment dive (T-3).

3.5.1.4. Nurses assigned to clinical hyperbaric treatment facilities must have as a minimum, current Basic Life Support (BLS) certification and have completed a

hyperbaric medicine and wound care course approved by the UHMS or the National Board of Diving and Hyperbaric Medical Technology (NBDHMT) en-route, or within 3 months of assignment. In addition, a minimum of 2-years expertise in inpatient care or emergency nursing services is mandatory (T-3). Flight nurse experience or completion of the USAF Flight Nurse course (B3OBY46FX) is highly desirable. It is highly encouraged that military nursing staff obtains commensurate certification in hyperbaric nursing if assignment is expected to exceed two years.

3.5.1.5. Civilian contractors or civil servants assigned to clinical hyperbaric treatment facilities must maintain the appropriate level of verifiable training or certification for their respective hyperbaric positions. Contract or civilian maintenance personnel must demonstrate appropriate certification or verifiable subject matter expertise before they may perform either chamber operation or maintenance duties (T-3). Additionally, those personnel must hold, or obtain within 6 months of start date, certification by the NBDHMT as a Certified Hyperbaric Technician (T-3).

3.5.1.6. Personnel utilized to provide inside tender duties must demonstrate competency in patient care according to local medical facility training requirements and have current BLS certification (T-3). Continuing education for members requiring re-certification is the responsibility of the CHT or CHRN. Any civilian or contract personnel that are unable to comply with CHT/CHRN requirements prior to hyperbaric chamber operation must be evaluated to determine competence for assigned responsibilities and have the certification requirement waived by the Facility Safety Director and the Hyperbaric Medical Director prior to independent chamber operation (T-3).

3.5.1.7. Aerospace Medical Service Technicians (minimum 4N051 AFSC) assigned to clinical hyperbaric treatment facilities will obtain certification as a Certified Hyperbaric Technician through the National Board of Diving and Hyperbaric Medical Technology within one year of completing an approved NBDHMT Team Training course and 480 hours of clinical hyperbaric medicine work experience (T-3). The 490 SEI for hyperbaric medicine is awarded to 4N0X1s that possess a NBDHMT certification in Hyperbaric Medical Technology.

3.5.2. Qualifying for Hazardous Duty Incentive Pay (HDIP): A Regular Air Force (RegAF) or Reservist hyperbaric team member qualifies for HDIP in accordance with DOD 7000.14-R, *Financial Management Regulation, Military Pay Policy-Active Duty and Reserve Pay*. This can be accomplished by serving as an inside attendant on treatment dives, functional test dives, research dives, and proficiency or equipment-check dives. HDIP is prorated for the member's first and last months of hazardous duty. Members on HDIP orders who do not participate in a hyperbaric dive at least once during a month must be reported to their accounting and finance office for collect-pay action for that month according to DFAS-DEM 177-373, *Defense Joint Military Pay Program* (T-1). This collect pay action is not required if members are qualified to participate in hypobaric chamber operations in lieu of participating in hyperbaric dive operations. Qualifying members from DoD sister services will be provided the appropriate forms to submit through their specific service pay channels certifying their eligibility for HDIP.

3.5.2.1. Medical Supplemental Team Members (MSTMs): Within the local area, up to 30 other medical personnel qualified as MSTMs may be designated to assist clinical

hyperbaric treatment facilities and receive HDIP for hyperbaric exposures (T-1). Up to 10 other medical personnel qualified as MSTMs may be designated to assist operational hyperbaric treatment facilities and receive HDIP for hyperbaric exposures (T-1). All supplemental team members must be trained utilizing an approved curriculum from USAFSAM/FEEH. (T-3)

3.5.2.2. Team proficiency: Each team member is required to complete a minimum of one dive per month. Proficiency dives must go to a minimum of 2.0 ATA (33 FSW) to qualify. Permanently assigned hyperbaric team support personnel (non-physician/RN) should be rotated through applicable crew positions on subsequent dives in order to maintain optimum team proficiency (T-3).

3.5.3. **Dive Team Composition:** The clinical hyperbaric dive team shall consist of a minimum of four trained individuals while operating a Class A, multiplace hyperbaric chamber (T-3). Regarding patient and staff safety concerns, three qualified staff members (to include the staff physician) are the minimum needed to operate a monoplace hyperbaric chamber (T-3). In all cases, when a monoplace chamber is in operation, one qualified team member must stay at the chamber control and communication center to maintain a constant observation of patients being treated, http://www.nbdhmt.org/position_statements.asp#f06 (T-0). Clinical team member duties are determined and published in local job descriptions, and basic operational checklists are developed by the USAFSAM/FEEH and are available to other USAF clinical hyperbaric treatment facilities for local implementation.

3.6. General Administration:

3.6.1. Operational hyperbaric chamber facilities, to include MoHS, must annotate documentation of recompression therapy at a minimum on AF Form 1352/AF Form 1354. Use of locally generated forms or electronic medical record documentation to document the same information is acceptable (T-3). Clinical units may use comparable forms. Medical documentation is subject to the guidelines of the MTF providing oversight as listed in section **3.10** of this Instruction.

3.6.2. All clinical and operational hyperbaric chamber facilities must maintain a roster of qualified team members who can be promptly recalled 24 hours/day, 7 days/week (T-3). Each hyperbaric facility must practice actual or telephone recall procedures during after-duty hours at least quarterly. An actual recall (response for treatment) may satisfy the quarterly practice recall procedure.

3.6.3. Telephone directories at installations hosting clinical or operational hyperbaric chamber facilities must list duty-hour and after-duty-hour phone numbers for contacting on-call personnel of each facility (T-3). This may be accomplished through the installation's 24-hour command post or medical treatment facility call team activation process.

3.6.4. Each USAF hyperbaric or hypobaric chamber facility must maintain an updated listing of contingency hyperbaric chamber facilities in the surrounding geographical area (T-2). It is required that all USAF Flight Surgeon Offices also maintain a similar list of local area hyperbaric chambers to appropriately manage the effects of a suspected DCS or AGE patient (T-2). Chamber evaluation criteria and chamber directory links are available at the AFMS Knowledge Exchange, <https://kx2.afms.mil/kj/kx2/HyperbaricMedicine/Pages/home.aspx>.

3.7. Emergency Hyperbaric Treatments: USAFSAM/FEEH shall maintain oversight and consultation responsibilities of USAF patients requiring emergency hyperbaric oxygen therapy due to a DCS or AGE, whether they receive treatment at a DoD or civilian facility (T-3). USAFSAM/FEEH contact information is listed in section **3.3.1** of this Instruction. Additional supporting information such as chamber evaluation criteria and chamber directories is available at the hyperbaric section of the AFMS Knowledge Exchange. Specific administrative disposition guidance regarding Flying after DCS Treatments and Aeromedical Disposition is provided in the Waiver Guide, *Decompression Sickness and Arterial Gas Embolism*, <https://kx2.afms.mil/kj/kx2/HyperbaricMedicine/Pages/home.aspx>.

3.8. Types of Hyperbaric Chamber Exposures and de-nitrogenation: Hyperbaric chamber exposures are conducted for patient treatments, human research, student training, functional testing, proficiency testing, and equipment checks. All USAF hyperbaric facilities shall determine a risk of DCS to a hyperbaric inside attendant and incorporate a de-nitrogenation process for inside attendants, such as the USN Dive Tables, or other approved residual nitrogen calculator in an effort to minimize the risk of developing DCS (T-3).

3.9. Hyperbaric Facility Safety Officer/Director: Fixed hyperbaric chamber facilities shall designate a safety officer (operational)/director (clinical) for all hyperbaric operations http://www.nbdhmt.org/position_statements.asp#c03 (T-0). This position must be filled by an employee working in the hyperbaric department with recognized credentials and Safety Director Training. Hyperbaric Safety Director Training focuses on National Fire Protection Agency requirements for safe and responsible hyperbaric chamber use. The military does not sponsor this training, and therefore, it must be acquired through civilian opportunities. The Safety Officer/Director will report directly to the facility chief in order to assure the integrity of the safety program. The safety officer/director is responsible for assuring the safe operation, control, and maintenance of the chamber and support equipment as well as the safety of all personnel in and around the hyperbaric chamber. Safety Officer/Director pertinent information may be referenced in AFMS Knowledge Exchange.

3.10. USAF Hyperbaric Exposure Clinical/Operational Records: Hyperbaric Medicine Facilities shall be responsible for tracking the continued use of hyperbaric oxygen in treating selected medical conditions to better define hyperbaric oxygen efficacy, safety, and optimal dose and response. Hyperbaric Medicine Facilities shall maintain the clinical/operational records of patients, subjects and inside observer research files for all exposures at hyperbaric facilities involving Air Force personnel in accordance with AFRIMS Table 48-02, Rule 21.00 and AFI 33-364, *Record Disposition-Procedures and Responsibilities* (T-1).

3.11. Hyperbaric Oxygen Research: Clinical hyperbaric treatment facilities are authorized to conduct Major Force Program (MFP) 6 and Defense and Health Program (DHP) research projects. All human research protocols must be developed according to AFI 40-402, *Protection of Human Subjects in Biomedical and Behavioral Research* (T-1). Research facilities utilizing HBO on animal test subjects will refer to AFMAN 40-401 IP, *The Care and Use of Laboratory Animals in DoD Programs* (T-1). All hyperbaric oxygen protocols must be reviewed and

approved by USAFSAM/FEEH prior to submission to either the Institutional Review Board or the Institutional Animal Care and Use Committee (T-1).

THOMAS W. TRAVIS
Lieutenant General, USAF, MC, CFS
Surgeon General

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

AFI 11-202V3, *Aircrew Training, General Flight Rules*, 22 Oct 2010

AFI 11-403, *Air Force Aerospace Physiological Training Program*, 30 Nov 2012

AFI 33-360, *Publications and Forms Management*, 25 Sep 2013

AFI 33-364, *Record Disposition-Procedures and Responsibilities*, 22 Dec 2006

AFI 40-402, *Protection of Human Subjects in Biomedical and Behavioral Research*, 13 Dec 2010

AFI 48-123, *Medical Examination and Medical Standards, Flying and Special Operational Duty*, 05 Nov 2013

AFI 48-149, *Flight and Operational Medicine Program (FOMP)*, 29 Aug 2012

AFMAN 40-401 IP, *The Care and Use of Laboratory Animals in DoD Programs*, 16 Feb 2005

AFMAN 33-363, *Management of Records*, 01 Mar 2008

AFPD 40-4 *Clinical Investigation and Human Use in Medical Research*, 11 May 1994

AFPD 48-1, *Aerospace Medical Enterprise*, 23 Aug 2011

DFAS-DEM 177-373, *Defense Joint Military Pay Program*

DoD 5400.11, *DoD Privacy Program*, 08 May 2007

DoD 6025.18-R, *DoD Health Information Privacy Regulation*, 02 Dec 2009

DOD 7000.14-R Vol 7A, Chapter 24, *Financial Management Regulation, Military Pay Policy-Active Duty and Reserve Pay*, Apr 2013

P-117, Article 15-102, *Manual of the Medical Department NAVMED*, 03 May 2012

Prescribed Forms:

AF Form 1352, *Hyperbaric Patient Information and Therapy Record*, 01 Oct 1982

AF Form 1354, *Hyperbaric Chamber Operations Record*, 01 Oct 1982

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*, 22 Sep 2009

DD Form 2005, *Privacy Act Statement--Health Care Records*, Feb 1976

Abbreviation and Acronyms

AFI—Air Force Instruction

AFMOA—Air Force Medical Operating Agency

AFMS—Air Force Medical Service

AFMSA—Air Force Medical Support Agency

AFPC—Air Force Personnel Center
AFSC—Air Force Specialty Code
AFTO—Air Force Technical Order
AGE—Air gas embolism
ASME—American Society of Mechanical Engineers
ATA—Atmospheres Absolute
CHT—Certified Hyperbaric Technologist
CO—Carbon monoxide
CONUS—Continental United States
DCS—Decompression Sickness
DHP—Defense Health Program
DoD—Department of Defense
EEHS—Emergency Evacuation Hyperbaric Stretcher
FEEH—Hyperbaric Medicine Department
FSW—Feet Sea Water
HBO—Hyperbaric Oxygenation
HDIP—Hazardous Duty Incentive Pay
MFP—Major Force Program
MHS—Military Health System
MoHS—Mobile Hyperbaric System
MTF—Military Treatment Facility
NAVMED—Navy Medicine
NAVSEA—Naval Sea Systems Command
NBDHMT—National Board of Diving and Hyperbaric Medical Technology
NFPA—National Fire Protection Agency
PVHO—Pressure Vessel for Human Occupancy
SG—Surgeon General
SNDL—Standard Navy Double Lock
TRCS—Transportable Recompression Chamber System
UHMS—Undersea and Hyperbaric Medicine Society
USA—United States Army
USAF—United States Air Force

USAFSAM—United States Air Force School of Aerospace Medicine

USCG—United States Coast Guard

USN—United States Navy

WHASC—Wilford Hall Ambulatory Surgical Center