



DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 200 STOVALL STREET
 ALEXANDRIA, VA 22332

O4Ba

From: Commander, Naval Facilities Engineering Command 3 JUN 1973
 To: Commander, Naval Air Development Center, Warminster, Pa. 18974

Sub System Certification of Hypobaric Research Facility, 9-A7, in
 Bldg. 538 at the Philadelphia Naval Base

- Ref (a) NAVAIRDEVGEN ltr PW-4, Ser: 4572 of 25 MAY 1971
 (b) NAVMAT Memo, MAT-0341/JHO of 3 Nov 1971
 (c) NAVAIRDEVGEN ltr 4031 Ser: 2122 of 13 MAR 1973
 (d) NAVFAC ltr FAC-O4Ba/API:jm of 20 FEB 1973 with enclosures (1)
 and (2)
 (e) Deficiency Report Forms 1 through 20 for Hypobaric Research
 Chamber 9-A7, Indicating corrective action
 (f) "Scope of Safety Review" for Hypobaric Chamber, NADC Warminster,
 Pa. of 10 Sep 1971

1. In response to reference (a) and as recommended by reference (b) a System Certification Team visited the subject facility on 22 May 1973, to evaluate its material adequacy for manned operation under the conditions specified in reference (c).
2. The subject facility has been found to be materially adequate based upon the fact that the deficiencies noted in reference (d) have been resolved in a manner acceptable to the inspection team as noted in reference (e). The Chamber Complex is therefore Certified for Manned Operation from sea level to the lowest pressures attainable with existing vacuum pumps (approximately equivalent to an altitude of 80,000 feet.) utilizing various atmospheric mixtures of air, nitrogen, helium and other non-toxic gases, up to and including 100% oxygen.
3. It should be noted that granting system certification does not insure that certification will remain effective.
 - a. The requirements for sustaining system certification are:
 - a. Maintain written maintenance inspection, repair, and replacement records for all system certification scope items
 - b. Retain a detailed report for each operation including pre-flight and post-flight procedures
 - c. Report to NAVFAC all material casualties for equipment in the system certification scope, reference (f)
 - d. Report to NAVFAC any excursions beyond the certified operational range.

ENCL (2)

Philadelphia Naval Base

For additional guidance follow Chapter 10 of the NAVSHIPS 0994-007-7010 NAVFAC P-422, "Hyperbaric Facilities - General Requirements for Material Certification" dated May 1970

4. Non-destructive testing of critical weld areas should be performed at least every two years of operation.

5. Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Naval Facilities Engineering Command system certification is effective for 1 year beginning 15 June 1973, as long as the complex operates within the authorized range and maintenance and operations are performed in accordance with the appropriate operation and maintenance manual.

The responsibility for assuring that the system certification is properly sustained during the period noted above rests with the Officer in Charge of the Naval Air Development Center Hypobaric Chamber Facility.



E. G. WHITEHEAD
By direction

Copy to:
CNO (OP-23)
NAVMAT 034
NAVMAT 03414
NAVSEC 6141B
NAVSEC 6154E
NAVSEC 6147C
NORTHDIV

73150933