DEPARTMENT OF THE NAVY
NAVAL SEA SYSTEMS COMMAND
2531 JEFFERSON DAVIS HWY
ARLINGTON VA 22242-5160

IN REPLY REFER TO

3151
Ser 00C/4204
20 December 1999

MEMORANDUM

From: SEA 00C
To: SEA 00C3
Program Executive Office, Mine Warfare (PMS-EOD)
Program Executive Office, Expeditionary Warfare (PMS 325J)

Subj: CONTINUATION OF SYSTEM CERTIFICATION OF UNDERWATER BREATHING APPARATUS (UBA) MK 16 MOD 0

Ref: (a) OPNAVINST 3150.27A Navy Diving Program
(b) NAVSEA SS521-AA-MAN-010 U.S. Navy Diving and Manned Hyperbaric Systems Safety Certification Manual
(c) NAVSEA ltr 3151 Ser 00C35/3258 of 22 Oct 96
(d) NAVSEA SS521-AG-PRO-010 U.S. Navy Diving Manual
(e) NAVSEA ltr 3151 Ser 00C3B/C3443(C) of 19 Aug 94
(f) NAXDIVINGU ltr Ser 03E/641 of 20 Dec 1993
(g) NAVSEA SS600-AH-MMA-010 UBA MK 16 MOD 0 Manual
(h) NAVSEA S9592-AN-MMO-010 MK 2 MOD 0 EBS I Manual
(i) NAVSEA SS600-AL-MMA-010 MK 1 MOD 0 EBS II Manual
(j) PEO-MIW ltr 3151 Ser EOD-22/77 of 11 Aug 99
(k) NAVSEA 00C memo Ser 00C/4285 of 3 Jan 97

Encl: (1) Certificate of System Adequacy
(2) Requirements for Sustaining System Certification

1. As required by reference (a), the Naval Sea Systems Command (NAVSEA) System Certification Authority (SCA) has satisfactorily completed surveys of the UBA MK 16 MOD 0 and ancillary equipment at selected field commands and training units. As required by reference (a), the surveys followed the guidelines of reference (b) and included a review of the UBA MK 16 MOD 0 configuration management, logistic support, material conditions of the UBAs, procedural adequacy for operation, and maintenance records.

2. There are no conditions known to exist which would prevent continued manned use of the UBA MK 16 MOD 0 equipment as presently configured. There are currently 99 SPECWAR operational rigs, 304 EOD operational rigs and 140 rigs in layup that are listed in this MK 16 MOD 0 UBA class of equipment. This class of equipment is granted a continuance of certification for the following mission profiles.

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a. Nitrogen Oxygen (N2O2) mixed gas dives to 150 FSW for a maximum bottom time of 30 minutes.

b. Helium Oxygen (HEO2) mixed gas dives to 200 FSW for a maximum bottom time of 35 minutes.

c. Shallower dives within normal limits of U.S. Navy Closed-Circuit Mixed-Gas UBA Decompression Tables using 0.7 ATA Constant Partial Pressure Oxygen in Nitrogen or Helium are authorized.

d. Closed circuit operation of the MK 24 FFM (EOD and SPECWAR configurations 1 & 2) is certified to the same depths and times as the MK 16. Open circuit operation of the MK 24 FFM in the EOD configuration 1, is certified for EBS I and EBS II emergency air decompression profiles only, with divers at rest and not free swimming. Open circuit operation of the MK 24 FFM in the SPECWAR configuration 2, is certified for SDV profiles while connected to the boat air system, with divers at rest and not free swimming. Open circuit operation of configuration 2 is authorized while connected to the Dry Deck Shelter hooka air system. Additionally, open circuit operation for configuration 2 is authorized with the mask connected to a 13.5 cubic foot emergency bail out bottle during SDV operations following the restrictions listed in reference (c).

e. Minimum water temperature of 29 degrees Fahrenheit for both the MK 16 and MK 24 (open and closed circuit) operation.

f. Maximum water temperature of 90 degrees Fahrenheit for both the MK 16 and MK 24 (open and closed circuit) operation.

g. Canister durations for use of H.P Sodasorb and 408 Sofnolime L-grade, are provided in table 17-4 of reference (d).

h. Canister durations, water temperatures and depth limitations for use of 812 Sofnolime D-grade, for SDV long duration profiles are in accordance with reference (e).

i. Canister for use of 812 Sofnolime D-grade, for EOD operations are in accordance with reference (f).

3. All UBA MK 16 MOD 0, MK 24 FFM, EBS I, and EBS II diving operations must be conducted in accordance with the latest revisions of references (d), (g), (h) and (i).

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4. The UBA MK 16 MOD 0 revised Scope of Certification and the Pre-Survey Outline Booklet forwarded by reference (j), have been reviewed and are approved.

5. The MK 16 MOD 0 class certification, currently granted by reference (k), is hereby granted a continuance until 31 December 2002. Enclosure (1) is provided as evidence of system certification. Enclosure (2) provides specific mandatory terms for sustaining the certification.

6. Granting of system certification does not ensure that certification will remain in effect for the full stated period. The responsibility for properly sustaining system certification is jointly shared between the Director of Diving Programs, NAVSEA Code 00C3, the Program Executive Office, Mine Warfare NAVSEA Code PMS-EOD, and the Program Executive Office, Expeditionary Warfare NAVSEA Code PMS 325J. NAVSEA Code 00C3 is the technical authority for all U.S. Navy diving systems. NAVSEA PMS-EOD is the MK 16 MOD 0 Program Manager who is responsible for the configuration management of the equipment throughout its service life. Both NAVSEA PMS-EOD and PMS 325J are the MK 16 MOD 0 sponsors and are responsible for promptly informing user commands of the certification parameters outlined in this letter, and the enforcement of the requirements listed in enclosure (2), which are subject to survey by the SCA.

R. C. ASHER
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Acting

Copy to:
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