

SURVEY
SYSTEM CERTIFICATION REQUIREMENTS/GUIDELINES
FOR SHOREBASED RECOMPRESSION CHAMBERS
AND SURFACE SUPPORTED DIVING SYSTEMS

SYSTEM _____

SURVEYOR _____

SECTION I - GENERAL	DATE: / /	YES	NO	N/A
1. Has the PSOB for Standard U.S. Navy Surface Supported Diving Systems been submitted to and approved by NAVFAC OCE1? (USNCERTMAN SS521-AA-MAN-010 Chpt. 2 Para. 2-2.3)				
2. Has the PSOB for Standard U.S. Navy Recompression Chamber Systems been submitted to and approved by NAVFAC OCE1? (USNCERTMAN SS521-AA-MAN-010 Chpt. 2 Para. 2-2.3)				
3. Has the PSOB for the Escape Training Facility been submitted to and approved by NAVFAC OCE1? (USNCERTMAN SS521-AA-MAN-010 Chpt. 2 Para. 2-2.3)				
4. Are the primary and secondary air/gas systems clearly defined in the PSOB? (USNDM Vol. 1 Rev. 3 Chpt. 6 Para 6-7.2, App. D Pg. D-9 & Vol. 2 Chpt. 11 Para. 11-2.5)				
5. Are the drawings for all equipment within the Scope of Certification up to date reflecting the current "as-built" configuration? (USNCERTMAN SS521-AA-MAN-010 Chpt. 2 Para. 2-2.3 & Chpt. 3 Para. 3-2.7)				
6. Do systems drawings identify all functional components by type, material, part or piece number, etc. and are designation numbers for components shown on the diagrammatic/schematic drawings? (USNCERTMAN SS521-AA-MAN-010 Chpt. 3 Para. 3-2.7)				
7. Do adequate Operating Procedures (OP's) and Emergency Procedures (EP's) exist for system line up and operation and have they been reviewed by NAVFAC OCE1? (USNDM Vol. 1 Rev. 3 Chpt. 6 Para 6-7.2, Diving Advisory 91-19 & USNCERTMAN SS521-AA-MAN-010 Chpt 3 Para. 3-6)				
8. Do the OP's state the maximum and minimum operating pressures for the HP flasks? (USNCERTMAN SS521-AA-MAN-010 App. B Para B-13.1.3 & USNDM Vol. 1 Rev. 3 Para 6-7.2)				
9. Does the Scope of Certification adequately define the boundaries and differentiate between in-scope and out-of-scope equipment? (USNCERTMAN SS521-AA-MAN-010 Chpt. 2 Para. 2-2.1)				
10. Have Re-Entry Control Procedures (REC) been officially established in writing? (USNCERTMAN SS521-AA-MAN-010 Chpt. 3 Para. 2-2.1)				
11. Is REC procedure being followed and a log kept? (USNCERTMAN SS521-AA-MAN-010 App. I Para. I-5.2)				
12. Are the air/gas systems and recompression chamber adequately covered by PMS? (USNCERTMAN SS521-AA-MAN-010 Chpt. 3 Para. 3-2.8.4, 3-8 & OPNAVINST 4790.4)				
13. Are air samples taken every six months and are the sample reports available for review? (USNDM Vol. 1 Rev. 3 App. I)				
14. Is documentation available verifying that all diver's breathing gas meets the required purity standards? (USNDM Vol. 2 App C & NSTM Chpt. 550 Para. 7.15 & 7.77 and AIG 92-12)				
15. In installations where diving air systems receive air from or provide air for non-diving functions, are priorities established in writing assuring adequate air is available for diving and/or recompression chamber operation? (USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1)				
16. Are flexible hoses used for oxygen service of an approved type? (Teflon Lined?) (USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9.3)				
17. Hoses and connectors used in application where they may be subject to mechanical loading, or if they were to fail and rupture, (and cause physical harm), are they provided with strain relief? (USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9.3)				
18. Is air compressor suction located so as to avoid contamination or exhaust fumes? (USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.1.a & USNDM Vol 1 Rev. 3 Chpt. 6 Para. 6-7.1.1)				

SECTION I - GENERAL	DATE: / /	YES	NO	N/A
19. Is there a filter installed between the compressor air intake either at the weather deck end or prior to the line entering the compressor? (USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.1.a & Para. B-13.1.1.a & NSTM Chpt 551 Para. 1.3.1 & 1.3.2)				
20. Is MIL-L-17331, 2190 TEMP (normal operation), MIL-L-17672, 2135 TH (cold weather), or NAVFAC approved lubrication oil being used in the compressors? (Anderol 500, 750) (USNDM Vol. 1 Rev. 3 Chpt. 6 Para. 6-7.2.1 and PMS 5921/4 R-2)				
21. Is there a back pressure regulator installed between the compressor outlet and the accumulator for compressors with a discharge pressure over 1000 PSIG? (USNDM Vol. 1 Rev. 3 Chpt. 6 Para. 6-7.2.1 & USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.1.1.e)				
22. Do low/medium pressure compressors operate in a discharge pressure range that is within 15 percent of maximum rated output pressure? (NSI Engineering Study "Use of Back Pressure Regulators in DLSS")				
23. Are installed moisture separators and filter hosings within PMS hydrostatic test requirements? (NAVFAC MO-324 Inspection & Certification of Boilers & Unfired Pressure Vessels)				
24. Are all permanently installed air/gas flasks within PMS hydrostatic test requirements as defined by NAVFAC MO-324? (NAVFAC MO-324 Inspection & Certification of Boilers & Unfired Pressure Vessels)				
<p>25. An alternative method of recertifying MIL-F-22606 flasks is by using UT inspection. The UT process is defined in SEA 03ME PROCEDURE UTFIP-1 of December 1994. A separate flask inspection report shall be prepared in accordance with MIL_STD-271 for each flask inspected. The following information as a minimum shall be included in the report:</p> <ul style="list-style-type: none"> a. Was permission requested from NAVFAC OOCE? b. Is there a separate report for each flask tested? c. Are flasks identified by size and type? d. Is the magnetic particle and ultrasonic procedure(s) identified by revision number? e. Are the inspector's qualifications current? f. Is the date of each inspection recorded? g. Is the type of material recorded? h. Is the equipment used described by serial numbers (ultrasonic instruments and magnetic particle equipment)? i. Is the Ultrasonic transducer manufacturer, frequency, size, angle, and serial number recorded? j. Was the correct ultrasonic couplant used? k. Are the ultrasonic calibration standard serial numbers recorded? l. Is the paint condition and the specific technique used to compensate for paint (thickness measurement and shear wave inspections) described? m. Is a unique number assigned to each reportable discontinuity? n. Are the specific locations of each discontinuity on the flask reported? (Reporting shall be such that the area can be relocated after the flask is painted). o. Is the length of each discontinuity, and the method used to measure the length recorded? p. Is the orientation of the discontinuity (e.g., relative to the flask axis or weld direction)? q. Is the ultrasonic peak amplitude in dB, relative to reference level recorded? r. Is the location of the discontinuity from the scanning surface recorded? s. Is the characterization of the discontinuity recorded? t. Did the flask pass? <p>(SEA 03ME Procedure UTFIP-1 & MIL-STD-271)</p>				
26. Are all Department of Transportation (DOT) type cylinders within the DOT hydrostatic test date requirements? (Code of Federal Regulations Chpt. 1 Vol. 49 Sect. 173.34)				
27. Are composite flasks free of structural damage? (SS500-HK-MMO-010/LWDS Table 8-1)				
28. Are composite flasks being drained according to PMS and post diving procedures? (Diving System Operating Procedures)				

SECTION I - GENERAL	DATE: / /	YES	NO	N/A
29. Are HP air/gas flasks stowed so there is easy access for inspection and bleed off of accumulated moisture? On horizontal flasks check arrow to make sure it is pointed down. <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.1.d & ASTM Chpt. 551 Para. 1.12.3.2)</i>				
30. Are air/gas receivers (LP, MP volume tanks) and pressure vessels designed in compliance with Mil-Specs, ASME standards or other recognized specifications? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-4)</i>				
31. Have air/gas receivers (LP, MP volume tanks) been inspected/tested IAW MO-324? <i>(MO-324)</i>				
32. Is there relief valve protection downstream from all pressure reducing stations? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.4c)</i>				
33. Is the relief valve set at 100% of maximum allowable working pressure and tagged with the pressure setting, date set and testing activity? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Paras. B-9.7 & B-13.1.4.d & NSTM Chpt. 551 Para. 1.5.4.2)</i>				
34. Are relief valves (except chamber relief valves) installed so they cannot be isolated from the system they are protecting? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.4.d)</i>				
35. Are all critical installed system gages within calibration? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9.2)</i>				
36. Are all gages labeled, adequately supported, provided with isolation valves and mounted to allow for "blowout plug" operation? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9.2 & USNDM Vol. 1 Rev. 3 App. F)</i>				
37. Are valves, check valves, moisture separators, filters and regulators installed so that gas flow is in the direction of the flow arrows or inlet and outlet legends marked on the device? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.4.g)</i>				
38. Are all valves and functional components identified with a label plate bearing the system designation number as it appears on the drawing? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9 & NSTM Chpt. 505)</i>				
39. Are all valve handwheels color coded? Where (multiple service)? <i>(NSTM Chpt. 505 & USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9)</i>				
40. Are all valves and controls readily accessible? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-11)</i>				
41. Are all lines and piping runs labeled, color coded (where multiple service), and provided with flow direction arrows? <i>(NSTM Chpt. 505 & USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9)</i>				
42. Are lines adequately supported with pipe clamps/brackets and are they protected from external forces when in an exposed location? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9)</i>				
43. Are reducing stations provided with an emergency bypass or is there a second reducer installed in the system? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.4.b)</i>				
44. Are there Lanyarded dust caps on charging connections, manifold outlets, interface hose connections, and divers umbilical hoses when not in use? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9-3)</i>				
45. Are all components (filters, air receivers, flasks, moisture separators, moisture traps, divers air manifold, etc.) that trap condensed water or oil mist provided with drain valves? <i>(NSTM Chpt. 551 Para. 1.12.3.2)</i>				
46. On a system without its own air compressor, is there a moisture separator, filter and relief valve installed at the charging connection? or is it covered by OPS? <i>(NSTM Chpt. 551 Para. 1.15.2)</i>				
47. For 5000 PSI compressors used for charging 3000 PSI systems: Are relief valves in place to prevent over pressurization? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.4.d)</i>				
48. Are there provisions for lighting of diving control stations for night operations? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-10.8)</i>				

SECTION II - SURFACE SUPPORTED DIVING SYSTEMS (AIR/MIXED GAS)	YES	NO	N/A
DATE: / /			
1. Is the primary air/gas system capable of supporting the maximum number of divers (both pressure & flow) during the most imposing dive specified in the PSOB? <i>(USNCERTMAN SS521-APpp. B Para. B-13.1.1, USNDM Vol. 1 Rev. 3 Chpt. 6 Para. 6-7.1.2 & Vol 2 Chpt. 11 Para. 11.2.5)</i>			
2. Is the secondary air/gas system capable of supporting the maximum number of divers (both pressure & flow) on an ascent from the most imposing dive specified in the PSOB if the primary system fails at the "worst case" time? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.2, USNDM Vol. 1 Rev. 3 Chpt. 6 Para. 6-7.2 & Vol 2 Chpt. 11 Para. 11.2.6)</i>			
3. Is a Diver's Umbilical Hose Record Log maintained? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9.3)</i>			
4. Are all air/gas systems filtered before reaching the diver? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.1.f & USNDM Vol. 1 Rev. 3 Chpt. 6 Para. 6-7.1.1)</i>			
5. Does the diving air/gas manifold have a pressure gage and gage isolation valve? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9.2.b)</i>			
SECTION III - RECOMPRESSION CHAMBER	DATE: / /	YES	NO
<p>NOTE</p> <p>When conducting a survey of a recompression chamber that does not operate in conjunction with a surface supported diving system the appropriate portions of SECTIONS II and IV should be completed for the recompression chamber support systems.</p>			
1. Do calculations confirm that primary air system has sufficient air to pressurize the inner lock once to 165 feet and the outer lock twice to 165 feet and ventilate throughout one treatment table 4 using O ² ? (Unless stated otherwise in the PSOB.) <i>(USNDM Vol. 1 Rev. 3 App. D Pg. D-9)</i>			
2. Do calculations confirm secondary air system has sufficient air to pressurize the inner and outer locks one to 165 feet and ventilate for one hour at 70.4 SCFM? (Unless stated otherwise in the PSOB.) <i>(USNDM Vol. 1 Rev. 3 App. D Pg. D-9)</i>			
3. Is the primary air system capable of pressurizing the chamber inner lock to 165 FSW? Inner Lock Time: _____ Inner & Outer Lock Time: _____ <i>(USNDM Vol. 1 Rev. 3 App. D Pg. D-9)</i>			
4. Has interior of chamber been painted since last survey? a. If chamber has been painted, was a NAVFAC approved painting procedure used?			
5. Has an air sample been taken from the chamber interior to ensure that no undesirable off gassing or contamination has occurred? (Accomplished on steel chambers after any interior painting has been done, and on all chambers after overhaul or rework. Sample should also be taken if contamination is suspected.) If painted, use NAVSEA-OOC3-P1-001 paint instruction for sample - if not painted, use regular sample. <i>(USNDM Vol. 1 Rev. 3 App. D Pg. D-21)</i>			
6. Has chamber been pressure tested within the last two years? <i>(USNDM Vol. 1 Rev. 3 App. D Pg. D-21)</i>			
7. Is the material in the oxygen system, including valves, piping, fittings, gages, hoses, lubricants and software of approved material? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.4.e & MIL-STD-777 Para. 1-1)</i>			
8. Are sufficient oxygen cylinders on station and can cylinders be readily connected and removed from the system while oxygen is in use? <i>(USNDM Vol. 1 Rev. 3 App. D Para D-2.4)</i>			
9. Does each installed BIBS mask have an isolation valve or quick disconnect? <i>(Chamber Design Drawings)</i>			
10. Are chamber BIBS masks operating properly with adequate flow rates and no leaks? <i>(USNCERTMAN SS521-AA-MAN-010 Para. 3-2.4 and B-9.4 & SS500-AW-MMM-010 Chpt. 3 Para 3-3.2)</i>			
11. Are chamber relief valves set not to exceed the maximum allowable working pressure (MAWP) of the vessel and tagged with pressure setting, date set and testing activity? <i>(ASME Boiler & Pressure Vessel Code)</i>			

SECTION III - RECOMPRESSION CHAMBER	DATE: / /	YES	NO	N/A
12. Are ball-type gag valves installed between the chamber and chamber relief valve? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-13.1.4.d, & USNDM Vol. 1 Rev. 3 App. D Para. D-2.4)</i>				
13. Are these valves lock-wired in the open position with light (frangible) wire? <i>(USNDM Vol. 1 Rev. D Para. 3 App. D-2.4)</i>				
14. Is the relief valve gag valve warning plate affixed to the valve or to the chamber in the vicinity of the inner/outer lock relief valves? <i>(USNDM Vol. 1 Rev. 3 App. D Para. D-5.3)</i>				
15. Are all valves, including exterior oxygen control valves for the inner and outer locks readily accessible? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-11)</i>				
16. Are viewports free of chips, cracks, discoloration, crazing, or other defects? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-6.3, USNDM Vol. 1 App. D Pg. D-14 & SS500-AW-MMM-010 Chpt. 3 Para. 3-3.1)</i>				
17. Are acrylic viewports less than 10 years old? (Age is determines from date of fabrication.) Are the following forms available for new viewports? a. Form PVHO-2 Fabrication Certification for Acrylic Windows b. Appendix A Enclosure 2 Material Manufacturer's Certification for Acrylic c. Appendix A Enclosure 3 Material Testing Certification for Acrylic d. Appendix A Enclosure 4 Pressure Testing Certification <i>(PVHO 1 App. A Pg. 25 & USNCERTMAN SS521-AA-MAN-010 App. B Para. B-6.3)</i>				
18. Are all door dogs, or other type installed door securing devices removed or in good operational condition? <i>(USNCERTMAN-SS521-AA-MAN-010 App. B Para. B-6.4, USNDM Vol. 1 Rev. 3 App. D Para. D-5.2 & Pg. D-10 & SS500-AW-MMM-010 Chpt. 3 Para. 303.1)</i>				
19. Are inner and outer lock door gaskets free of cracks, deterioration and excessive adhesive adhesive on gasket butt joint? <i>(USNDM Vol 1 Rev. 3 App. D Para. D-5.2 & Pg. D-10)</i>				
20. Does the medical lock, if installed, operate properly? <i>(USNDM Vol. 1 App. D Pg. D-8 & SS500-AW-MMM-010 Chpt. 3 Para. 3-3.1 & IAW OP-3)</i>				
21. Is interior wiring properly supported and adequately protected so that it cannot be damaged or used for hand-holds? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-10/2)</i>				
22. Are interior lamps provided with 40 watt bulbs to prevent overheating? <i>(USNDM Vol. 1 Rev. 3 App. D Pg. D-2)</i>				
23. Is emergency lighting available for operators and to illuminate inside the chamber? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-10.10 & USNDM Vol. 1 Rev. 3 App. D Para. D-2.4)</i>				
24. Do primary (open speaker/headsets) and secondary communications systems in both the inner and outer locks work properly? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-10.10 & USNDM Vol. 1 Rev. 3 App. D Para. D-2.4)</i>				
25. Are mattress and bedding of approved fire resistant material, and are unauthorized flammable materials excuded? <i>(USNDM Vol. 1 Rev. 3 App. D Para D-6.2 Pg. D-21)</i>				
26. Is the "Fire/Explosion Hazard" warning sign posted at or in very close proximity to the chamber entrance door? <i>(USNCERTMAN-SS521-AA-MAN-010 App. B Para. B-15.b & USNDM Vol. 1 Rev. 3 App. D Pg. D-22)</i>				
27. Are aural protectors present in the chamber and do they have equalization holes drilled in each ear piece? <i>(USNDM Vol. 1 Rev. 3 App. D Pg. D-11)</i>				
28. Is there an approved means of extinguishing a fire in the interior of the chamber? <i>(Code of Federal Regulation (CFR) 197.328(13))</i>				
29. Are chamber bilges and medical lock clean and dry? <i>(USNDM Vol. 1 Rev. 3 App. D Pg. D-16)</i>				
30. Are drain plugs, if installed, free from signs of significant corrosion? <i>(USNDM Vol. 1 Rev. 3 App. D Pg. D-16)</i>				
31. Are all penetrators free of corrosion? <i>(USNDM Vol. 1 Rev. 3 App. D Pg. D-16)</i>				
32. Are deck plates properly secured? <i>(PMS MIP'S H-12/98-81, H-12/88-27 & USNDM Vol. 1 Rev. 3 App. D Pg. D-16)</i>				
33. Are the exhaust ports guarded to prevent injury on decompression or venting and are they free from sharp edges and burrs? <i>(USNDM Vol. 1 Rev. 3 App. D Pg. D-8)</i>				

SECTION III - RECOMPRESSION CHAMBER	DATE: / /	YES	NO	N/A
<p>34. In chambers with the modernization alteration installed, do the following listed components operate properly:</p> <ul style="list-style-type: none"> a. heater/chiller unit? b. carbon dioxide scrubber? c. oxygen analyzer? d. carbon dioxide analyzer? e. thermometer? f. Canty light intensity controls? g. GFI <p>(AIG 91-12)</p>				
SECTION IV - SYSTEM FABRICATION	DATE: / /	YES	NO	N/A
<p>1. Are the components used in the system, such as air compressors, filters, chamber gages, etc., on approved products list, or is documented approval from NAVFAC Ooce for their use available? (USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9.1)</p>				
<p>2. Are the piping, fittings, valves, unions and gaskets used in the fabrication of the compressed gas systems IAW the following tables from MIL-STD-777:</p> <ul style="list-style-type: none"> a. Table J for Air Systems? b. Table K for oxygen and Mixed Gas Systems? c. Or are NAVFAC approved? <p>(MIL-STD-777 Para. 1.1)</p>				
<p>3. Was the system brazed to the requirements of NAVSEA 0900-LP-001-7000, Class P3A, Special Category, or similar commercial specification approved by NAVFAC Ooce?</p> <p>(USNCERTMAN SS521-AA-MAN-010 Chpt. 3 Para. 3-3.2)</p>				
<p>4. Are records available showing brazer was qualified at the time the system was fabricated?</p> <p>(USNCERTMAN SS521-AA-MAN-010 Chpt. 3 Para. 3-3.2)</p>				
<p>5. Are records available showing that all brazing was done IAW qualified and approved brazing procedures? (USNCERTMAN SS521-AA-MAN-010 Chpt. 3 Para. 3-3.2)</p>				
<p>6. Are there visible indications (scribe marks one-inch or a pre-determined distance from joint) indicating proper fit-up of joint before brazing? (NAVSEA 0900-LP-001-7000 Para 5.5.6.3)</p>				
<p>7. Was welding done IAW MIL-STD-278, Class P-1, or a similar commercial specification approved by an equivalent welding authority? (USNCERTMAN SS521-AA-MAN-010 Chpt. 3 Prar 3-3.1 & MIL-STD-278 Sect. 1, Para 3.3.2(b)(1))</p>				
<p>8. Are records available showing welder and NDT inspector were qualified at the time the system was fabricated? (USNCERTMAN SS521-AA-MAN-010 Chpt. 3 Para. 3-3.1)</p>				
<p>9. Are the following class P1 records available for all welded joints:</p> <ul style="list-style-type: none"> a. Joint identification? b. Joint design? c. Base material type? (include heat/lot identification) d. Filler material type? (include heat/lot identification) e. Fit-up? f. Welding procedure identification? g. Heat treatment? h. Welder identification: i. NDT methods and results? j. Disposition of weld? k. Cycles of repairs to welds? l. Inspection procedure? m. NDT personnel identification? <p>(MIL-STD-278 Para. 4.1.3)</p>				
<p>10. Was oxygen system fabricated IAW approved procedures? (USNCERTMAN SS521-AA-MAN-010 Chpt. 3 Para. 3-3.1 & MIL-STD-278 Sect. 1, Para 3.3.2(b)(1))</p>				

SECTION IV - SYSTEM FABRICATION	DATE: / /	YES	NO	N/A
11. Is documentation available, dated and signed showing that the installed system has successfully completed a hydrostatic test of 1.5 times the maximum design working pressure? <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9.5 & NSTM Chpt 51., Para 1.16.1.1.1)</i>				
12. Confirm that any new components i.e. valves, reducers, pressure regulators, relief valves, etc., have been tested to 1.5 max system operating pressure. <i>(USNCERTMAN SS521-AA-MAN-010 App. B Para. B-9.5 & NSTM Chpt. 51, Para 1.16.1.1.1.)</i>				
13. Have new/refurbished valves been seat tightness tested? <i>(MIL-STD-1330D, Table VII)</i>				
14. Has system tightness/drop test which conforms to the following parameters been conducted: a. New construction (drop test required): 1. Air systems pressurized above 1000 psig, 24 hours, 1% drop? 2. Air systems pressurized below 1000 psig, 6 hours, 5% drop? 3. Helium/helium oxygen systems, 24 hours, 1% drop? 4. Oxygen systems, 24 hours, 1% drop?				
b. Modified, refurbished, overhauled (drop test required): 1. Air systems pressurized above 1000 psig, 24 hours, 1% drop? 2. Air systems pressurized below 1000 psig, 6 hours, 5% drop? 3. Helium/helium oxygen systems, 24 hours, 1% drop? 4. Oxygen systems, 24 hours, 1% drop? c. Joint tightness test where all distributed joints are accessible for soap testing and visual inspection: 1. Air oxygen, 0 leakage? 2. Helium/helium oxygen, 0.6 cc/min? (Leakage is identified by the formation of individual bubbles under white light inspection) <i>(MIL-STD-1330D, Table VIII)</i>				
15. Has system been cleaned and inspected for hydrocarbon removal and particulate level IAW a NAVFAC approved procedure? <i>(USNCERTMAN SS521-AA-MAN-010 Chpt. 3 Para. 3-3.3)</i>				
16. Has the system been checked for cleaning agent removal IAW a NAVFAC approved procedure? <i>(USNCERTMAN SS521-AA-MAN-010 App. G3 Para. 5-2 & G-5.3)</i>				
17. Has the system been flow tested IAW a NAVFAC approved procedure? <i>(USNCERTMAN SS521-AA-MAN-010 Chpt. 3 Para. 3-5.3)</i>				
SECTION V - DIVER'S HANDLING SYSTEMS	DATE: / /	YES	NO	N/A
1. Has the diver's handling system, as defined in the PSOB, been weight tested? <i>(USNCERTMAN SS521-AA-MAN-010 App. H Para. H-3.3.5, General Specifications for Overhaul of Surface Ships Sect. 092 Para 092F, Sect 582 Para. 582j & PMS MIP H-12/25)</i>				
2. Are Test Label Plates attached showing all required test data? <i>(General Specifications for Overhaul of Surface Ships Sect. 573 Para. 573h)</i>				
3. Are lines/wire rope used to deploy the diver's stage the proper size (diameter) and material? <i>(NSTM Chpt. 613)</i>				
4. Has the diver's stage been weight tested IAW PMS? <i>(USNCERTMAN SS521-AA-MAN-010 App. H Para. H-3.3.5)</i>				

SECTION VI - MISCELLANEOUS QUESTIONS	DATE: / /	YES	NO	N/A
Have you been getting Top Side Tech Notes? (If you have, what would you like to see in future issues?)				
What do you like least about Certification? What changes would you like to see?				
What can we do at NAVFAC to help make things better?				
Is the Navy supplying the right kind of equipment (i.e., diving rigs, HP compressors, helmets, hoses, HP systems)? If not, what would you like to see?				