

# CHAPTER 1

## INTRODUCTION

### 1-1. GENERAL.

#### WARNING

Unauthorized modification to, and deviations from, prescribed life support and survival equipment by individual crewmen could create unknown safety hazards. The OPNAVINST 3710.7 Series specifies minimum requirements for such equipment and is supplemented by the individual model NATOPS.

1-2. The OPNAVINST 4790.2 Series identifies NAV-AIRSYSCOM as the only authority for modification to life support and survival equipment, which is usually accomplished by the Fleet Support Team (FST) (formerly Cognizant Field Activity (CFA)) via Aircrew System Changes or a change to the equipment procurement package. This manual also permits an operating activity, with approval of the controlling custodian, to conditionally modify ONE unit of equipment in-service in order to correct or overcome unsatisfactory conditions in that equipment item. Any other type of deviation, peculiar configuration, or modification to life support and survival equipment is not allowed, and Aircrew Survival Equipmentmen have no authority or responsibility to perform them.

1-3. If an omission or conflict should occur between FST documents and NATOPS requirements, if there is a need for clarification of equipment configuration, or if equipment deficiencies are discovered, the applicable FST should be notified. The FST for Seat Survival Kits is Naval Air Warfare Center Aircraft Division (NAWCAD) Code 4.6.2.1, NAS Patuxent River, MD, 20670-1906. For parachutes and related hardware, including torso harnesses, the FST is the Naval Air Warfare Center Weapons Division, Code 463000D, China Lake, CA, 93555.

1-4. NAWCAD DET, INDIANAPOLIS, IN 46219, has cognizance over all survival radios and emergency beacons.

1-5. The Aviation-Crew Systems manual is released under the authority of the Naval Air Systems Command in compliance with the request of the Chief of Naval Operations. The instructions contained herein are mandatory. This manual consists of separately bound volumes, as listed below:

TITLE	PUBLICATION NUMBER
Inflatable Survival Equipment (Liferafts)	NAVAIR 13-1-6.1-1
Inflatable Survival Equipment (Life Preservers)	NAVAIR 13-1-6.1-2
Parachutes	NAVAIR 13-1-6.2
Seat Survival Kits (Oxygen Hoses and Non-SKU Seat Kits)	NAVAIR 13-1-6.3-1
Seat Survival Kits (SKU Series Seat Kits)	NAVAIR 13-1-6.3-2
Oxygen Equipment (Aircraft Equipment, Masks, and Other Systems)	NAVAIR 13-1-6.4-1
Oxygen Equipment (Regulators)	NAVAIR 13-1-6.4-2
Oxygen Equipment (Concentrators)	NAVAIR 13-1-6.4-3
Oxygen Equipment (Converters)	NAVAIR 13-1-6.4-4
Rescue and Survival Equipment	NAVAIR 13-1-6.5
Aircrew Personal Protective Equipment (Aircrew/Passenger Equipment)	NAVAIR 13-1-6.7-1
Aircrew Personal Protective Equipment (Clothing)	NAVAIR 13-1-6.7-2
Aircrew Personal Protective Equipment (Helmets and Masks)	NAVAIR 13-1-6.7-3
Aircrew Personal Protective Equipment (Protective Assembly, Aircrew Survival - Armor)	NAVAIR 13-1-6.7-4
Special Missions Aircrew Equipment	NAVAIR 13-1-6.10

## NAVAIR 13-1-6.3-2

1-6. The purpose of this volume is to provide technical information related to the configuration, application, function, inspection, and maintenance of a particular category of aircrew safety and survival equipment. The information contained in each volume is intended for Organizational, Intermediate, and Depot Levels of maintenance as established within the Naval Aviation Maintenance Program (OPNAVINST 4790.2 Series).

### 1-7. DESCRIPTION OF NAVAIR 13-1-6.3-2.

**1-8. CONTENTS.** This volume contains all information on configuration, function, application, modifications, rigging and packing, inspection and maintenance, local fabrication of tools and equipment, and Illustrated Parts Breakdown of seat survival kits (SKU-Series Seat Kits).

**1-9. CONFLICTS AND SUPERSEDURES.** These volumes shall take precedence over all other documents except for effective related Aircrew System Bulletins and Changes, and Interim Aircrew System Bulletins and Changes. These documents are effective until officially rescinded, canceled, or superseded.

1-10. The modifications section of each chapter lists all effective changes which affect seat survival kits and have been issued on or before the date of latest change or revision to this volume. When applicable, the subject matter of these documents has been incorporated within the text of the appropriate chapters.

1-11. Effective changes and bulletins which effect seat survival kits and are issued between changes and revisions to this volume should be recorded in the modification section of the manual for the affected equipment by annotating the outer margin of the page with a vertical line and the number of the change or bulletin. A copy of the change or bulletin should be filed in a separate binder in the ALSS work center. When this volume is updated these documents will be listed in the modification sections of the applicable chapters and the text of the chapters will be updated to reflect the changes and bulletins.

1-12. Appendix A is reserved.

1-13. Appendix B lists torquing requirements for flared tube and pipe connections.

1-14. Appendix C lists all metric system and metric unit conversion charts.

**1-15. UPDATING.** These volumes will be updated periodically by the issuance of a revision, which is a 100 percent replacement of pages. Between revisions, changes and rapid action changes will be released, which are partial replacement of pages. All added and changed pages shall be incorporated in these volumes according to page number. Superseded and deleted pages shall be discarded in accordance with the local security procedures for data containing distribution statements. A list of effective pages is provided with each change. A summary of the major changed areas for a particular change or revision is located directly beneath the list of effective pages.

**1-16. COMMENTS AND RECOMMENDATIONS.** Comments and recommendations shall be submitted using established deficiency reporting systems in accordance with OPNAVINST 4790.2 Series.

**1-17. ENGINEERING DRAWINGS.** Government engineering drawings are available to the fleet by submitting a letter of request to Commanding Officer, Naval Air Technical Data and Engineering Service Command, Naval Air Station North Island, P.O. Box 357031, Building 90 Distribution, San Diego, CA 92135-7031. Each request should include the equipment nomenclature, part number, and CAGE code. The drawings will be provided in the form of aperture cards (Automatic Data Processing Punch Cards). Technical data may also be obtained online at the NATEC website located at <http://www.natec.navy.mil>. Authorized users must first establish an account prior to obtaining data. Access/account information can be obtained at the NATEC website.

**1-18. TECHNICAL DIRECTIVES AND FORMS.** NATEC is the central management activity for aeronautical technical publications, engineering drawings and associated technical services. Upon release, NATEC will forward to all designated activities, copies of Technical Directives and Forms. Additional copies are available utilizing the procedures shown in paragraph 1-14 as well as from the PMA-202 website at <https://pma202.navair.navy.mil>.

**1-19. QUALITY ASSURANCE.** Quality assurance steps are provided for critical operations. When a step is underlined, the Aircrew Survival Equipmentman shall perform the operation and then have performance verified by a Collateral Duty Inspection (CDI-CDQAR-QAR-QA) as established within the Naval Aviation Maintenance Program (OPNAVINST 4790.2 Series) prior to proceeding to the next operation. In no case shall an Aircrew Survival Equipmentman perform his/her own quality assurance inspection.

**1-20. ALLOWANCE LISTING OF SEAT SURVIVAL KITS.**

1-21. NAVAIR 00-35QH-2 establishes the allowance listing for seat survival kits as applicable. The allowance is generally determined by the number of crew-member seats (stations) aboard the aircraft and the specific duties required for the aircrewmember. A specific spare allowance is provided for extra flight crew requirements, assemblies down for rework, awaiting replacement units, and inspection cycle spares.

**1-22. LEVELS OF MAINTENANCE.**

1-23. Maintenance, inspection, repair, and overhaul shall be performed at the established level of maintenance in accordance with and as defined in OPNAV-INST 4790.2 Series. In cases of necessity, such as at very small activities, Organizational and Intermediate Levels may be combined within local capabilities. It is recognized that, due to conditions other than those assumed here, minor deviations to procedures outlined in this manual may be unavoidable. Prior to forwarding to a depot facility, it shall be definitely determined that maintenance cannot be performed at a lower level.

**1-24. SUPPLEMENTARY PUBLICATIONS.**

1-25. In addition to Aircrew System Bulletins and Changes, and Interim Aircrew Systems Bulletins and Changes still in effect, the following publications supplement this volume.

1. NAVAIR 00-35QH-2, Allowance List, Aviation Life Support System and Airborne Operation Equipment for Aircraft Squadrons Navy and Marine Corps.

2. OPNAV INSTRUCTION 4790.2 Series. The Naval Aviation Maintenance Program.

3. OPNAVINST 4410.2A.

4. NATOPS MANUALS provide information on required Aircrew Personal Protective Equipment.

5. Naval Logistical Library (NAVSUP 600) lists directives and manuals available from Naval Publications and Forms Center.

6. P2300, Repairable Assemblies (lists repairable assemblies and applicability of Navy aviation materials).

7. P2310, Supporting Repair Parts (lists supporting repair parts of Navy aviation materials).

8. NAVAIR 13-1-6-8 Work Unit Code Manual lists work unit codes assigned to survival equipment.

9. NAVSUPINST 4423.29 (Series) Naval Material Command (NMC) Uniform Source, Maintenance and Recoverability (SM&R) Codes.

10. NAVAIR 01-1A-509 Cleaning and Corrosion Control Manual.

11. ASTM-D-6193 Standard Practice for Stitches and Seams.

12. NAVAIR 16-30URT33-1 Beacon Set, Radio AN/URT-33A, Organizational and Intermediate Maintenance Instructions.

13. NAVSUP P-719 is a Guide for the Assignment and Use of Source, Maintenance and Recoverability (SM&R) Codes.

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