

UN-
Nuc. 129
Total 675
7/21-1
3/6449

UNCLASSIFIED

AEC-AFSWP
NAVORD
AIR FORCE

TP
SWOP
T.O.

B36-506
B36-506
11N-B36-506

129

[Redacted]

TECHNICAL MANUAL

Special Weapons Retrofit Order

Alteration Order No. 172 to
Mk 36Y1 Mod 1 Bomb,

Mk 36 Mod 1 Type 3 Bomb, and

Mk 36 Mod 0 Bomb Maintenance Spares

OPERATIONAL SECURITY REVIEW
DATE: 9/5/96
AUTHORITY: W.C. Layne
REASON: 96SD 465
DATED: 8-29-96
PERSON VERIFYING MARKING & DATE: W.C. Layne 9-5-96

SANDIA SYSTEMATIC DECLASSIFICATION REVIEW	
1 st Review Date: 8/28/96	Determination (Circle Number):
Authority: ADD	1. Classification Retained
Name: W.C. Layne	2. Classification Changed to: U
2 nd Review Date: 8-29-96	3. Contains No DOE Classified Information
Authority: ADD	4. Coordinate With:
Name: W.C. Layne	5. Contains UCAIT
	6. Comments:

Published under the authority of the Secretaries of the Navy and Air Force, the Chief, Armed Forces Special Weapons Project, and the Atomic Energy Commission.

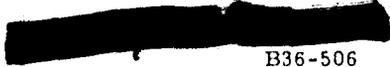
Classification cancelled (or changed to [Redacted])
 (Insert appropriate classification)

by authority of MC Holloway
 (Person authorizing change in classification)

by W.D. Walter 6-25-59
 (Signature of person making the change and date thereof)

UNCLASSIFIED

[Redacted]



B36-506

UNCLASSIFIED

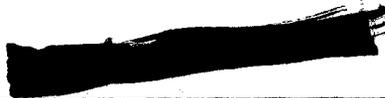
Reproduction for non-military use of the information or illustrations contained in this publication is not permitted. The policy for military use reproduction is established for the Army in AR 380-5 and SR 380-5-10, for the Navy in Navy Regulations, Article 1517, and for the Air Force in Air Force Regulation 205-1.

LIST OF EFFECTIVE PAGES

TOTAL NUMBER OF PAGES IN THIS MANUAL IS 12, CONSISTING OF THE FOLLOWING:

<u>Page No.</u>	<u>Latest Change No.</u>
Title	Original
A	Original
i & ii	Original
1 thru 7	Original
Authentication	Original

UNCLASSIFIED



B36-506

UNCLASSIFIED

(This page intentionally left blank)

UNCLASSIFIED

UNCLASSIFIED

SAFETY PRECAUTIONS

TOXIC MATERIALS.

1 Most vapors of cleaning agents are toxic if inhaled in large quantities for extended periods. Use toxic cleaning agents sparingly and only in well-ventilated areas. Be sure that cleaning agent containers are kept closed except when in actual use.

2 Wash hands thoroughly with soap and warm water after using cleaning agents.

FLAMMABLE MATERIALS.

Use flammable cleaning agents and paints sparingly and only in well-ventilated areas. No sparks, open flames, or other sources of ignition are to be present when using flammable materials.

UNCLASSIFIED

SECTION 1

GENERAL

UNCLASSIFIED

1-1 COMPLIANCE REQUIREMENTS.

1-1.1 BY WHOM WORK WILL BE ACCOMPLISHED. This work will be accomplished by all activities having custody of the affected material.

1-1.2 WHEN WORK WILL BE ACCOMPLISHED. At a time scheduled by the inspection and repair activity.

1-1.3 MAN-HOURS AND PERSONNEL REQUIRED.

1-1.3.1 MAN-HOURS.

1-1.3.1.1 It is estimated that 1 man-hour will be required to alter each Mk 36Y1 Mod 1 War Reserve Bomb or Mk 36 Mod 1 Type 3 Bomb.

1-1.3.1.2 For Mk 36 Mod 0 Bomb Maintenance Spares, it is estimated that 1 man-hour will be required to perform this alteration.

1-1.3.2 NUMBER OF PERSONS REQUIRED. It is recommended that two persons be assigned to each team performing this alteration.

1-1.4 FORM ENTRY REQUIREMENTS. Accomplishment of this alteration shall be noted on the inspection record card, packing sheets, and associated records.

Compliance with this retrofit order shall be reported as directed by the applicable Service.

1-1.5 PROJECT NUMBER. All military shipping documents and correspondence associated with this retrofit order will cite AFSWP Project Number 26-57.

1-2 PURPOSE.

1-2.1 MK 36Y1 MOD 1 BOMB (WAR RESERVE). Cable CF-1242 is replaced by cable CF-1423 to provide the reliability originally intended.

1-2.2 MK 36 MOD 1 TYPE 3 BOMB. Alteration of Mk 36 Mod 1 training bombs is to rework the equipment by incorporating the changes described in paragraph 1-2.1.

1-2.3 MK 36 MOD 0 BOMB MAINTENANCE SPARES. Alteration of the Mk 36 Mod 0 Bomb Maintenance Spares is to provide support to bombs in which the change described in paragraph 1-2.1 has been incorporated.

1-3 WEIGHT AND BALANCE INFORMATION.

The weight and balance change resulting from the instructions contained herein is negligible.

UNCLASSIFIED

SECTION 2

UNCLASSIFIED

SUPPLY DATA

2-1 PARTS REQUIRED FOR EQUIPMENT.

2-1.1 PART NUMBERS.

2-1.1.1 The AEC part numbers given in this document are also applicable to the Army and Navy. Available Air Force stock numbers are listed separately, where required.

2-1.1.2 Digital suffix numbers to AEC part numbers denote either the original part (-00) or changes affecting function and/or interchangeability (-01, etc.). These numbers are assigned in sequence and changes are accomplished in sequence. Thus higher digital suffix numbered parts have incorporated all lower numbered changes and are, therefore, interchangeable with all lower suffix part-numbered parts. However, unless otherwise specified, a lower part-numbered part is not interchangeable with a part having a higher suffix. Changes to suffix numbers will not be reflected in this manual unless such changes cause a revision of procedures or are necessary for identification purposes.

2-1.2 PARTS REQUIRED (AEC SUPPLIED). One CF-1423 cable assembly (P/N 352222-00) is required to perform this alteration on both the bomb and bomb maintenance spres. The cable is supplied in Alt 172 package 1/1 (P/N 340945-00).

2-1.2.1 WAR RESERVE MATERIAL.

2-1.2.1.1 Retrofit material for initial application to war reserve major assemblies and/or end items in Department of Defense custody and Air Force OSS/SSF will be supplied in quantities as specified in the delivery schedule provided Service Control Points by Commander, Field Command. Distribution will be through normal supply channels in accordance with established priorities. Further redistribution will be made by Service Depots in accordance with established Service procedures.

2-1.2.1.2 Retrofit material for initial application to war reserve major assemblies and/or end items required for National Stockpile Sites will be supplied in quantities required and on a time scale in accordance with the Field Command Stockpile Maintenance and Modification Schedule.

2-1.2.2 TRAINING MATERIAL. Retrofit material for initial application to training weapon major assemblies will be furnished automatically, based on

stated Service requirements, to Service Special Weapon Depots in accordance with existing procedures. Further distribution will be made by the Service Depots in accordance with established Service procedures. Retrofit material will be furnished automatically to Air Force organizations in accordance with established priorities, as stock number 0600-11N-B36-506. Delivery of material is scheduled to begin approximately April 1958 and continue at the rate of 200 cables per month.

2-1.3 SIZE, WEIGHT, AND COST OF MATERIAL. The CF-1423 cable assembly is shipped in a package (P/N 340945-00) which measures 15 by 10 by 3 inches, inside dimensions, and which weighs approximately 3 pounds. The estimated cost is \$60.00.

2-1.4 PARTS REQUIRED (NOT KIT SUPPLIED).

2-1.4.1 The material listed in table I is required for compliance with this retrofit order. Acceptable alternates to expendable materials listed in table I are indicated in TP 35-51 or TP 40-54, as applicable.

2-1.4.2 All organizations other than the Air Force will requisition the material from appropriate supply activities through normal supply channels.

2-1.4.3 Air Force organizations in ZI will requisition material not kit supplied by line item through normal supply channels. Overseas organizations will be furnished this material automatically as a kit by AFD 2388.

2-2 ALTERATION OF SPARES IN STOCK.

2-2.1 IDENTIFICATION OF SPARES.

2-2.1.1 MAINTENANCE SPARES. Procedures for the alteration of the Mk 36 Mod 0 Bomb Maintenance Spares are provided in paragraph 3-3.

2-2.1.2 BASE AND MILITARY SPARES. No rework is required for items in base and military spares.

2-2.2 PARTS REQUIRED TO ALTER BOMB MAINTENANCE SPARES. One CF-1423 cable assembly (P/N 352222-00) is required to accomplish this retrofit order on the Mk 36 Mod 0 Bomb Maintenance

SECTION 3

MODIFICATION DATA

3-1 GENERAL.

Application of these procedures accomplishes Alt 172 to the Mk 36Y1 Mod 1 Bomb, Mk 36 Mod 1 Type 3 Bomb, and Mk 36 Mod 0 Bomb Maintenance Spares.

3-1.1 The alteration procedures contained herein assume the completely assembled bomb has been removed from stockpile storage and is in the stockpile storage condition. After performance of the alteration procedures, the bomb will have been returned to the stockpile storage condition.

3-1.2 All operations shall be in accordance with the specification contained herein, and to the highest grade of professional practices associated with the work.

3-1.3 Except as noted herein, the sequence of procedures in this manual may be changed by the using organization to facilitate operations, provided no inspections are invalidated and no safety features violated.

3-1.4 Prior to repackaging, it is necessary that the cleanliness of each part that has been exposed be re-established. Visually inspect such parts and remove any dirt, dust, oil or grease, chips, or other foreign material.

3-1.5 Before installing a replacement part, visually inspect for any damage or defective conditions which may have been incurred during shipment, storage, or handling.

3-1.6 Refer to TP 35-51 for cleaning of foreign matter from small areas, closing and sealing of containers, obliteration, and marking information. Specific marking instructions are included where required and are to be used in conjunction with the general marking information in TP 35-51. If the color or size specified for application of a marking on the bomb or container does not match the color or size of the marking being changed, use a color or size that will.

3-2 ALTERATION PROCEDURES FOR MK 36Y1 MOD 1 WAR RESERVE BOMBS AND MK 36 MOD 1 TYPE 3 BOMBS.

3-2.1 UNPACKAGING PROCEDURES.

3-2.1.1 The towbar may or may not be assembled to the bolster truck. If it is necessary to move the bomb

and bolster truck forward or backward, the towbar is assembled to fittings on each side of the front bolster and secured by means of captive pins. If it is necessary to move the bomb and bolster truck sideways, the towbar is assembled to fittings on the straddle-carrier hoisting adapters on either side of the bolster truck and secured by means of captive pins.

3-2.1.2 Unfasten the snap fastener securing the front panel of the security cover to the top panel. Remove the front panel from the work area.

3-2.1.3 Unbuckle the two straps of the top panel. These straps are located beneath the H-423 Bolster Truck.

3-2.1.4 Roll the top panel back to expose the entire front case section of the bomb.

3-2.2 ALTERATION PROCEDURES.

3-2.2.1 Remove the wire seal and open the cover of the toolbox on the bolster truck. Remove sufficient parcels to permit the removal of the CF-1242 cable assembly. Remove and dispose of the CF-1242 cable.

3-2.2.2 Obtain the container containing the CF-1423 cable assembly. Open the container and remove the parcel from the container. Place the CF-1423 cable and the other appropriate parcels in the toolbox, making sure that the cable wrapping will not be punctured when the cover is closed. Use sufficient bound hair wadding to prevent excessive movement. Close the cover of the toolbox and wire-seal in accordance with procedures in TP 35-51.

3-2.3 REVISION OF MARKINGS.

3-2.3.1 Using lacquer (yellow, 3305), or enamel (yellow, 33538), revise markings in accordance with procedures in paragraphs 3-2.3.2 through 3-2.3.6, and TP 35-51.

3-2.3.2 Paint or stencil "172" after the ALTS heading on each side of the bomb. Position the new Alt number to the right of any other Alt numbers present and separate from the existing Alt numbers by a comma. Use numbers approximately 1 inch high.

3-2.3.3 Add the rework number under the first digit on the extreme left of the Mk-Mod part number and package part number on each side of the bomb. If existing rework numbers are present, add the rework number to the right of the existing numbers

and separate by a comma. For Mk 36Y1 Mod 1 War Reserve Bombs, apply rework number "5"; for Mk 36 Mod 1 Type 3 Bombs, apply rework number "4". Use numbers approximately 1 inch high.

3-2.3.4 Using olive drab enamel or lacquer (OD, 3412), obliterate the date stenciled on each side of the security cover. Paint or stencil the current month and year in place of the obliterated date. Use characters approximately 1 inch high. The markings appear in several locations on the security cover; make revision to the appropriate marking at each location.

3-2.3.5 On the security cover, add the rework number under the first digit on the extreme left of the Mk-Mod and package part numbers. If existing rework numbers are present, add the number to the right of the existing number and separate by a comma. For Mk 36Y1 Mod 1 War Reserve Bombs, apply rework number "5"; for Mk 36 Mod 1 Type 3 Bombs, apply rework number "4". Use numbers approximately 1 inch high.

3-2.3.6 Paint or stencil "172" after the ALTS heading on the end and side of the security cover. Position the new Alt number to the right of any other Alt numbers present and separate from existing Alt numbers by a comma.

3-2.4 REPACKAGING.

3-2.4.1 Pull the front end of the top panel of the security cover forward so that the arrow is positioned approximately at the center of the framework.

3-2.4.2 Place the front panel in position with the arrow on the upper end pointing toward the arrow on the top panel. Snap the front panel to the top panel. Fold the lower end of the front panel under the assembly and snap in place.

3-2.4.3 Pass the two long straps underneath the H-423 and outside of the H-423 cross member and the toolbox, and secure with the buckles on the opposite side.

3-2.4.4 As required, position the towbar on the front or side of the H-423, align the holes, and insert the two pins in the two holes.

3-3 ALTERATION PROCEDURES FOR MK 36 MOD 0 BOMB MAINTENANCE SPARES.

3-3.1 GENERAL REQUIREMENTS. For general requirements, refer to TP 35-51 for packaging, fabrication of any boxes or containers, and identification markings. As required, clean the items which are to be packed by any cleaning method which will not damage them, in accordance with procedures in TP 35-51.

3-3.2 MATERIAL REQUIRED FOR PACKING BOMB MAINTENANCE SPARES. Packaging materials are indicated in table II. Refer to TP 35-51 for unit of issue and AEC part numbers.

3-3.3 ITEMS TO BE PACKED. Inventory items to be packed against current packing sheets. Reattach external packing sheets in accordance with procedures in TP 35-51.

3-3.4 UNPACKAGING, ALTERATION, AND REPACKAGING OF MK 36 MOD 0 BOMB MAINTENANCE SPARES.

3-3.4.1 Obtain the container identified as Mk 36 Mod 0 BMS 2/8. Remove the wire seal from the container. Remove the bolts and nuts that secure the clamping ring to the container. Remove the clamping ring and cover.

3-3.4.2 Remove the bound hair wadding, two 16-unit bags of activated desiccant, and the card humidity indicator from the container. Remove sufficient wadding and parcels to permit removal of the CF-1242 cable from the container. Remove and discard the CF-1242 cable.

3-3.4.3 Obtain the container containing the CF-1423 cable assembly. Remove the CF-1423 cable from the container, leaving the cable wrapped.

3-3.4.4 Pack the CF-1423 cable and other appropriate parcels in the container, using sufficient bound hair wadding (1 in. thick) to prevent excessive movement.

3-3.4.5 Place two 16-unit bags of activated desiccant and a card humidity indicator in the container.

3-3.4.6 Close and wire-seal the container in accordance with procedures in TP 35-51.

3-3.4.7 Revise the markings on the container BMS 2/8 and all other containers in the bomb maintenance spares group in accordance with procedures in TP 35-51. Add "172" after the ALT heading on each container. If existing Alt numbers are present, add the number to the right of the existing number and separate by a comma. Add the rework number "7" under the first digit on the extreme left of the Mk-Mod part numbers on each container. Add the rework number "2" under the first digit on the extreme left of the BMS 2/8 package part number. If existing rework numbers are present, add the rework number to the right of the existing number and separate by a comma. Revise the date on BMS 2/8. Use a color and size to match existing markings.

TABLE II
PACKAGING MATERIAL FOR MK 36 MOD 0 BOMB
MAINTENANCE SPARES*

DESCRIPTION	QUANTITY
Barrier Material, Paper, Noncorrosive (crepe)	As required
Container, Drum-Type (35 gal)	1
Desiccant, Activated (16-unit bag)	2
Indicator, Humidity, Card (rectangular)	1
Tape, Pressure-Sensitive Adhesive (masking) (1 in. W)	As required
Wadding, Bound Hair (1 in. thick)	As required

*The listed materials are for original packaging. This list is given here to allow for replacement of material not normally replaced during field re-packaging, but which may be damaged during unpackaging, testing, inspection, or other handling.

UNCLASSIFIED

001509

B36-506

(This page intentionally left blank)

UNCLASSIFIED

UNCLASSIFIED 001510

B36-506

DEPARTMENTS OF THE NAVY AND AIR FORCE
Washington 25, D. C., 16 April 1958

This publication is issued for the information and guidance of all concerned.

BY ORDER OF THE SECRETARIES OF THE NAVY AND AIR FORCE:

OFFICIAL:
JAMES DARR, JR.
Lieutenant Commander, USN
Navy Member, JSWPB

PAUL D. STROOP
Chief, Bureau of Ordnance

OFFICIAL:
EDWIN W. RAWLINGS
General, USAF
Commander
Air Materiel Command

THOMAS D. WHITE
Chief of Staff, United States Air Force

This publication is issued for the use of Armed Forces Special Weapons Project personnel.

OFFICIAL:
CORDES F. TIEMANN
Colonel, USAF
Chief of Staff

EDWARD N. PARKER, Rear Admiral, USN
Chief, Armed Forces Special Weapons
Project

This publication is hereby released by the Atomic Energy Commission for the use of concerned personnel.

K. F. HERTFORD
Manager, Albuquerque Operations
U. S. Atomic Energy Commission



UNCLASSIFIED

001511

UNCLASSIFIED

Interim
Changes

UNCLASSIFIED

UNCLASSIFIED

AEC-AFSWP TP B36-506
NAVORD SWOP B36-506
AIR FORCE T.O. 11N-B36-506

INTERIM CHANGE

1. This is interim change number 1-1 to TP B36-506 dated 16 April 1958.
2. A suitable entry of this change will be made in the referenced publication.
3. Make the following changes:
 - a. Page 3, delete first two sentences from paragraph 2-4 and add the following information to the paragraph: One CF-1242 cable (P/N 351189-00) (Air Force stock number 1135-511-5691) is associated with each war reserve bomb, training bomb, and bomb maintenance spares. The cable is unclassified. Dispose of cables from training bombs locally. As wrapped in the BMS and war reserve bomb, the CR-1242 is adequately protected. Package the wrapped cable or cables in a suitable shipping container and mark container for shipment in accordance with procedures in TP 35-51 for packaging and marking for return shipment. AEC Storage Sites will return war reserve material direct to the following address. Air Force and Navy operational organizations, including OOSS and SSF, will return war reserve material to applicable Service Special Weapons Depots for transshipment to the following address:

Sandia Corporation
Sandia Base, Albuquerque, New Mexico
Organization 5520
M/F: Post Mortem
 - b. Page 5, change last sentence of paragraph 3-3.4.2 to read: Remove the CF-1242 and lay it aside for disposition.
4. This interim change is effective until receipt of formal publication change number 1.

Published under the authority of the Secretaries of the Navy and Air Force, the Chief, Armed Forces Special Weapons Project, and the Atomic Energy Commission.

Interim Change 1-1, 3 November 1958

Distribution:
Same as TP B36-506

UNCLASSIFIED