

SC 2465 (CP)



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PACKAGING PROCEDURE
FOR
B-51D AFSWP

INVENTORIED

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W. C. Payne
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September 1969

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SC-2465 (CP)
Original page 2
PER 13,558
July 12, 1952

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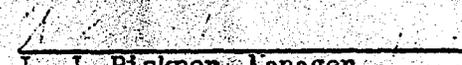
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SC-2465 (CP)
Original page 3
PER 13,558
July 12, 1952

SANDIA CORPORATION
OPERATING UNDER CONTRACT WITH THE ATOMIC ENERGY COMMISSION

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1. This document consists of a list of component parts: Packaging materials, containers, applicable specification and instructions for cleaning and packaging of the B-51D AFGWP Type Units.
2. The purpose of this procedure is to furnish instruction to insure proper packaging of individual items, a group of items or assemblies for export shipment or storage.
3. Packaging as described herein is designed to offer 18 months protection under moderately severe ambient climatic conditions.
4. Units ordered no-pack or domestic pack shall be packaged in accordance with specification listed herein with the following exceptions:
 1. Wrapping of tools and parts in tool box of the H-46 container shall be omitted.
 2. Placement of silica gel and indicator cards in the unit and the H-46 containers shall be omitted.
 3. Silica gel and indicator card shall be omitted from B 2/2.
 4. Stenciling PKD. METH. 2 shall be omitted from B 1/2 and B 2/2.


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APPLICABLE SPECIFICATIONS

SC-2465 (CP)
Document Change #2
Replacement page 4
PCR 14,179
December 4, 1952

1. General Method of Cleaning and Packaging.....SC-1665 (CP)
2. Standard Operational Procedure for Identification Markings.....SC-1846A (CP)
3. Packaging Marking of H-46 Container.....DS-2536-15764

CONTAINERS USED

CONTAINER NO.	METHOD OF PACK	STOCK NO. OR DRAWING NO.	USE
B 1/2	IId	106400	Use to pack major assembly.
B 2/2	IId	801460	Use to pack items in B 2/2.

MATERIALS USED

NO.	ITEM	S/N	APPLICABLE SPEC.	QTY.	USE
1.	Paper, Greaseproof	809875	JAN-B-121	*3 sq.ft.	Use as called for.
2.	Tape, Pressure sensitive	803329	JAN-P-127	*10 ft.	Use as called for.
3.	Cushioning material	802551	UU-C-843	*5 sq.ft.	Use as called for.
4.	Desiccant	800153 or 800155	JAN-D-169	31 lbs.	See appendix.
5.	Paper, VPI	809876	Commercial	*50 sq.ft.	Use as called for.
6.	Thin Film, rust preventive	806086	AXS-673	*1 pt.	Use as called for.
7.	Envelope, Vapor Phase Inhibitor 6 x 9	809749	Commercial	2	Use as called for.

*Material amounts are approximate and should be adjusted in accordance with production findings. Sufficient materials shall be used, however, to insure adequate packaging.

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SC-465 (CP)
 Document Change #2
 Replacement page 5
 PCR 14,179
 December 4, 1952

PACKAGING PROCEDURE FOR B 1/2

ITEM	STK. NO.	QTY.	METHOD OF PACK	METHOD OF CLEANING	PACKAGING PROCEDURE
Major Assembly MC-285	103078	1	IID	C1	See appendix #1.
* Jacks	106414	4	1a	C2	No pre-pack.
Mallet, Rubber 16 oz. W/Wood Handle	813953	1	0	C1	No pre-pack.
*Wrench, Ratchet, Reversible 1/2" sq.dr.	813094	2	1A	C2	Wrap in VPI paper.
*Handle, Lifting	112278	2	1A	C2	" " "
Socket, 9/16", 1/2" Male Dr.	800794	2	1A	C2	" " "
Wrench, 9/16", open end	806525	2	1A	C2	" " "
Extension 4", 1/2" Male Dr.	800320	2	1A	C2	" " "
Wrench, 1 1/8" box end	800518	2	1A	C2	" " "
Elevator	106417	2	1A	C2	" " "
Screw Assembly	104760	4	1A	C2	" " "
Bolt Assembly, Short	104680	4	1A	C1	" " "
Strap Mounting	104683	4	1A	C1	" " "
Plug, Ratchet, double 1/2" sq.dr.	812051	2	1A	C1	" " "
*Bolt, Wing	104985	1	1A	C1	No pre-pack.
Cable Ass'y. Elec.	810747	1	0	C1	See appendix #1, section G.

All items marked with asterisk shall be placed in box #1 (left hand box looking forward). Remaining items go in other box (#2).

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SC-2465 (CP)
Original page 6
PER 13,558
July 12, 1952

PACKAGING PROCEDURE
B 2/2
CONTENTS

ITEM	STK. NO.	QTY.	METHOD OF PACK	METHOD OF CLEANING	PACKAGING PROCEDURE
Cable, CF 707	108949	1	0	C1	Wrap each cable in grade A grease-
Cable, CF 1023	105511	1	0	C1	proof paper. See appendix #3.
Baro Hose, AN-6-26	808458	1	1A	C1	Place Baro Hose in 6" x 9" VPI envelope.
Wrench, Speed, 1/4" sq. dr.	800432	1	1A	C1	Wrap speed wrench in VPI paper.
H-160, Dovetail Lifter	113084	1	1A	C1	Wrap in VPI paper.
H-161, Spacer Carrying Case	112006	1	1A	C1	Wrap in VPI paper.
H-165, Bag	112322	1	0	C1	Wrap in grade A paper or VPI paper.
Bolts, Trunnion	106271	2	1A	C5	Place in 6 x 9 VPI envelope.

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SC-2465 (CP)
Original page 7
PER 13,558
July 12, 1952

APPENDIX #1

A. Major disassembly of H-46A Container prior to weapon installation.

1. Block wheels of container to prevent rolling during installation. If blocking is impractical the following procedure shall be used:
Remove the four jackscrews and four (4) attaching trunnion lugs from the tool containers. Screw the jackscrews into the trunnion lugs about half way. Slide the receiver slots in the trunnion lugs over the dovetails on the chassis frame (two located on the front cross support, and two on the extreme rear ends of the side frames of the chassis). With a ratchet wrench from the tool container, screw the jacks until the tire deflections have been relieved.

2. If the drawbar is attached to the container, it should be removed. Pull the captive pin from the clevis pin attaching the clevis of the drawbar to the guide arm of the steering assembly. Withdraw clevis pin, and remove drawbar. Replace clevis pin in drawbar.

The removal of the drawbar from the container eliminates a possible hazard to personnel performing disassembly and reassembly operation.

3. Container Disassembly.

- a. Station four persons at the four hand grips on the front container to support it during removal of clamps. Release the Marman Clips (one on each side of the container) which fasten the forward upper and lower ring clamps together, which, in turn, secure the front container to the cradle assemblies. Lift off the upper ring clamp.
- b. Remove the front container, by moving it forward in a horizontal plane until it is clear of the frame assembly.

NOTE

Care must be exercised in removing the front container so as to avoid striking the humidity indicator port on the projecting portion of the chassis assembly and thus breaking the indicator window.

NOTE

After removal do not place the container in vertical position resting on the clamping surfaces. This procedure would cause damage to container lead surfaces and seal ring.

UNCLASSIFIED

[REDACTED]
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SC-2465 (CP)
Original page 8
PER 13,558
July 12, 1952

APPENDIX #1 (CONT'D)

- c. Slide the lower ring clamp forward and off.
- d. Station six persons at the six hand-grips on the rear container to support it during removal. Release the two Marman ring clips (one on each side of the container), which fasten the rear upper and lower ring clamps together, which in turn, secure the rear container to the cradle assemblies. Lift off the upper ring clamp.
- e. Remove the rear container, by moving it rearward in a horizontal plane until it is clear of the frame assembly.

NOTE

After removal do not place the container in vertical position resting on the clamping surfaces. This procedure would cause damage to container lead surfaces and seal ring.

- f. The lower ring clamp is removed by rotating it, and lifting off when clear of the lower cradle assembly of the container.
4. To remove the upper cradle assembly unscrew the 8 bolts (2 external and 2 internal on each side of the container assembly), which fasten the upper and lower cradle assemblies together. Insert the cradle lifting handles in the holes (two in each side) on the lower two flanges of the upper cradle. Lift the cradle upward and move forward and away from the container. The center section bolts should operate easily without binding.
 5. To remove the two weather cover ring assemblies (1 front and 1 rear), remove bolts, one on each side of the container for each ring, which fasten the rings to the brackets located at the ends of the extended arms on the lower cradle assembly mounts. Replace bolts in brackets.
 6. Prepare tie down brackets (two, one forward and one rear, on each arm on lower cradle assembly mount) for weapon installation:
 - a. Remove tie down bolts (one in each bracket).
 - b. Retract vertical adjusting screws (one in each bracket) until flush with lower surface of bracket.

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SC-2465 (CP)
Original page 9
PER 13,558
July 12, 1952

APPENDIX #1 (CONT'D)

NOTE

These screws are not used in this operation and must be left in retracted position.

- c. Lock vertical adjusting screws by tightening lock nuts (one on each vertical adjustment screw).
 - d. Remove rear cantilever arm fittings from support (this is a safety measure to protect the hands of the operators).
- B. Installation of MK-5 weapon in H-46 Container.
1. Installation of the MK-5 weapon in the H-46 Roadable Container is limited to the following minimum condition of assembled components.
 - a. MC-65 sphere, with both forward and rear case assemblies mounted.

CAUTION

Sphere trunnion bolts must be removed, and the bottom skin section shall be installed prior to loading unit into H-46 container.

2. Raise weapon to position over H-46 container with overhead hoist.
3. Lower weapon so that weapon handling fittings (2 on each side of weapon) engage container tie down bracket.

NOTE

Forward weapon handling fittings fit between two projection ears of forward tie down brackets. Forward face of rear weapon handling fittings contact rear face of rear tie down brackets.

4. Align holes in tie down brackets with lower holes in weapon handling fittings by lateral positioning of tie down brackets while hoist supports weapon.
5. Insert tie down bolts (one through each handling fitting) and secure bolts by installation and tightening of nuts.
6. Install cantilever arm fittings and tighten tie down bracket bolts (two in each bracket).

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SC-2465 (CP)
Original page 10
PER 13,558
July 12, 1952

APPENDIX #1 (CONT'D)
NOTE

Securely tighten rear handling fitting tie down bolts and nuts so as to tighten rear handling fittings against rear tie down brackets. Tighten forward handling fitting bolts and nuts so as to engage fiber portion of elastic stop nuts.

7. Lower hoist to disengage from weapon.
 8. Assemble other two removable skin sections to the unit, if they haven't been previously installed.
 9. The B Inspection Record shall be taped to the inside of the rear case, on the bottom portion of the case assembly.
- C. Assembly of H-46 Roadable Container subsequent to weapon installation.
1. Install the two fin storage brackets.
 - a. Remove the two brackets from their strapped position inside of the rear container.
 - b. Mount one storage bracket on the rear case.
 - (1). Position the rear bracket attaching lug over the rear edge of the rear case. Push the front bracket support into the hole in the rear case so that the support lies against the second stiffener ring inside the rear case. The fin storage bracket is now parallel with the weapon.
 - (2). From the outside, insert two bolts through the rear mounting flange of the bracket and the rear mounting flange of the case. Screw on nuts, and tighten securely.
 - (3). On the inside of the rear case, insert two bolts from the forward side, through the second stiffener ring and the front bracket support. Tighten bolts securely into plate nuts mounted on second stiffener ring.
 - (4). Repeat the process described above (para. 1, 2, and 3) for the installation of the remaining fin storage bracket which is mounted diagonally opposite the first bracket.
 2. Mount the 4 tail fins to the fin storage brackets.

UNCLASSIFIED [REDACTED]

UNCLASSIFIED

SC-2465 (CP)
Original page 11
PER 13,558
July 12, 1952

APPENDIX #1 (CONT'D)

- a. Mount two fins on each bracket by using studs on the brackets plus the bolts and nuts not used in installing the fin storage brackets on the rear case.
- b. Position the cover assembly over the rear mounting flange of the rear case, and align the camlocks over their mating assembly holes. Tighten securely.
- c. The packing sheet in its waterproof envelope shall be secured to the left front thumb lock on the nose as you face the unit, and shall be wired to the thumb lock with No. 18 Galv. Wire, S/N-800138.

NOTE

When positioning the cover assembly, the breather hole is located in the center, and below the horizontal center line.

4. Install weather covers.

- a. The installation of the weather cover ring assemblies is the reverse of the disassembly procedure. This procedure is described in Section A, paragraph 5. However, cushioning material shall be placed between the ring and the unit.
- b. Mount two elastic cords across the two ring assemblies by fastening the clip ends over edge of fins, crossing the cords over each other when passing through the rear ring assembly and hooking ends of cords to forward ring assembly.
- c. Drape weather cover over weapon.
- d. Clip four tie cords to lower edge of weather cover so as to position a cord over each of four tie down fittings (two on forward surface of chassis front cross member, one on each side and to rear of chassis).

5. Reassembly of major components of H-46 container.

The reassembly of the H-46 container is the reverse of the major disassembly procedure. This procedure is described in Section A, Subsections 1, 2, 3, and 4. However, the containers should fit easily into the center section.

- a. The Marman clamp bolts should draw down easily and evenly with a 12" ratchet wrench. There should be no evidence of contact between the clamp flange and the container or center section flange.

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SC-2465 (CP)
Document change #2
Replacement page 12
PCR 14,179
December 4, 1952

APPENDIX #1 (CONT'D)

- b. The Marman bolts shall be covered with rust preventative AXS - 673.
- c. Place 5 lbs. of silica gel in front of unit, 8 lbs. in the rear, 5 lbs. in bag at forward end of container, and 10 lbs. evenly distributed throughout container.
- d. The wheel storage nuts shall be cleaned and the threads covered with rust preventative oil. Tape shall be applied over the threads.

D. Stenciling

1. The unit shall be stenciled in accordance with drawing number 104678.
2. The H-46 with contents shall be stenciled in accordance with SC-1846A (CP) and sketch DS-2536-15764.
3. The H-46 with contents shall be pressure checked. Remove plug from the rear of the container and connect a manometer. Inject dry air or an inert gas through check valve in front access cover to obtain approximately 3 p.s.i. (150 mm.hg.) gage pressure within the container. Disconnect source of air or inert gas and allow check valve to close. Valve must close before pressure in container drops below 50 mm.hg. Take reading on manometer. If reading on manometer does not drop more than 1 mm. hg. in fifteen min. the container shall be considered sealed.

E. Inspection: When containers are opened for inspection of the unit, all silica gel shall be replaced including gel in the container attached to IFD assembly.

F. When the drawbar is in its stowed position for transport purposes, the towbar safety chain shall be taped or tied to the towbar.

UNCLASSIFIED

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SC-2465 (CP)
Document change #2
Insertion page 13
PCR 14,179
December 4, 1952

APPENDIX #1 (CONT'D)

- G. Wrap the connectors of the detachable cable assembly in VPI paper and tape to secure the paper in place. The cable shall then be securely taped along the side of the drawbar which is nearest to the connector receptacle. The cable shall be taped to the drawbar in such a manner that no damage will occur to cable if the drawbar is placed in its stowed position. Do not kink cable.

If cable assembly is not detachable, the open cable connector shall be wrapped in VPI paper and taped to secure paper in place.

APPENDIX #2

Remove all tools from H-46 tool boxes and pack each as specified in procedures, and replace tools in boxes. These tools shall be inspected for rust and corrosion every time unit is given functional check. After tools are inspected they shall be repacked with new V.P.I. paper. When drawbar is attached to pull container, the wing bolt shall be stored in tool box.

APPENDIX #3

The items called out in B 2/2 shall be packed in a 7 gal. AN container. Sufficient cushioning shall be used to prevent excess movement. 3 lbs. of silica gel shall be added just prior to sealing of the container.

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1 September 1952

SANDIA CORPORATION

PER NO. 13,558,420

ADVANCE PRODUCTION ENGINEERING RELEASE

DEC. ON
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TITLE	AFSWP	UNIT CODE	REV. DESIGN	OTHER SPEC.
Packaging Procedure for B51D Type Units		B-51	REV. DESIGN	Publication

No.: SC 2465 (CP) Issue: Orig.

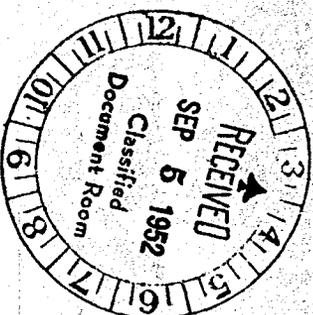
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This PER releases the subject document.

Reason: To provide Packaging Procedure for B 51AD AFSWP Units.

Effective Date: October 1, 1952.

FOR REFERENCE
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Items Affected: Inspection - - DEG

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		L. J. Biskner, Manager	
		Production Engineering	
10085	DB	ORG.	DATE
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