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USCONARC
U S ARMY
ARCTIC TEST BOARD

Fort Greely, Alaska



XEROX

Report of
SERVICE TEST OF
TEST, AVIATION MAINTENANCE, CHALL, ADJUSTABLE,
FOR FIXED-WING AIRCRAFT T59-1

Date 18 MAY 1961

Project Nr. ATB 4-81

HEADQUARTERS
UNITED STATES CONTINENTAL ARMY COMMAND
FORT MONROE, VIRGINIA

ATDEV-6 424

7 June 1961

SUBJECT: Arctic Test of the Fixed-Wing Maintenance Tent, T59-1

TO: Chief of Research and Development
Department of the Army
Washington 25, D. C.

1. Reference is made to letter, ATDEV-6 452, Headquarters, USCONARC, 30 November 1960, subject: "Aircraft Tie-Down Kits, Arctic," with 1st Indorsement, CRD/H-17037, Office of Chief of Research and Development, Department of the Army, 7 December 1960.

2. Attached is the US Army Arctic Test Board Service Test Report of the Tent, Aviation Maintenance, Small, Adjustable, for Fixed-Wing Aircraft, T59-1.

3. This headquarters approves the conclusions of the report when applied to L-23, HU-1, H-19 and H-34 size aircraft and recommends that:

a. The Tent, Aviation Maintenance, Small, Adjustable, Fixed-Wing, T59-1 be considered suitable for Arctic use for L-19, L-20, H-13 and H-23 aircraft when anchoring devices capable of penetrating frozen ground are provided. By reference letter, paragraph 1 above, this headquarters requested the development of suitable Arctic tie-down devices.

b. That no new development of Arctic maintenance shelters for L-23, HU-1, H-19 and H-34 size aircraft be initiated until results of service test by the US Army Aviation Board of the modified T59-1 and T60-1 fixed-wing maintenance shelters have been evaluated.

c. Type classification action be withheld pending results of US Army Aviation Board test of modified T59-1 and T60-1 maintenance shelters.

4. The T59-1 and T60-1 maintenance shelters are being tested by the US Army Aviation Board. Deficiencies were found which are being corrected

by the developer. When the modified T59-1 and T60-1 maintenance shelters are returned to the USA Aviation Board, testing will be resumed. If warranted by results of the USA Aviation Board tests, the modified shelters will be shipped to the US Army Arctic Test Board for additional testing. Improved anchoring devices will be required to correct the deficiencies already noted in the attached report of test.

FOR THE COMMANDER:

1 Incl
Rept of Svc Test of Tent,
Avn Maint, Small, Adjustable,
for Fixed-Wing Acft T59-1,
USA Arctic Test Bd, 18 May 61



WILLIAM A. KEIL
Major, AGC
Asst Adjutant General

Copies furnished:

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HEADQUARTERS
US ARMY ARCTIC TEST BOARD
APO 733, Seattle, Washington

18 MAY 1961

REPORT OF PROJECT NR ATB 4-81
SERVICE TEST OF TENT, AVIATION MAINTENANCE, SMALL, ADJUSTABLE
FOR FIXED-WING AIRCRAFT T59-1

1. AUTHORITY:

a. Directive: Ltr, ATDEV-6 452.1(18 Jul 60), Hq USCONARC, 18 July 1960, subject: "Service Test of Tent, Aviation Maintenance, Small, Adjustable, for Fixed-Wing Aircraft, T59-1."

b. Purpose: To determine the suitability of the Tent, Aviation Maintenance, Small, Adjustable, for Fixed-Wing Aircraft, T59-1 for Army use under arctic winter conditions.

2. REFERENCES:

a. DA Project Nr: 7X71-09-011. Technical Objective Nr: SO-8.

b. CDOG, paragraph 1639b(18), Change 3, 1 December 1960.

c. Equipment Failure Reports Nr 1 through 8, Project Nr ATB 4-81, US Army Arctic Test Board.

d. Letter Report, Project Nr AC 452 (Arctic), Army Field Forces, Arctic Test Branch, 11 June 1952, subject: "Arctic Test of Shelter, Two Man Maintenance, Army Aircraft."

e. Ltr, ATDEV-6 400.114/5 (4 Mar 58), Hq USCONARC, 4 March 1958, subject: "Approved Military Characteristics for Army Aircraft Maintenance Shelters."

f. Consolidated Annual R&D Project Report, OQMG, DA, Volume 1, 1 January - 31 December 1959.

g. Development Review Panel, Quartermaster Research and Engineering Command, Natick, Mass., December 1959, Volume II, Clothing and Tentage.

h. Plan of Test, Project Nr ATB 4-81, US Army Arctic Test Board, 15

July 1960, "Service Test of Tent, Aviation Maintenance, Small, Adjustable, for Fixed-Wing Aircraft, T59-1."

3. DESCRIPTION OF MATERIEL:

a. The Tent, Aviation Maintenance, Small, Adjustable, for Fixed-Wing Aircraft, T59-1 (test tent) is intended for use during maintenance of the L-19, L-20, and L-23 fixed-wing aircraft, and the H-13, H-19, H-34, and HU-1 rotary-wing aircraft. It is 12 feet wide, 10 feet long, and 12 feet high; and weighs 250 pounds. The aluminum frame consists of two arches, eight purlins, and four foot-plates. The arches are straight for the first six feet of height and are curved on a six-foot radius for the upper six feet of height. Spreading of the arches is prevented by the 12-foot cable anchored to the arch foot-plates. The covering is made of nine-ounce boat sateen and is non-sectional. Slide fasteners, which open from the ground line to the peak at the center line of both ends, facilitate erecting the fabric covering on the frame.

b. The H-13 helicopter is the only rotary aircraft on which the engine and rotary head are intended to be completely inclosed within the shelter, with the exception that the blades extend through the sleeve openings at both ends of the test tent. The test tent is intended to house the HU-1 helicopter rotary head only, i.e. the engine is not within the shelter and the rotary blades extend through the shelter ends in the same manner as for the H-13. The test tent is intended to house the tail assembly and to be used as a nose-in shelter for the H-13, H-19, H-34 and HU-1. A slide fastener with a double slide, extending the entire length of the tent top, provides an opening for the anti-torque rotor to extend through the top of the tent.

c. With fixed-wing aircraft, the tent is used as a nose-in or a tail-in shelter. When used for a nose-in shelter, a round opening on one end of the tent shrouds the aircraft ahead of the wing section. When used as a tail-in shelter, the same round opening shrouds the rear fuselage. Sleeved openings in the sides of the tent accommodate the elevators of the aircraft.

d. All apertures are capable of being blacked out as required. The shelter is equipped with a moulded rubber lighting harness having one switch box containing light bulb sockets and drop cord outlets for power tools. Heater duct openings are provided for warming the shelter.

e. One test tent with a partial maintenance package was received at this Board on 11 October 1960. A photograph of the test tent components is contained in Annex C.1.

4. BACKGROUND:

a. The requirement for the test tent is stated in reference 2b.

b. The development of Army fixed and rotary-wing aircraft has advanced rapidly since World War II, resulting in an increase of maintenance complexities and amplifying the need for suitable shelters to protect maintenance personnel from the elements. Various field expedients have been used for this purpose, i.e. welded metal frames covered with canvas, or lean-tos made with materials such as tarpaulins. The Herman-Nelson Heater, or similar means, have been used for heating the make-shift shelters. These shelters have been found inadequate.

c. There is presently no standard aviation maintenance tent in the supply system. The test tent is designed to afford cover for personnel performing organizational maintenance on major components of Army aircraft.

d. Information concerning tripartite standardization is not available.

5. SUMMARY OF TEST RESULTS: Tests were conducted by Capt William K. Toothill, Transportation Corps, and other personnel of Test Group Nr 4, US Army Arctic Test Board, utilizing plan of test, reference 2h.

a. General:

(1) The test tent was utilized in performance of organizational maintenance on L-19 and L-20 aircraft. Maintenance services utilizing the test tent were performed in temperatures ranging from 10°F down through -35°F. Personnel utilizing the tent were dressed in arctic winter clothing.

(2) The test tent was satisfactory with respect to stowing and transporting, suitability for use with the L-19 and L-20 aircraft, and maintenance.

(3) The test tent was marginally satisfactory with respect to erecting, striking, and packing (ground anchors were not suitable) and physical characteristics (not large enough to accommodate the H-34 engine and tail rotor).

(4) The test tent was unsatisfactory with respect to durability and suitability for use with the H-34 and HU-1 helicopters.

b. Test Nr 1 - Preoperational Inspection and Physical Characteristics

The physical characteristics of the test tent were found to be as described in paragraph 3, Description of Materiel. Initial inspection revealed that the tent

was not damaged in transit and was in proper condition for test.

c. Test Nr 2 - Erecting, Striking and Packing No difficulties were encountered in erecting, striking or packing the test tent following cold-soak for 108 hours at ambient temperatures ranging from 10°F down through -38°F. Instructional literature was complete and readily understood. While wearing complete arctic clothing to include the arctic mitten set, the average time required by a crew of 4 to erect the tent under conditions of extreme cold was 12.2 man-hours and to strike and pack it 4.0 man-hours. The aluminum ground anchors supplied with the test tent could not be driven into frozen ground.

d. Test Nr 3 - Stowing and Transporting No difficulties were encountered in stowing or transporting the test tent in the truck, cargo, 2-1/2-ton, 6x6; trailer, cargo, 1-1/2-ton, 2-wheel; the U1-A and YAC-1; and H-21, H-34, H-37, and HU-1 helicopters. The test tent required approximately 26.8 cu ft of space for stowage. The test tent was dropped by parachute from the U1-A and YAC-1 aircraft without difficulty.

e. Test Nr 4 - Suitability for Intended Use The test tent was heated comfortably when outside ambient temperatures were as low as -35°F by means of the type H-1, Engine and Shelter (400,000 BTU) Heater. The test tent provided adequate work space for the L-19 and L-20 aircraft. It did not provide adequate work space for the H-34 helicopter engine or tail rotor. It would not house the HU-1 helicopter rotor head. The lighting harness and blackout provisions were adequate.

f. Test Nr 5 - Maintenance Maintenance instructions supplied with the test tent were adequate; however, a maintenance allocation chart was not provided. No special tools or repair fabric were required in maintaining the test tent. A total of 20 man-hours were required for field maintenance. Periodic maintenance inspections (daily and weekly) required a total of 10 man-hours.

g. Test Nr 6 - Durability

(1) As a result of being exposed to winds of 35 mph with gusts up to 70 mph, two braces broke on the tent purlins, the loop fasteners failed and the fixed-wing end sustained a five-foot tear. The test tent did not fail in steady winds up to 35 mph.

(2) No unusual wear or failure of the test tent occurred, with the exception of wind damage, as the result of exposure for 60 days to adverse weather conditions, including ambient temperatures ranging down through -38°F. Wind damage rendered the test tent unserviceable.

h. Test Nr 7 - Military Characteristics The test tent met the mili-

tary characteristics with the following exceptions: It was not provided with a suitable ground anchor for all types of terrain encountered, and it did not provide adequate work space for the H-34 helicopter engine and tail rotor or the HU-1 helicopter rotor head. It did not have a bright reflective interior surface.

6. DISCUSSION:

a. Because the test tent would not house the H-34 tail rotor or provide sufficient work space for the engine, consideration should be given to development of a larger type organizational maintenance shelter.

b. The aluminum ground anchor supplied with the test tent is not suitable for arctic use. Consideration must be given to development of a ground anchor that can be used in frozen ground.

7. CONCLUSION: It is concluded that Tent, Aviation Maintenance, Small Adjustable, for Fixed-Wing Aircraft, T59-1 is unsuitable for Army use under arctic winter conditions.

8. RECOMMENDATIONS: It is recommended that:

a. No further consideration be given to Tent, Aviation Maintenance, Small Adjustable, for Fixed-Wing Aircraft, T59-1 for Army use under arctic winter conditions.

b. Development continue to provide an Aviation Maintenance Shelter, Small Adjustable to protect personnel performing organizational maintenance on fixed and rotary wing aircraft under arctic winter conditions.

ANNEXES:

- A - Details of Test
- B - Findings
- C - Photographs
- D - Coordination

Henry E. Davidson, Jr.
HENRY E. DAVIDSON, JR.
Colonel Armor
President

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ANNEX A - DETAILS OF TEST
REPORT OF PROJECT NR ATB 4-81

Test Nr 1 - Preoperational Inspection and Physical Characteristics

1. PURPOSE:

- a. To determine the physical characteristics of the test tent.
- b. To insure that the test tent was in proper condition for test.

2. METHOD:

- a. The test tent was weighed, measured, and photographed.
- b. The test tent was examined for damage sustained in transit.
- c. The test tent was given a technical inspection in accordance with the maintenance instructions provided for test.

3. RESULTS:

- a. The test tent was 12 feet wide, 10 feet long, and 12 feet high; and weighed 250 pounds.
- b. The results of the technical inspection indicated that no damage was sustained in transit and that the test tent was in proper condition for test.
- c. A photograph of the test tent components and of the test tent erected with an L-19 in the nose-in position are contained in Annexes C.1 and C.2, respectively.

Test Nr 2 - Erecting, Striking, and Packing

1. PURPOSE: To determine the ease of erecting, striking, and packing the test tent.

2. METHOD: The test tent was cold-soaked twice for periods of 24 and 108 hours in ambient temperatures ranging from 10°F through -38°F. It was then erected and subsequently struck and packed by a crew of four men dressed in complete arctic winter clothing to include the arctic mitten set. The test was repeated three times without cold-soak. The following were recorded:

- a. Suitability of instructional material.
- b. Man-hours required by a 4-man crew to erect, strike, and pack the test tent.
- c. Difficulties or unduly time consuming operations encountered.

3. RESULTS:

a. The instructional literature for erecting, striking, and packing supplied with the test tent was complete and readily understood.

b. The following chart lists the hours of cold-soak and man-hours required for erection, striking, and packing the test tent under the conditions indicated:

ERECTION NR	HOURS OF COLD-SOAK	LOWEST AMBIENT TEMPERATURE	CREW	MAN-HOURS ERECTION	MAN-HOURS STRIKE&PACK	TEMP WHEN ERECTED
1	-	-	4	6.0	2.0	10°F
2	108	-38°F	4	12.3	4.0	-31°F
3	24	-32°F	4	12.0	4.0	-32°F
4	-	-	4	12.7	4.3	-30°F
5	-	-	4	12.0	3.7	-30°F

c. The aluminum ground anchor furnished with the test tent could not be driven into frozen ground (Par 6, Annex B). In anticipation of this problem, ground anchors were driven into the ground at appropriate locations prior to freeze-up and these pre-set anchors were used during the conduct of tests. No other difficult or time-consuming operations were encountered.

Test Nr 3 - Stowing and Transporting

1. PURPOSE: To determine the ease of stowing and transporting the test tent on military vehicles and Army aircraft, and ease of packing, stowing and dropping the test tent from Army aircraft by parachute.

2. METHOD:

a. The test tent was stowed and transported by the following vehicles and aircraft:

- (1) Truck, Cargo, 2-1/2-Ton, 6x6.
- (2) Trailer, Cargo, 1-1/2-Ton, 2-Wheel.
- (3) U1-A Airplane.
- (4) YAC-1 Airplane.
- (5) H-34, H-21, HU-1, and H-37 helicopters.

b. The test tent was packed and rigged for aerial delivery and then dropped by parachute from the U1-A aircraft. This test was repeated using the YAC-1 aircraft.

c. Throughout this test, the following were recorded:

- (1) Space occupied in vehicles and aircraft.
- (2) Difficulties experienced in stowing, transporting, or man-handling test tent.
- (3) Any difficulties encountered and any damage resulting from the parachute delivery were recorded.

3. RESULTS:

a. No difficulty was experienced stowing or transporting the test tent 20 miles on the truck, cargo, 2-1/2-ton, or trailer, cargo, 1-1/2-ton, 2-wheel. The tent required 26.8 cubic feet of stowage space.

b. No difficulty was experienced stowing or transporting the test tent on the H-21, H-34, H-37, or HU-1 helicopters or the U1-A or YAC-1 aircraft.

c. No difficulties were encountered and no damage resulted from parachute delivery of the test tent. A photograph of the test tent rigged for aerial delivery is contained in Annex C.3.

Test Nr 4 - Suitability for Intended Use

1. PURPOSE: To determine the adequacy and suitability of the test tent for protecting personnel performing maintenance on Army aircraft.

2. METHOD: Personnel, utilizing the test tent as protection, performed organizational maintenance on the L-19 and L-20 aircraft. Attempts were made to use the tent in maintenance of the H-34 and HU-1 helicopters. The follow-

ing were recorded:

- a. Adequacy of provisions for introduction of heat.
- b. Freedom of movement in the working space provided.
- c. Adequacy of working light admitted through windows and adequacy of lighting harness.
- d. Adequacy of entrance drape to admit personnel and aircraft.
- e. Effects of working within tent with regard to comfort and safety of personnel.
- f. Adequacy of blackout provisions.
- g. Difficulties encountered.

3. RESULTS:

a. The tent was heated by use of the type H-1, Engine and Shelter (400,000 BTU) Heater, regulating the heat by means of the heat control on the heater. Personnel remained comfortable at all times when ambient temperatures ranged as low as -35°F.

b. The test tent working space was adequate for performance of maintenance on the L-19 and L-20 engine and tail sections. The test tent did not provide adequate working space for the H-34 helicopter engine, as the clamshell doors could not be opened wide enough because of interference between the tent walls and the dipole antennas on each door of the helicopter (Par 4, Annex B). The test tent did not provide sufficient working space for the tail rotor of the H-34 (Annex C.4). The tail rotor is 14 feet 10 inches high and the test tent is 12 feet high (Par 3, Annex B). The tent froze to the ground and could not be lifted and placed over the tail rotor. The test tent will house the HU-1 helicopter engine and tail section and provides adequate work space. The test tent will not house the HU-1 helicopter rotor head (Annex C.5) because the configuration of the tent will not allow the stabilizer bars to pass through the tent opening (Par 5, Annex B).

c. The lighting harness, supplemented by a drop cord, provided an adequate means for lighting within the tent.

d. The entrance drape was adequate for admission of personnel and the L-19 and L-20 aircraft, and the HU-1 helicopter with the exceptions noted above.

e. All personnel remained comfortable while utilizing the test tent when outside temperatures were as low as -35°F and no safety hazards were noticed during the conduct of the test.

f. Blackout provisions were adequate.

Test Nr 5 - Maintenance

1. PURPOSE: To determine whether the test tent can be maintained readily at organizational level.

2. METHOD: The test tent was maintained throughout the test period in accordance with the repair instructions provided. Particular attention was paid to any requirements for special tools or repair material and to the man-hours expended in maintaining the test tent. The adequacy of the repair instructions was evaluated.

3. RESULTS:

a. The repair instructions supplied with the test tent were adequate for maintaining the test tent, with the exception that a maintenance allocation chart was not provided (Par 8, Annex B).

b. No special tools or repair fabric were required in repairing failures that occurred in the fabric portion of the test tent due to wind damage. The braces could not be repaired at organizational level.

c. A total of 20 man-hours was expended in field maintenance of the test tent. This time was expended in repairing fabric damage.

d. Periodic maintenance inspections required a total of 10 man-hours. Performance of daily and weekly inspections required an average of 0.25 man-hours each.

Test Nr 6 - Durability

1. PURPOSE: To determine whether the test tent is durable.

2. METHOD:

a. The test tent was erected and exposed to ambient temperatures ranging from 10°F down through -38°F for a period of 60 days to detect any wear or failures resulting from exposure.

b. Concurrently with other tests, and separately on as many other occasions as were necessary to obtain valid results, the tent was erected in lo-

cations subject to winds of 35 mph with gusts to 70 mph.

c. Throughout the 6 month test period, the test tent was frequently inspected and a record made of the cause and extent of all physical failures.

3. RESULTS:

a. When erected for a period of 5 days in an exposed position and subjected to winds of 35 mph with gusts to 70 mph, the following failures occurred:

(1) Two (2) braces broke on the tent purlins (Par 1, Annex B).

(2) The loop fasteners failed and a five foot tear occurred in the fixed wing end of the tent (Par 2, Annex B).

(3) These failures occurred during the high velocity gusts. The tent did not fail in steady winds up to 35 mph.

b. No wear or failures of the test tent occurred, with the exception of wind damage, as a result of being exposed for 60 days to prevailing weather conditions including ambient temperatures ranging down through -38°F. A final inspection of the test tent after completion of all tests revealed that the tent was unserviceable due to wind damage.

Test Nr 7 - Military Characteristics

1. PURPOSE: To determine the extent to which the test tent meets the military characteristics.

2. METHOD: Concurrently with all other tests, the extent to which the test tent met the military characteristics was evaluated.

3. RESULTS: The test tent met the military characteristics with the following exceptions:

a. A suitable ground anchor for all types of terrain to be encountered was not provided (Par 6, Annex B).

b. Adequate unobstructed work space was not provided for the H-34 helicopter engine and tail rotor or the HU-1 helicopter rotor head (Par 4 & 5, Annex B).

c. The test tent did not incorporate a bright reflective interior surface (Par 7, Annex B).

ANNEX B

FINDINGS

DEFICIENCY/SHORTCOMING

SUGGESTED CORRECTIVE ACTION

REMARKS

SECTION I

This section contains deficiencies requiring elimination in order to make the item acceptable for use on a minimum basis.

- | | | |
|--|---|---|
| 1. Two braces broke on tent pulleys due to high winds. | Reinforce braces. | Test Nr 6, Annex A.
Equipment Failure Report Nr 1. |
| 2. Loop fasteners failed and a five-foot tear occurred in the F/T end of the tent due to high winds. | Reinforce loop fasteners and tent fabric to provide a tent which will withstand high winds. | Test Nr 6, Annex A.
Equipment Failure Report Nr 2. |
| 3. Tent will not house H-34 tail rotor. | Increase tent height. | Test Nr 4, Annex A.
Equipment Failure Report Nr 3. |
| 4. Clam Shell doors on H-34 could not be opened wide enough to allow sufficient access to engine. | Widen tent. | Test Nr 4, Annex A.
Equipment Failure Report Nr 4. |
| 5. Tent will not house HU-1 rotor head. | Increase tent height. | Test Nr 4, Annex A.
Equipment Failure Report Nr 5. |
| 6. Aluminum ground anchor could not be driven into frozen ground. | Provide ground anchor that can be driven into frozen ground. | Test Nr 2, Annex A.
Equipment Failure Report Nr 6. |

<u>DEFICIENCY/SHORTCOMING</u>	<u>SUGGESTED CORRECTIVE ACTION</u>	<u>REMARKS</u>
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SECTION II

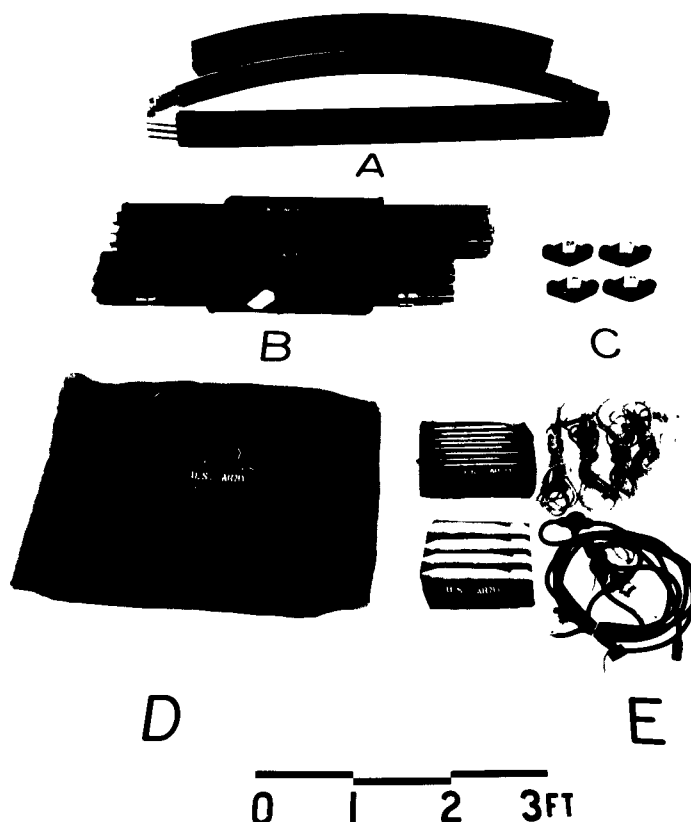
This section lists those deficiencies and shortcomings of the item which were discovered during test and satisfactorily corrected prior to completion of the test. They no longer represent a defect in the item tested. The correction must be applied to the production model of this item.

None.

SECTION III

This section lists shortcomings which are desired to be corrected as practicable, either concurrent with elimination of the deficiencies in Section I, in production engineering, or by product improvement.

- | | | |
|--|---|---|
| 7. Tent does not incorporate a bright reflective interior surface. | Provide a tent which incorporates a bright reflective interior surface. | Test Nr 7, Annex A.
Equipment Failure Report Nr 8. |
| 8. A maintenance allocation chart was not provided for test. | Provide a maintenance package in accordance with AR 750-6. | Test Nr 5, Annex A.
Equipment Failure Report Nr 7. |



US ARMY ARCTIC TEST BOARD

FORT GREELY, ALASKA

PROJECT NR ATB 4-81

13 OCT 60

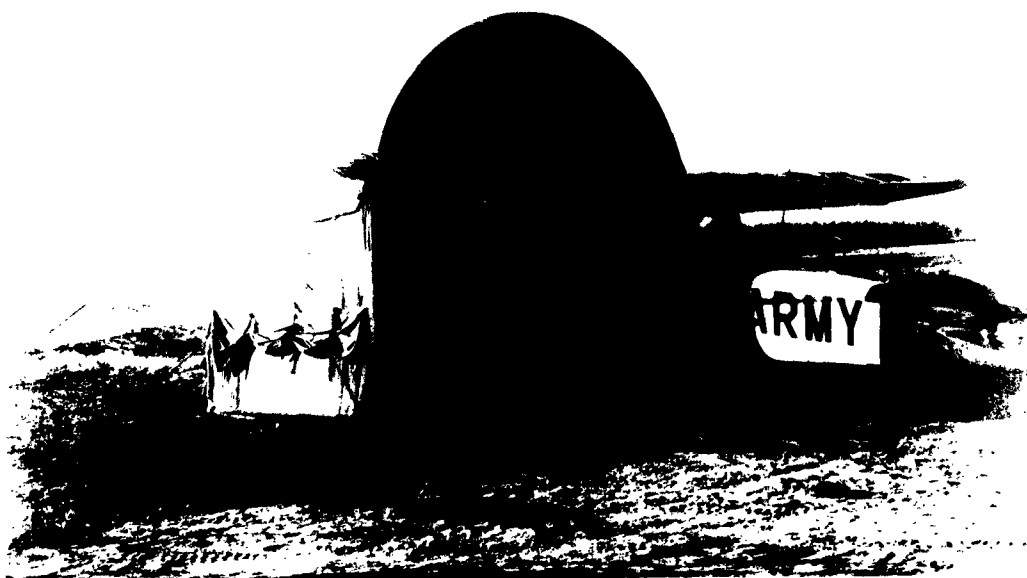
NEGATIVE NR 31-1

SERVICE TEST OF TENT, AVIATION MAINTENANCE, SMALL,
ADJUSTABLE, FOR FIXED WING AIRCRAFT, T59-1

COMPONENTS OF TEST TENT

A. ARCHES
B. PURLINS
C. FOOTPLATES

D. BLANKET AND ROOF SECTION
E. TIE-DOWN COMPONENTS AND
LIGHTING HARNESS



US ARMY ARCTIC TEST BOARD

FORT GREELY, ALASKA

PROJECT NR ATB 4-81

19 OCT 60

NEGATIVE NR 42-1

SERVICE TEST OF TENT, AVIATION MAINTENANCE, SMALL,
ADJUSTABLE, FOR FIXED WING AIRCRAFT, T59-1

TEST TENT WITH L-19 IN NOSE-IN POSITION



US ARMY ARCTIC TEST BOARD

FORT GREELY, ALASKA

PROJECT NR ATB 4-81

14 NOV 60

NEGATIVE NR 118-1

SERVICE TEST OF TENT, AVIATION MAINTENANCE, SMALL,
ADJUSTABLE, FOR FIXED WING AIRCRAFT, T59-1

TEST TENT RIGGED FOR AIRDROP.



US ARMY ARCTIC TEST BOARD

FORT GREELY, ALASKA

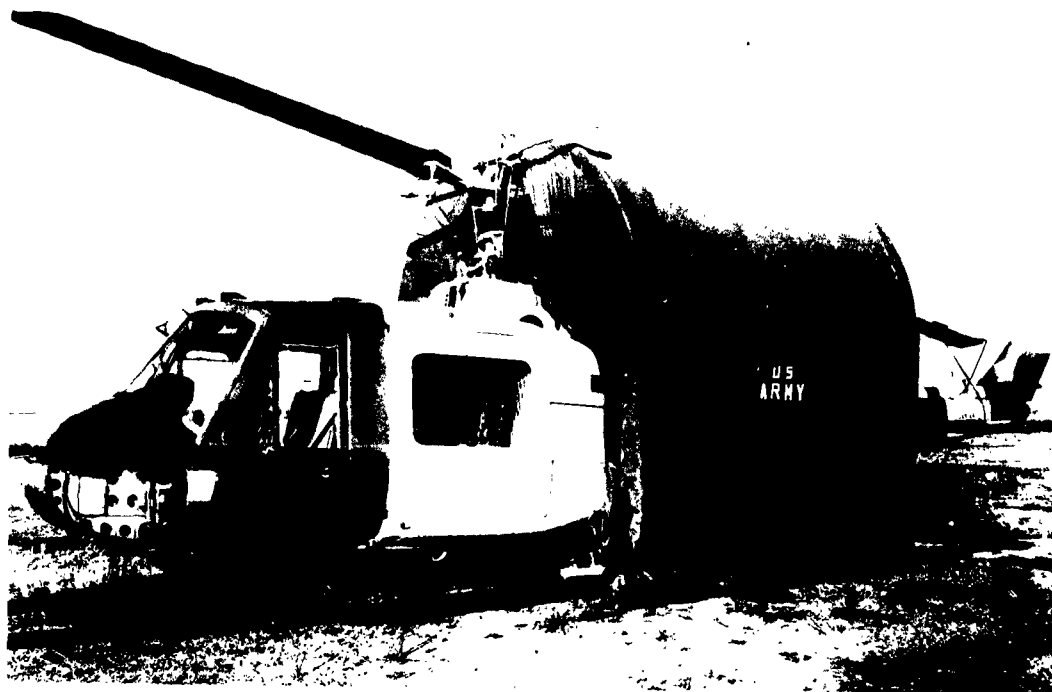
PROJECT NR ATB 4-81

10 JAN 61

NEGATIVE NR 66-3

SERVICE TEST OF TENT, AVIATION MAINTENANCE, SMALL, ADJUSTABLE,
FOR FIXED WING AIRCRAFT, T59-1

TEST TENT WITH H-34 HELICOPTER WITH PYLON FOLDED.



US ARMY ARCTIC TEST BOARD
FORT GREELY, ALASKA

PROJECT NR ATB 4-81

10 JAN 61

NEGATIVE NR 42-4

SERVICE TEST OF TENT, AVIATION MAINTENANCE, SMALL, ADJUSTABLE,
FOR FIXED WING AIRCRAFT, T59-1

TEST TENT WITH HU-1 HELICOPTER IN POSITION. NOTE INADEQUATE
CLEARANCE FOR STABILIZER BARS.

ANNEX D - COORDINATION ON PLAN
UNITED KINGDOM AND CANADIAN COMMENTS
PLAN OF TEST - PROJECT NR ATB 4-81

1. The British Liaison Officer, USCONARC did not reply and concurrence is assumed.

2. The Canadian Army had "no comment on Plan of Test," but recommended this item be placed in the Information Exchange List.