

UNCLASSIFIED

<b>AD NUMBER</b>
ADB972097
<b>NEW LIMITATION CHANGE</b>
<b>TO</b> Approved for public release, distribution unlimited
<b>FROM</b> Distribution: DTIC users only.
<b>AUTHORITY</b>
Air Mobility Command ltr, 29 May 98

THIS PAGE IS UNCLASSIFIED

3583

DTIC ELECTE  
S C D  
JAN 4 1994

UNANNOUNCED

REPORT  
of

UNCLASSIFIED

# THE ARMY AIR FORCES BOARD

AD-B972 097



Classification Changed  
Per Authority Letter 46-30  
dated 13 Feb 47

MASTER FILE

"DTIC USERS ONLY"

SUBJECT  
~~UNCLASSIFIED~~

OPERATIONAL AND TACTICAL SUITABILITY OF THE C-46A AIRPLANE FOR  
TROOP CARRIER OPERATIONS

PROJECT No. (M-I) 105 3583

DATE

COPY No. 59

8 August 1977

93 12 23 025

1876

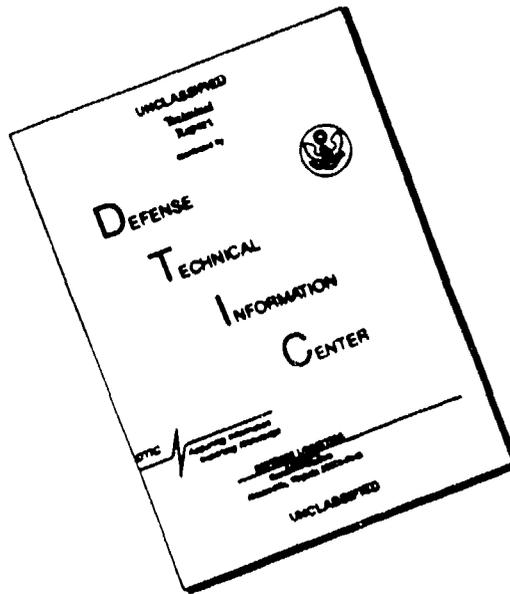
93-31168



~~UNCLASSIFIED~~  
UNCONFIDENTIAL

FOR INFORMATION ONLY

# DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

UNCLASSIFIED

Unannounced Justification	
By	
Distribution /	
Availability Codes	
Dist	Avail and/or Special
12	

Address Reply To  
 COMMANDING GENERAL, ARMY AIR FORCES  
 Washington 25, D.C.

Attention:

HEADQUARTERS, ARMY AIR FORCES  
 WASHINGTON

DTIC QUALITY INSPECTED 6

AFRBC-3  
 9 September 1944

SUBJECT: Operational and Tactical Suitability of the C-46A Airplane  
 for Troop Carrier Operations - AAF Board Project No. (M-1)105

TO : President  
 Army Air Forces Board  
 Orlando, Florida

1. Report of AAF Board, subject and number as above, dated 8 August 1944, has been reviewed by interested agencies of this Headquarters and recommendations thereof are approved.
2. In accordance with recommendations of subject report, action will be taken to include in the following priority the modifications as listed below to make the C-46A aircraft fully suitable for Troop Carrier use:
  - a. Camouflage all aircraft for Troop Carrier use in accordance with Military Requirement Policy No. 15, dated 8 June 1944.
  - b. Install formation lights on the upper portion of the wings and fuselage.
  - c. Install a standard exit door directly opposite the present rear door (it is desired that the door be forty (40) inches wide by sixty-three (63) inches high and designed to open inwardly during flight).
  - d. Install two paratroop anchor cables, one on each side of the longitudinal center line of the cargo compartment and running from the forward bulkhead of the compartment to Station 633 or 651 with a stop for static line snap fasteners at Station 615.

# 5387-15

UNCLASSIFIED

~~CONFIDENTIAL~~  
UNCLASSIFIED

- e. Install a retractable lever to operate the jaws of the glider tow mechanism so that one man can accomplish a glider hoop-up.
- f. Make provisions for a minimum of four (4) and, if possible, six (6) external parapacks.
- g. Install AN/APN-2, AN/APN-1, SCR-522, and AN/APN-4.
- h. Install paratroop jump lights on both paratroop exists with operating switch accessible to both pilot and copilot.
- i. Modify airplane interphone system to include an outlet adjacent to the glider tow mechanism for glider-airplane intercommunication.

3. The following items are to be a matter of further study:

- a. Methods to provide better engine cooling and better cooling for the engine oil when the airplane is towing gliders.
- b. A method to provide inward opening of the rear cargo port door during flight for jumping of paratroopers.
- c. The desirability of installing R-2800-C engine in the C-46A airplane to improve the performance of the airplane.
- d. The desirability of installing paddle blade propellers to improve climb and cruise performance of the airplane when towing gliders.
- e. Feasibility of installing self-sealing tanks in the C-46A airplane.

By command of General ARNOLD:

/s/ R. H. Macklin  
for H. A. CRAIG  
Major General, U. S. Army  
Asst. Chief of Air Staff  
Operations, Commitments & Requirements

S# 5387-16

~~CONFIDENTIAL~~  
UNCLASSIFIED

UNCLASSIFIED

THE ARMY AIR FORCES BOARD  
Orlando, Florida

8 August 1944

ARMY AIR FORCES BOARD PROJECT NO. (M-1) 105  
OPERATIONAL AND TACTICAL SUITABILITY OF THE C-46A AIRPLANE FOR  
TROOP CARRIER OPERATIONS

I. OBJECT

To determine the operational and tactical suitability of the C-46A airplane for Troop Carrier operations.

II. FACTUAL DATA

1. This project, AIF Board Project No. (M-1) 105, was authorized by a letter from Headquarters, Army Air Forces, Washington, D.C., dated 9 May 1944, subject "Operational Suitability of the C-46 Towing the CG-13A Glider," and TTX dated 12 May 1944 requesting a report on the suitability of the C-46A airplane for airborne operations.

2. Tests were initiated at Laurinburg-Maxton Army Air Base, N.C. on 12 May 1944 with C-46A No. 41-2402, a "war weary" from Alaska, which had recently been released from Mobile Modification Center. Trouble with the right engine grounded the airplane after 29 flight test hours were logged. Since the left engine had approximately 570 hours, both engines were replaced, to minimize the inoperative time on the ground. Upon completion of engine changes, the "war weary" airplane was flown to Wright Field for further experimental tow testing.

3. A new C-46A airplane was requested in order to continue with the tests. C-46A airplane Serial No. 42-107334, temporarily assigned for a period of ten days, arrived on 25 May 1944 and the tests were resumed. The glider tow testing was accelerated and completed by 1 June 1944. An operational\* C-46A airplane grossing (1) 39,692 lbs. and (2) 46,692 lbs. towed the following glider combinations:

- a. CG-13A glider grossing 16,500 lbs.
- b. Two CG-4A gliders grossing 7,500 lbs. per glider.
- c. British Horsa glider grossing 15,250 lbs.

4. This airplane was then flown to Camp Mackall, N.C. for airborne suitability tests by the Airborne Center. Parachute jumps were completed within the prescribed time, and the airplane was released to Air Transport Command on 3 June 1944. Test of the C-46 for airborne use by Airborne Center,

\* An airplane is considered operational when it contains a full fuel load, combat equipment, and a crew of five.

S# 5387-1

-1-  
UNCLASSIFIED

Camp Mackall, N.C. is covered in Inclosure No. 3 of this report.

5. For a complete record of all maintenance and estimated man-hours of work required on subject airplanes, see Inclosure No. 5.

III. CONCLUSIONS

It is concluded that:

1. The C-46A airplane will tow the CG-13A glider or two CG-4A gliders more efficiently than any other available two engine airplane tested to date.
2. The C-46A airplane is suitable for dropping paratroopers but it cannot be used to maximum efficiency with only one exit door.
3. The C-46A airplane is a satisfactory personnel, cargo, and airborne equipment transport, carrying 5000 lbs. more maximum payload and 23 more individuals than the C-47A airplane.
4. The following changes to the C-46A airplane should be made to make it fully suitable for troop carrier use:
  - a. Install a standard exit door directly opposite the present rear port cargo door. (It is desirable that the door be 35" wide x 66" high and designed to open inwardly during flight.)
  - b. Install two parachute anchor cables, one on each side of the longitudinal center line of the cargo compartment and running from the forward bulkhead of the compartment to Station 633 or 651 with a stop for static line snap fasteners at Station 615.
  - c. Install a retractable lever to operate the jaws of the glider tow mechanism so that one man can accomplish a glider hook-up.
  - d. Make provisions for a minimum of four and, if possible, six external pararacks.
  - e. Install AN/APN-2 Interrogator-responder, AN/APN-1 radio altimeter, SCR-522, and AN/APN-4.
  - f. Install formation lights on the upper portions of the wings and fuselage.
  - g. Install paratroop jump lights at both paratroop exits with the operating switch accessible to both pilot and copilot.
  - h. Modify airplane interphone system to include an outlet near glider tow mechanism for glider-airplane intercommunication.

5. An accelerated service test of the C-46A airplane should be conducted to determine the serviceability of the aircraft when subjected to troop carrier operations with emphasis on glider tow work.

6. The C-46A airplane should be considered a supplementary airplane to the C-47 airplane for troop carrier work, but not necessarily a replacement.

IV. RECOMMENDATIONS

It is recommended that:

1. The C-46A airplane be considered operationally and tactically suitable for troop carrier operations when modified as outlined in paragraph 4 of Conclusions.

2. At least four new C-46A airplanes be assigned to Laurinburg-Maxton Army Air Base, N.C. for an accelerated service test of the aircraft when used for troop carrier operations, including towing of the CG-13A gliders.

3. At least one C-46A airplane be modified immediately as outlined in paragraph 4 of Conclusions and assigned to Airborne Center, Camp Mackall, N.C. for further tests, including the dropping of paratroops.

4. The C-46A airplane be considered for supplementing but not replacing the C-47 airplane for troop carrier operations.

5. A study be made of the following:

a. Methods to provide better engine cooling and better cooling for engine oil when the airplane is towing gliders.

b. A method to provide inward opening of the rear port cargo door during flight.

c. The desirability of installing the R-2800-C engine in the C-46A airplane to improve the performance of the airplane.

d. The desirability of installing paddle blade propellers to improve climb and cruise performance of the airplane when towing gliders.

e. The feasibility of installing self-sealing fuel tanks in those C-46A airplanes that will be used on combat missions.

V. DISCUSSION

1. General: The C-46A airplane is considered a logical addition to troop carrier unit equipment because it has a performance that is superior to the C-47A airplane in the following respects: (1) In towing gliders, (2) in transporting a greater number of paratroops, and (3) in carrying larger cargo loads. The C-46A is the only airplane having this performance superior-

rity which is in production and is available for use as a supplement to the C-47A airplane on troop carrier missions. The subject airplane is not recommended as a total replacement for the C-47A airplane because of the advantage inherent in a smaller airplane in landing and taking off on unprepared strips.

- a. As a tow plane the C-46A is superior to the C-47A airplane. For example, an operational C-46A airplane has approximately the same tow characteristics with a CG-13A glider (16,500 lbs. gross weight) as an operational C-47A airplane has with a single CG-4A glider (7,500 lbs. gross weight).
- b. With modifications as listed in paragraph 4 of Conclusions, the C-46A airplane will become an extremely desirable aircraft for the dropping of paratroops. The addition of a starboard exit door will allow a 50% increase over the present number of paratroopers being dropped without increasing the tactical ground pattern in length.
- c. Transporting a maximum payload of 15,000 lbs., the C-46A airplane is a more efficient cargo carrier for air landing operations when compared to the C-47A airplane and its maximum payload of 10,000 lbs. On three occasions the Airborne Center, Camp Mackall, N.C., has tested the C-46A airplane for transporting airborne equipment and has approved the airplane for air landing operations. The tests have proved that the C-46A can satisfactorily accommodate the 105mm howitzer M-2 which cannot be transported in the C-47A airplane unless disassembled. Refer to Inclosure No. 3 for further information on b. and c. above.

2. Serviceability: The present problem to be solved is the rate of serviceability and the maintenance that will be required by the C-46A airplane when operated in the theater as compared to the operation of the C-47A airplane under similar conditions. The "war weary" C-46A airplane required 2.23 man hours for inspection and maintenance per test hours, compared to .88 man hours per test hours for a late production model C-46A (see Inclosure No. 5). To obtain a more complete cross sectional view of the operation of the C-46A airplane, it has been recommended that four new production model C-46A airplanes be made available to Laurinburg-Maxton Army Air Base, N.C. for CG-13A glider tow training. A record will be kept of all maintenance and this record will be forwarded at a later date as a supplement to this report with recommendations for operating the C-46A airplane in the field on troop carrier operations.

3. Performance:

- a. The C-46A airplane is equipped with two R-2800-51 Pratt & Whitney engines which develop 2000 horsepower per engine at take-off when using 100 octane fuel. Normal rated power is 1600 horsepower. Full take-off power was utilized by the

-4-

tug airplane on take-off and during the initial steep climb. The combination was airborne at 90 m.p.h., then climbed steeply at 100 m.p.h. until an altitude of 100 ft. over obstacles was reached. At this point the combination was levelled off and power was reduced to normal rated power. A climb at 120 m.p.h. was maintained to desired altitude. The operational climb power settings were not changed after being reduced to normal rated power (41.5" Hg. and 2400 R.P.M.) but were allowed to drop correspondingly with increase in altitude. Cruise settings were tested at the 75% power level to determine the best cruising speeds obtainable. At 75% power the C-46A airplane towed the CG-13A glider at a speed which allowed the CG-13A to fly in a normal level flight attitude, an accomplishment not possible with the C-47A airplane.

- b. The C-46A airplane has an initial steep climb available for clearing obstacles that is not available with the C-47A airplane. (A 16mm film of the C-46A and CG-13A combination take-off will be sent with the original of this report to Headquarters Army Air Forces, Washington, D. C.)
- c. The cruising speed of the C-46A airplane towing two CG-4A gliders is dependent upon the flight attitudes of the gliders. Namely, flying the gliders high and wide reduces the cruising speed of the combination, whereas flying the gliders low and close in increases the cruising speed. Flying the gliders in the high and wide attitude also affects climb and take-off distance performance adversely.
- d. For all performance data on the various combinations tested, refer to Inclosure No. 4.

4. Modifications:

- a. The installation of a starboard exit door would permit two sticks of paratroopers to jump simultaneously, thereby taking maximum advantage of the troop carrying qualities of the C-46A airplane. This installation is therefore considered essential.
- b. Provisions for a minimum of four pararacks is considered essential in order that parabundles may be delivered with each stick of paratroopers. Six installations would be more desirable since this would assist the dropping of airborne artillery unit equipment simultaneously with the paratroopers, thereby keeping a unit and its equipment intact.
- c. The installation of the R-2800-C engine is considered a desirable change to be investigated since the additional

C O N F I D E N T I A L

power available would considerably improve the performance of the subject combinations. This installation may accomplish the desirable feature of the C-46A airplane and CG-13A glider combination attaining a 130 m.p.h. cruise speed with power settings capable of automatic lean mixture, thereby increasing range performance.

- d. It is desired that engine and oil temperature cooling be improved to provide a greater margin from maximum allowable temperatures. During testing the free air temperature averaged between 28°C. and 34°C. and the following temperature averages were noted:
- (1) Climb: Cylinder head temperature--225°C. to 235°C.  
Oil temperature--90°C. to 100°C.
  - (2) Cruise: Cylinder head temperature--218°C. to 228°C.  
Oil temperature--80°C. to 90°C.

VI. INCLOSURES

1. Incl. No. 1 - Directive dated 9 May 1944 from Hqs. AAF, Washington, D.C. to President, AAF Board, Orlando, Fla., subject "Operational Suitability of the C-46 Towing the CG-13A Glider."
2. Incl. No. 2 - Directive TX dated 12 May 1944 from Hqs. AAF, Washington, D.C., Log #C623, to CG, AAF Tactical Center, Orlando, Fla.
3. Incl. No. 3 - Letter dated 19 June 1944 from Hqs. Airborne Center, Army Ground Forces, Camp Mackall, N.C. to President, AAF Board, Orlando, Fla. (Attn: Aircraft Division), subject "Test of the C-46 for Airborne Use."
4. Incl. No. 4 - Performance Data.
5. Incl. No. 5 - C-46A Maintenance Record.
6. Incl. No. 6 - Test Personnel.

PREPARED BY:

STERLING D. ROBERTS, Major, A.C., Special Branch, Aircraft Div., AAF Bd.

CONCURRED IN BY:

- D. D. DIVINE II, Colonel, A.C., Bomb. Branch, Aircraft Div., AAF Board.  
C. F. DAMBERG, Colonel, A.C., Chief, Aircraft Division, AAF Board.  
H. G. MONTGOMERY, JR., Colonel, A.C., Chief, Tactics Division, AAF Bd.  
W. G. SMITH, Colonel, A.C., Chief, Communications Division, AAF Board.  
E. H. RICE, Colonel, A.C., Chief, Equipment Division, AAF Board.  
G. W. MCGREGOR, Colonel, A.C., Executive, AAF Board.

APPROVED:

For the Army Air Forces Board:

-6-

S# 5387-6

C O N F I D E N T I A L

C O N F I D E N T I A L

A.F. Board Project No. (M-1) 105

E. L. EUBANK  
Brigadier General, U.S. Army  
President

OFFICIAL: *Robert H. Manda*  
*Capt U.S.*  
GUSTAV A. NEUBERG  
Lt. Colonel, AGD  
Recorder

DISTRIBUTION: "C"

-7-

S# 5387-7

C O N F I D E N T I A L

INCLOSURE NO. 1

HEADQUARTERS  
ARMY AIR FORCES  
Washington, D. C.

9 May 1944

SUBJECT: Operational suitability of the C-46 towing the CG-13A glider.

TO: President, Army Air Forces Board  
Orlando, Florida

1. It is requested that a project be initiated to test the operational suitability of the C-46 as a towship for the CG-13A glider.

2. Preliminary Army Air Forces Board tests have shown that there are numerous operational limitations to the combination of C-47 and CG-13A glider. It is, therefore, desired to determine whether the C-46 may prove more suitable for towing this glider. The C-46 is already equipped as a towplane.

3. Tests should include investigation of the following under varying load conditions for tug and glider:

- a. Take off distances
- b. Rate of climb to various altitudes up to 10,000 feet
- c. Most efficient cruising conditions
- d. Advantages or limitations of this tow combination for tactical use.

4. In order to run these tests, arrangements have been made to have a C-46 available at Maxton Army Air Base for a ten day period.

5. This project should be assigned second priority.

By command of General ARNOLD:

/s/ R. H. Macklin  
for WILLIAM F. MCKEE, Colonel, A.C.  
Deputy Asst. Chief of Air Staff,  
Operations, Commitments & Requirements

S# 5387-8

C O N F I D E N T I A L

C O N F I D E N T I A L

INCLOSURE NO. 2

FROM: WAR WASHINGTON DC

12 MAY 1944

TO: Commanding General  
AAF Tactical Center  
Orlando, Florida

AAF BOARD IS REQUESTED TO ALSO INCLUDE SUITABILITY OF THE BAKER DASH SEVENTEEN AS A TOW FOR CHARLIE GEORGE ~~DASH THIRTEEN~~ ABLE GLIDER IN PROJECT PRESENTLY BEING CONDUCTED AT MAXTON AIR BASE PD REFERENCE MADE TO DIRECTIVE EIGHT MAY CMA SUBJECT OPERATIONAL SUITABILITY CHARLIE DASH FOUR SIX TOWING CHARLIE GEORGE DASH THIRTEEN ABLE GLIDER PD PAREN WAR THREE FIVE TWO NINE FIVE TO EUBANKS SIGNED ARNOLD PAREN BAKER DASH SEVENTEEN WITH MODEL ONE SIX ZERO XRAY PICK UP UNIT ARRIVE MAXTON ABOUT FIFTEEN MAY FOR TEN DAY PERIOD PD REQUEST RECOMMENDATIONS TO PRACTICABILITY OF USING BOTH AIRCRAFT FOR JUMPING PARATROOPERS

LOG #C623

S# 5387- 9

C O N F I D E N T I A L

C O N F I D E N T I A L

INCLOSURE NO. 3

HEADQUARTERS AIRBORNE CENTER  
ARMY GROUND FORCES  
Camp Mackall, North Carolina

452.1-GNVDI

19 June 1944

SUBJECT: Test of the C-46 for Airborne Use.

TO: President, Army Air Forces Board, Orlando, Florida.  
(Attn: Aircraft Division)

1. Tests were conducted recently at this headquarters to consider the practicability of the C-46 cargo airplane for use in airborne operations. The results of these tests were as follows:

a. Parachute.

- (1) On 2 and 3 June 1944, tests were conducted to determine the suitability of the C-46 for delivery of parachutists. On 2 June, exits were made from the door outlined in red on Inclosure No. 1. For tests on both 2 and 3 June, the under surface of the horizontal stabilizer was covered with red chalk since it was suspected that early openings of parachutes due to a static line of only 15 feet would result in the canopies striking the stabilizer. On examination of fifty-one (51) canopies used on 2 June, two (2) were found to bear chalk marks. On 3 June, the rear door outlined in green on Inclosure No. 1 was used for the exits. No parachute gave evidence of hitting the empennage and the exits were generally more satisfactory.
- (2) It is concluded that exit of parachutists from the rear door using the 15-foot static line is safe and entirely satisfactory.
- (3) It is recommended:
  - (a) That the door outlined in green on Inclosure No. 1 be used for parachute jumping.
  - (b) That an additional door be installed in the C-46 on the right side of the fuselage, directly opposite the door mentioned in (1) above, with its aft edge no further forward. The dimensions should be not less than 35 inches wide by 66 inches high. (In an airplane carrying more than 18 men one door is not sufficient. The ground pattern or dispersion on the ground of the tactical unit is excessive. In

-1-

S# 5387-10

C O N F I D E N T I A L

C O N F I D E N T I A L

the case of the recent exit of 40 men from the C-46, the resulting pattern was 1650 feet. With two doors being used simultaneously for exits, the pattern would be approximately one half of that figure.)

- (c) That two anchor cables be installed, one on either side of the center line in the top of the cargo compartment and running from the forward bulkhead of the compartment to station 633 or 651 with a stop for static line snap fasteners at station 615.
- (d) That one C-46 be modified as described above and be delivered to this station for final test.

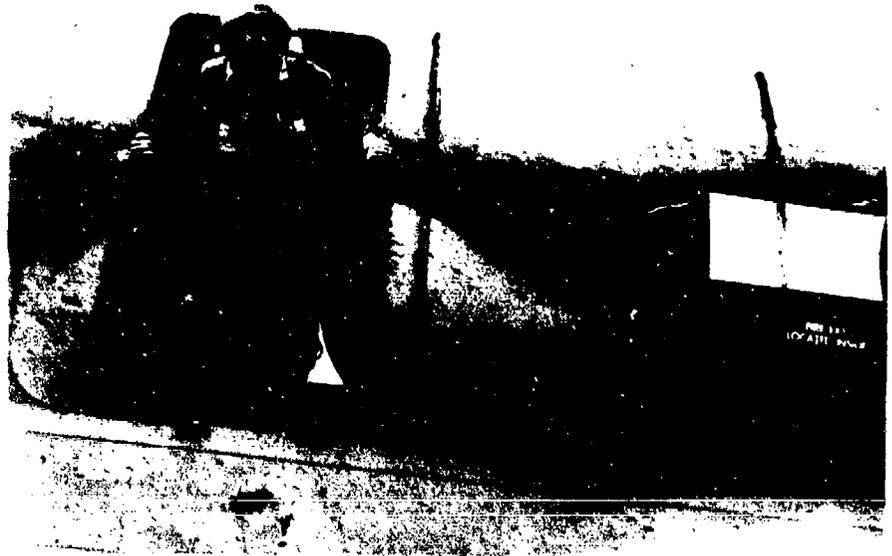
b. Air-Landing.

- (1) This headquarters has, on three occasions, conducted tests of the loading and lashing of airborne equipment in the C-46 airplane. These tests have shown that the C-46 is a satisfactory airplane for airlanded operations and will transport all normally air-transported items of equipment in the airborne division.
- (2) The C-46 cargo airplane can also accommodate the 105mm howitzer, M-2, which cannot be transported in C-47 airplanes unless disassembled.
- (3) No modification is necessary in the C-46 airplane for airlanded operations. However, the task force loading floor, ramp, and all sub-assemblies must be available on a basis of one set per airplane on airlanded missions.

/s/ Josiah T. Dalbey  
JOSIAH T. DALBEY  
Colonel, Infantry  
Commanding

1 Incl:  
Incl No. 1 - Photograph.

CONFIDENTIAL



Inclosure 1

CONFIDENTIAL

C O N F I D E N T I A L      P E R F O R M A N C E   D A T A

1. C-46A, 46,692 lbs. gross wt towing:	Initial Rate of Climb	Approx. Serv. Ceiling In Density Alt.	Take-Off Distances	Approx. Max. Range** @Density Alt @ IAS	Cruise Power Settings				Best Climbing Speed (IAS)	
					Density Altitude	M.P.	RPM	IAS		Chart F.P.
A. CG-13A, 16,500 lbs. gross wt.	226 ft/min	11,100 ft.	3500 ft.*	680/4500/135	4500 ft.	35.5"	2100	125	1224	120 mph cowl flaps 1/2 open
				564/8000/130	4500 ft.	35"	2250	138	1207	
					4500 ft.	36"	2200	140	1233	
					5000 ft.	33"	2300	121	1169	
B. Two CG-4As, 7,500 lbs. gross wt. per glider	180 ft/min	13,100 ft.	3500 ft.*	632/4500/125	4500 ft.	35"	2250	135	1208	120 mph cowl flaps 1/2 open
					4500 ft.	36"	2200	122	1241	
C. Horse, 15,250 lbs. gross wt.	200 ft/min	11,700ft.	3200 ft.*	632/4500/125	4500 ft.	35"	2250	125	1260	120 mph cowl flaps 1/2 open
					4500 ft.	36"	2200	130	1281	

2. A C-46A airplane, 39,692 lbs. gross wt., towing a CG-13A glider, 16,500 lbs. gross wt., at 8000 ft. density altitude at 140 mph will have an approximate maximum range\*\* of 603 statute miles.

\* Take-off figures give distances for airplane wheels off the ground and airplane using 10° flaps. If no flaps are used at least 300 ft. must be added to the above figures.

\*\* Allowance made for a 10% fuel safety reserve and fuel for warm-up, taxiing, take-off and climb to altitude.

NOTE: All figures given above are subject to revision upon further flight tests. During testing, uncalibrated instruments were used and free air temperatures averaged between 28°C. and 34°C.

C O N F I D E N T I A L

~~UNCLASSIFIED~~ A L

INCLOSURE NO. 5

MAINTENANCE RECORD

Subject: Maintenance man hours on C-46A aircraft, serial Nos. 41-12402 and 42-107334

Object: Comparative check against aircraft in glider tow.

Note: All discrepancies noted were called to the attention of Curtis - Wright and Pratt-Whitney representatives.

Record: Aircraft No. 41-12402

Ship received 8 May 1944

5-9-44 25 hr. insp. completed, estimated man hours-10. No major discrepancies noted.

5-10-44 Left air-speed indicator replaced, estimated time- 1 hour.

5-11-44 Hyd. leak in tail wheel return line repaired, estimated time- 4 hrs.

5-11-44 R. Prop. repaired, pilots turn gyro replaced, estimated time- 5 hrs.

5-12-44 50 hr. inspection completed and minor repairs made, estimated time- 40 hrs.

5-15-44 Brake accumulator drained and refilled, estimated time, -2 hrs.

5-19-44 Right starter replaced, estimated time- 3 hrs.

Total flight time 29:10.

Total man hours for inspection and maintenance - 65.

5-19-44 Ship transferred to sub-depot for engine change due to damaged intake valve.

Aircraft No. 42-107334

Ship received 24 May 1944

5-26-44 Right cylinder head temperature gauge repaired, estimated time- 1 hr.

5-28-44 25 hr. inspection completed, estimated time, - 10 hrs.

5-30-44 Landing gear warning light repaired, estimated time - 1/2 hr.

6-1-44 50 hr. inspection completed, discrepancies noted:

Right Engine:

3 spark plug leads loose

Hyd. leak, main hyd. pump

3 cylinder head deflector plates broken

Left Engine:

Oil leak at oil by-pass plug

2 spark plug leads loose

2 cylinder head deflector plates broken.

Airplane general:

Hyd. leak at elevator booster. Hyd leak at Auto-pilot.

Estimated time for inspection and repairs - 30 hrs.

6-3-44 Right cylinder head temperature repaired - estimated time 1 hr.

Total flight time 48:00 hours

Estimated time for inspection and maintenance, 42:30 hours.

Pvt. Floyd V. Tibbets, 35140172, Crew Chief - Cpl. H. M. Sperling, 16087007.  
Asst.

# 5387-13

~~UNCLASSIFIED~~  
UNCLASSIFIED

~~C~~ UNCLASSIFIED A L

INCLOSURE NO. 6

TEST PERSONNEL

1. STERLING D. ROBERTS, Major, O-424681, AAF Board, Project Officer.
2. VERNON A. RUX, Major, O-388646, AAF Board, Project Officer.
3. ELRINO NEHER, JR., 1st Lt., O-737455, 810 AAF Base Unit, Maxton, N.C.,  
Project Tow Plane Pilot.
4. JULIAN R. HALL, 2nd Lt., O-537071, 810 AAF Base Unit, Maxton, N.C.,  
Project Glider Pilot.
5. H. M. SPERLING, Cpl., 16087007, 810 AAF Base Unit, Maxton, N.C.,  
Project Asst. Crew Chief.
6. FLOYD V. TIBBETS, Pvt., 35140172, 810 AAF Base Unit, Maxton, N.C.,  
Project Crew Chief.

S# 5387-14

~~C~~ UNCLASSIFIED  
~~CONFIDENTIAL~~

CADO CONTROL NO.:  
(N.A.)

US CLASSIFICATION:  
Unclass.

ATI NO.:  
75 611

OA NO.:  
(M-1) 105

TITLE:

Operational and Tactical Suitability of the C-464  
(Cargo) Airlifters for Troop Carrier Operations -  
AAF Board Project No. (M-1) 105 (3583A452.1).

AUTHOR(S):  
8 AUG 1944. 15pp.  
Roberts, Sterling D.

ORIGINATING AGENCY:

Air Proving Ground, Eglin Air Force Base, Fla.

FOREIGN TITLES:  
(N.A.)

PUBLISHED BY:  
(Same)

PUBLISHING NO.:  
(Same)

TRANSLATED BY:  
(N.A.)

TRANSLATION NO.:  
(N.A.)

PREVIOUSLY CATALOGED AS:

(M-1)



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS AIR MOBILITY COMMAND (AMC)

29 MAY 1998

MEMORANDUM FOR DTIC-RSM

8725 John H. Kingman Road, Station 0944  
Fort Belvoir VA 22060-6218

FROM: HQ AMC/SCYN[FOIA]  
402 Scott Drive Room 132  
Scott AFB IL 62225-5363

SUBJECT: Distribution Limitation on DTIC Documents (FOIA Request – Mr. Ian Sullivan)

1. On 27 March 1998, Ms. Kelly Akers from your office forwarded 10 documents to 11 CS/SCSR, Washington DC as responsive documents to a FOIA request from Mr. Ian Sullivan. Air Force was considered to be the controlling activity to determine releasability of the documents. Ms. Akers requested notification if the Air Force determined the distribution statements should be changed.

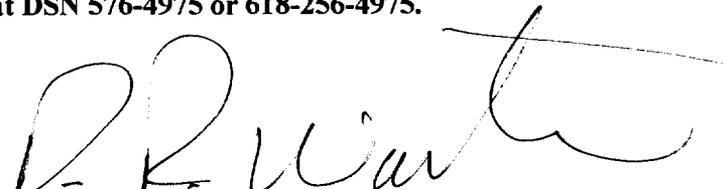
2. Five of the documents were sent to Headquarters Air Mobility Command, Scott AFB IL for release determination. Upon review, we determined documents listed below are releasable to the requester and the restricted distribution statement can be removed.

~~ATI 075959 Suitability of the B-24 Type Aircraft for Troop Carrier Operations~~  
~~ATI 076730 Suitability of the B-17 Airplane for Troop Carrier Operations~~  
~~ATI 087724 Tactical Doctrine of Troop Carrier Aviation~~  
B972097 ✓ Operational and Tactical Suitability of the c-46A Airplane for Troop Carrier Operations – AAF Board Project No. (M-1) 105  
B972518 ✓ Parachute Questionnaire Project

3. Direct any questions to Ms. Glenda Allen at DSN 576-4975 or 618-256-4975.

*Per my telecon with  
Glenda Allen on  
8 Jun 98, the documents  
can be marked "available  
to the public." It wasn't  
real clear in ~~the~~ letters.  
her*

*Kelly Akers  
DTIC-RSM  
8 Jun 98*

  
DOUGLAS R. WALTON, GS-12  
Chief, Records Management  
Directorate of Communications &  
Information