FEDERAL AVIATION AGENCY

3A2
Revision 18
CURTISS-WRIGHT
C-46A
C-46D
C-46F
C-46R

February 1, 1965

AIRCRAFT SPECIFICATION NO. 3A2

Type Certificate Holder — Airlift International, Inc.
P. O. Box 535
Miami, Florida 33148

I - Model C-46F, Approved September 23, 1949

Engines — 2 P&W Military R-2800-75. Propeller gear ratio .500:1.
(See Item 100 for optional engines)

Fuel — Aviation gasoline: Minimum Grade 100/130

Engine limits

	H.P.	RPM	M.P. in.Hg.	Alt.
Low Impeller gear ratio 7.6:1:				
Takeoff (two minutes)	2000	2700	52.0	S.L
Takeoff (two minutes)	2000	2700	51.0	1500'
Maximum Continuous	1700	2550	44.0	S.L.
Maximum Continuous	1700	2550	43.0	5500'
High Impeller gear ratio 9.89:1:				
No takeoff approved				
Maximum continuous	1450	2400	43.5	9000'
Maximum continuous	1450	2400	43.0	13300'

Airspeed limits

Vno (Normal operating)	220 mph (191 knots) True Ind.
Vne (Never exceed)	270 mph (235 knots) True Ind.
Va (Maneuvering)	149 mph (130 knots) True Ind.
Vfe (Flaps Down 35°)	150 MPH (130 Knots) True Ind.
(Flaps Down 17°)	172 MPH (150 Knots) True Ind.
(Flaps Down 10°)	190 MPH (165 Knots) True Ind.
Vle (Landing gear extended)	150 mph (131 knots) True Ind.

C.G. range — (308.0) (19.7% m.a.c.) to (324.4) (29.7% m.a.c.) Gear extended.
Effect of retracting landing gear is +21,029 in.lbs.

Maximum weights
Cargo

Takeoff	48,000 lbs.
Landing	48,000 lbs.
Zero Fuel and Oil	47,130 lbs.

Note: Aircraft certificated for 45,000 lbs. eligible at increased gross weight when Item 200 is incorporated and Airplane Flight Manual Item 400(a) or (b) is utilized.

I - Model C-46F (cont'd)

Passenger

45,000 lbs. (When operated for non-revenue passenger carriage under CAR 43. Not eligible for carriage of passengers for compensation or hire.)

Minimum crew

2 - Pilot and Co-pilot (80).

Cargo or baggage

(Maximum floor loading 185 lb/ft^2 with 1/4 in. plywood covering.)

Comp. B, Sta. 128 to 194	1900 lbs.
Comp. C, Sta. 194 to 276	4100 lbs.
Comp. D, Sta. 128 to 276 (Front belly)	3450 lbs.
Comp. E, Sta. 276 to 358	4500 lbs.
Comp. F, Sta. 358 to 440	4500 lbs.
Comp. G, Sta. 399 to 542.5 (Rear belly)	1750 lbs.
Comp. H, Sta. 440 to 542.5	5200 lbs.
Comp. I, Sta. 542.5 to 615	3100 lbs.
Comp. J, Sta. 615 to 704	3100 lbs.

Fuel capacity

1406 gals. (Six tanks: 3 in each outer wing; two front 236 gals. each (304), two center 292 gals. each (340), two rear 175 gals. each (374)); 1400 gals. usable. See Item 105 for system fuel. (No fuselage fuel or oil tanks permitted.)

Oil capacity

79.6 gals. (One 39.8 gal. tank in each nacelle) (253);
67.6 gals. usable. See Item 110 for system oil.

Control surface movements

Aileron	Up	12.5° ± 1°	Down	11.5° ± 1°
Aileron tab	Up	12.5° ± 1°	Down	13.5° ± 1°
Elevator	Up	34° + 1°,-0°	Down	16° ± 1°
Elevator trim tab	Up	10° ± 3°	Down	42° ± 3°
Elevator spring tab	Up	15° ± 2°	Down	30° ± 2°
Elevator "Vee" tab	Up	31° ± 3°	Down	20° ± 3°
Rudder	Right	20° + 0°,-2°	Left	20° + 0°,-2°
Rudder trim tab	Right	30° ± 3°	Left	30° ± 3°
Rudder spring tab	Right	20° ± 2°	Left	20° ± 2°
Wing flaps	Down	35° - 1.5°		

Serial Nos. eligible

Buffalo aircraft Nos. 2477 through 2710 (AAF Nos. 44-78545 through 44-78778). This includes all C-46F series aircraft.

Required equipment

In addition to the pertinent required basic equipment specified in CAR 3 and the modifications required in accordance with Riddle Airlines Report No. RA-01, the following items of equipment must be installed:
1(a) or 1(b) with 2(a) and 3(a); or 1(c); 100(a), (b) or (c); 106(a), 111(a); 115(a); 116(a) or (b); 200; 201(a); 202(a) or (b); 203; 204; 205(a); 300; 310(a); 320: 400(a) or (b); 410; 440(a), (b) or (c).

Certification basis

Type Certificate 3A2 (CAR 3, Normal Category)

II - Model C-46A and C-46D, Approved May 6, 1953

Engines

2 P&W Military R-2800-75. Propeller gear ratio .500:1.
(See Item 100 for optional engines)

Fuel

Aviation gasoline: Minimum Grade 100/130

Engine limits

	H.P.	RPM	M.P. in.Hg.	Alt.
Low Impeller gear ratio 7.6:1:				
Takeoff (two minutes)	2000	2700	52.0	S.L
Takeoff (two minutes)	2000	2700	51.0	1500'
Maximum Continuous	1700	2550	44.0	S.L.
Maximum Continuous	1700	2550	43.0	5500'
High Impeller gear ratio 9.89:1:				
No takeoff approved				
Maximum continuous	1450	2400	43.5	9000'
Maximum continuous	1450	2400	43.0	13300'

Airspeed limits

Vno (Normal operating)	220 mph (191 knots) True Ind.
Vne (Never exceed)	270 mph (235 knots) True Ind.
Va (Maneuvering)	149 mph (130 knots) True Ind.
Vfe (Flaps Down 35°)	150 MPH (130 Knots) True Ind.
(Flaps Down 17°)	172 MPH (150 Knots) True Ind.
(Flaps Down 10°)	190 MPH (165 Knots) True Ind.
Vle (Landing gear extended)	150 mph (131 knots) True Ind.

C.G. range

(308.0) (19.7% m.a.c.) to (324.4) (29.7% m.a.c.) Gear extended.
Effect of retracting landing gear is +21,029 in.lbs.

Maximum weights

Cargo

Takeoff	48,000 lbs.
Landing	48,000 lbs.
Zero Fuel and Oil	47,130 lbs.

Note: Aircraft certificated for 45,000 lbs. eligible at increased gross weight when modified in accordance with Riddle Airlines Report RA-09 and Airplane Flight Manual Item 400(c) or (d) is installed.

Passenger

45,000 lbs. (When operated for non-revenue passenger carriage under CAR 43. Not eligible for carriage of passengers for compensation or hire.)

Minimum crew

2 - Pilot and Co-pilot (80).

Cargo or baggage

Comp. B, Sta. 128 to 194	1900 lbs.
Comp. C, Sta. 194 to 276	4100 lbs.
Comp. D, Sta. 128 to 276 (Front belly)	3450 lbs.
Comp. E, Sta. 276 to 358	4500 lbs.
Comp. F, Sta. 358 to 440	4500 lbs.
Comp. G, Sta. 399 to 542.5 (Rear belly)	1750 lbs.
Comp. H, Sta. 440 to 542.5	5200 lbs.
Comp. I, Sta. 542.5 to 615	3100 lbs.
Comp. J, Sta. 615 to 704	2800 lbs.

(Maximum floor loading 185 lb/ft^2 with 1/4 in. plywood covering.)

Fuel capacity

1406 gals. (Six tanks: 3 in each outer wing; two front 236 gals. each (304), two center 292 gals. each (340), two rear 175 gals. each (374)); 1400 gals. usable. See Item 105 for system fuel. (No fuselage fuel or oil tanks permitted.)

II - Model C-46A and C-46D (cont'd)

Oil capacity

79.6 gals. (One 39.8 gal. tank in each nacelle) (253);
67.6 gals. usable. See Item 110 for system oil.

Control surface movements

Aileron	Up	35° ± 2°	Down	20° ± 2°
Aileron tab	Up	14° ± 1°	Down	14° ± 1°
Elevator	Up	34° +1°, -0°	Down	16° ± 1°
Elevator trim tab	Up	10° ± 3°	Down	42° ± 3°
Elevator spring tab	Up	15° ± 2°	Down	30° ± 2°
Elevator "Vee" tab	Up	31° ± 3°	Down	20° ± 3°
Rudder	Right	20° + 0°,-2°	Left	20° + 0°,-2°
Rudder trim tab	Right	30° ± 3°	Left	30° ± 3°
Rudder spring tab	Right	20° ± 2°	Left	20° ± 2°
Wing flaps	Down	35° ± 1.5°		

Serial Nos. eligible

All Curtiss-Wright C-46 aircraft except Buffalo numbers 2477 thru 2710 (AAF Nos. 44-78545 thru 44-78778), Buffalo Nos. 1 thru 25 (AAF Nos. 41-5159 thru 41-5183) and St. Louis Nos. 451 thru 467 (AAF Nos. 43-47403 thru 43-47419).

Required equipment

In addition to the pertinent required basic equipment specified in CAR part 3 and the modifications required in accordance with Riddle Airlines Report No. RA-01 and RA-09, the following items of equipment must be installed:
1(a) or 1(b) with 2(a) and 3(a); or 1(c); 100(a), (b) or (c); 106(a), 111(a); 115(a); 116(a) or (b); 200; 201(a); 202(a) or (b); 203; 204; 205(a); 300; 310(a); 320; 400(c) or (d); 410; 440(a), (b) or (c).

Certification basis

Type Certificate 3A2 (CAR 3, Normal Category)

III - Model C-46R, Approved March 12, 1957

Engines

2 P&W Military R-2800-34. Propeller gear ratio .450:1.
(See Item 100 for optional engines)

Fuel

Aviation gasoline: Minimum Grade 100/130

Engine limits

	H.P.	RPM	M.P. in.Hg.	Alt.
Low Impeller gear ratio .29:1				
Takeoff (two minutes)	2100	2800	54.0	S.L
Takeoff (two minutes)	2100	2800	52.5	3400'
Maximum Continuous	1800	2600	45.0	S.L.
Maximum Continuous	1800	2600	44.0	6500'
High Impeller gear ratio 9.45:1:				
No takeoff approved				
Maximum continuous	1500	2500	43.0	10000'
Maximum continuous	1500	2500	42.0	16000'

Airspeed limits

Vno (Normal operating)	218 mph (192 knots) True Ind.
Vne (Never exceed)	270 mph (235 knots) True Ind.
Va (Maneuvering)	152 mph (132 knots) True Ind.
Vfe (Flaps Down 35°)	150 MPH (130 Knots) True Ind.
(Flaps Down 17°)	172 MPH (150 Knots) True Ind.
(Flaps Down 10°)	190 MPH (165 Knots) True Ind.
Vle (Landing gear extended)	150 mph (130 knots) True Ind.

III - Model C-46R (cont'd)

C.G. range

(309.3) (20.5% m.a.c.) to (324.9) (30.0% m.a.c.) Gear extended.
Effect of retracting landing gear is +21,029 in.lbs.

Maximum weights

Takeoff	49,000 lbs.	
	50,000 lbs.	(AFM Revision 5, dated 6-30-58, required
Landing	48,000 lbs.	
Zero Fuel and Oil	47,130 lbs.	

Maximum passengers

62 with three emergency exits in addition to main door.

Cargo or baggage

(Maximum floor loading 185 lbs. per sq. ft. with 1/4 in. plywood covering.)

Comp. B, Sta. 128 to 194	1900 lbs.
Comp. C, Sta. 194 to 276	4100 lbs.
Comp. D, Sta. 128 to 276 (Front belly)	3450 lbs.
Comp. E, Sta. 276 to 358	4500 lbs.
Comp. F, Sta. 358 to 440	4500 lbs.
Comp. G, Sta. 399 to 542.5 (Rear belly)	1750 lbs.
Comp. H, Sta. 440 to 542.5	5200 lbs.
Comp. I, Sta. 542.5 to 615	3100 lbs.
Comp. J, Sta. 615 to 704	2800 lbs.

Fuel capacity

1406 gals. (Six tanks: 3 in each outer wing; two front 236 gals. each (304), two center 292 gals. each (340)two rear 175 gals. each (374)); 1400 gals. usable. See Item 105 for system fuel. (No fuselage fuel or oil tanks permitted.)

Oil capacity

79.6 gals. (One 39.8 gal. tank in each nacelle) (253);
67.6 gals. usable. See Item 110 for system oil.

Control surface movements

Aileron (20-050-5701 Assy.)	Up	12.5° ± 1°	Down	11.5° ± 1°
Aileron tab (20-050-5701 Assy.)	Up	12.5° ± 1°	Down	13.5° ± 1°
Aileron (20-050-1001 Assy.)	Up	35 ± 2°	Down	20° ± 2°
Aileron tab (20-050-1001 Assy.)	Up	14° ± 1°	Down	14° ± 1°
Elevator	Up	34° +-0°	Down	16° ± 1°
Elevator trim tab	Up	10° ± 3°	Down	42° ± 3°
Elevator spring tab	Up	15° ± 2°	Down	30° ± 2°
Elevator "Vee" tab	Up	31° ± 3°	Down	20° ± 3°
Rudder	Right	20° + 0°,-2°	Left	20° + 0°,-2°
Rudder trim tab	Right	30° ± 3°	Left	30° ± 3°
Rudder spring tab	Right	20° ± 2°	Left	20° ± 2°
Wing flaps	Down	35° ± 1.5°		

Serial Nos. eligible

All Curtiss-Wright C-46 aircraft except St. Louis numbers 451 through 467 (AAF numbers 43-47403 through 43-47419) and Buffalo numbers 1 through 25 (AAF numbers 41-5159 through 41-5183).

Required equipment

Aircraft must be modified to conform to Drawing List presented in Riddle Airlines Report RA-22. The following items of equipment must be installed:

1(d); 2(b); 3(a); 4; 100(d), (e), (f), (g), (h) or (i); 106(a); 107(a) and (b); 108; 111(b); 115(a) or (b); 116(a) or (b); 120; 200; 201(b); 202(a) or (b); 203; 204; 205(a); 300; 310(b) (See NOTE 6); 320; 400(e); 402; 403; 410; 440(a) or (b) for cargo only; 460(a).

Certification basis	Type Certificate No. 3A2 (Transport Category, CAR 4b, dated July 20, 1950, with the following exceptions: 1. Section 4b.0 thru Section 4b.19, of CAR 4b, effective May 18, 1954, is complied with; 2. Section 4b.480 thru Section 4b.490, effective May 16, 1953, with the exception of Section 4b.484(a)(1) and Section 4b.487(e), is complied with; 3. In determining compliance with Section 4b.116, performance credit for automatic indication of loss of power was utilized; 4. Section 4b.324, 4b.337, 4b.352, and 4b.353 are not complied with. As is provided in SR-406A, effective June 7, 1955.) Compliance with the ditching provisions of Section 4b.261 has been shown.

SPECIFICATIONS PERTINENT TO ALL MODELS

Datum	Nose of fuselage - Station 0
Leveling means	Lugs provided on right cabin floor at Stations 276 and 378.
Production basis	None. Prior to original certification of each aircraft a Civil Aeronautics Administration representative must perform a detailed inspection for workmanship, materials, and conformity with the approved technical data and a check of the flight characteristics.
Export eligibility	Eligible for export to all countries subject to the provisions ofMOP 2-4 except as follows: (a) Canada - Landplane - eligible Skiplane - not eligible

EQUIPMENT:

Propellers and Propeller Accessories (except De-icing Equipment)

1. Propellers
   - (a) 2 Ham. Std., hubs 23E50, blades 6491-0 or 6801-0 — 986 lbs. (142)
     (Blades 6491 and 6801 may be installed in same hub).
     Dia.: Max. 15' 3/8", min. allowable for repairs 14' 8 1/2".
     No further reduction permitted.
     Min. low pitch setting, 10° at 72 in. sta.
   - (b) 2 Ham. Std., hubs 23E50, blades 6491-4 or 6801-4, when modified — 982 lbs. (142)
     in accordance with Pan American World Airways Report No. LA-424.
     Dia.: Max. 14' 8", min. allowable for repairs 14' 3".
     No further reduction permitted.
     Min. low pitch setting, 10° at 72 in. sta.
   - (c) 2 Curtiss hubs C543S, Curtiss blades 814-3C3-18 or — 1238 lbs. (141)
     American blades C3821306.
     Max. diameter 13' 6".
     Min. low pitch setting, 17° at sta. 54
   - (d) 2 Ham. Std., hubs 33E60, blades 6801-6 — 1008 lbs. (142)
     Dia.: Max. 14' 7 5/16", min. allowable for repairs 14' 3 5/16".
     No further reduction permitted. Min. low pitch setting,
     14° at 72 in. sta.
     Placards required: (1) "Avoid continuous operation in flight
     between 1875 and 2175 RPM", (2) "Avoid continuous operation on
     ground between 1600 and 1875 RPM and between 1950 and 2275 RPM".
2. Two propeller governors
   - (a) 2 Ham. Std. 4G8-G23G-1 — 10 lbs. (163)
   - (b) 2 Ham. Std. 4G8-G30M — 10 lbs. (163)

3.	Two propeller feathering pumps		
	(a) 2 Pesco IEVR-280-BHC-3	38 lbs.	(233)
4.	Propeller feathering switches, 2 Airite Products 1230	1 lb.	(47)

Engines and Engine Accessories - Fuel and Oil System

100.	Engines		
	(Eligible on C-46A, D or F)		
	(a) 2 P&W R-2800-75	4650 lbs.	(178)
	(b) 2 P&W R-2800-51	4600 lbs.	(178)
	(c) 2 P&W R-2800-51M1	4780 lbs.	(178)
	(Eligible on C-46R)		
(d)	2 P&W R-2800-34	4720 lbs.	(181)
(e)	2 P&W R-2800-83	4784 lbs.	(181)
(f)	2 P&W R-2800-83A	4734 lbs.	(181)
(g)	2 P&W R-2800-85	4750 lbs.	(181)
(h)	2 P&W R-2800-85A	4730 lbs.	(181)
(i)	2 P&W R-2800-57	4630 lbs.	(181)
	(AFM Revision 13 dated 9-3-64 required)		
105.	System fuel, 6 gals.	36 lbs.	(335)
106.	Submerged fuel booster pumps		
	(a) 6 Thompson TFD-12900-13	39 lbs.	(338)
107.	Nacelle emergency fuel pumps	20 lbs.	(368)
	(a) 2 Delco Motors A4949Z		
	(b) 2 Thompson pumps AN 4102-2 or AN 4102-1		
108.	Carburetors, 2 PR58E2-1552		
	(PR58E2 carburetors modified in accordance with Riddle Report RA-44 are required for cooling and performance data shown in Flight Manual) (C-46R only)		
110.	System oil, 12 gals.	90 lbs.	(202)
111.	Oil coolers		
	(a) 2 Harrison 8504770	127 lbs.	(206)
	(b) 2 AiResearch 87270-155-13	80 lbs.	(205)
115.2	Starters Jack and Heintz		
	(a) JH-4ER type G-20	83 lbs.	(216)
	(b) JH-5ER	94 lbs.	(216)
116.	Exhaust manifold assembly		
	(a) 2 Solar 12-1068		
	(b) 2 Slick Airways 00237		
120.	2 Power failure warning switches, Airite No. 5012A	4 lbs.	(160)

Landing Gear

200.	2 Main gear shock strut assemblies, Cleveland Pneumatic 8250A (modified)		
201.	2 Main wheel-brake assemblies		
	NOTE: Item 201(b) wheel assembly (H-3-845) may be substituted for item 201(a) wheel assembly (H-3-38M-1) but not vice versa.		
	(a) Goodrich (Hayes) (not eligible on C-46R)		
	Wheel assembly H-3-38M-1	343 lbs.	(275)
	Brake assembly H-2-257-1	90 lbs.	(275)
	(See NOTE 4 for eligible brake block replacements).		
	(b) Goodrich Model H-14-932		
	Wheel assembly H-3-845 (Military H-3-38M-2)	348 lbs.	(275)
	Brake assembly H-2-642	105 lbs.	(275)
202.	2 Main wheel tires with tubes		
	(a) 19.00x23, 16-ply, rayon, Type III	542 lbs.	(275)
	(b) 19.00x23, 16-ply, nylon, Type III	394 lbs.	(275)
203.	Tail wheel shock strut assembly, Cleveland Pneumatic Tool Company No. 8108		
204.	Tail wheel assembly, Hayes D-3-21-M or D-3-21A	11 lbs.	(756)
205.	Tail wheel tire with tube		
	(a) 10.00x7 10-ply, nylon, Type III	46 lbs.	(756)

Electrical Equipment

300.	2 Aircraft storage batteries, Type G-1, 24 volt	158 lbs. (100)
310.	2 Generators. (When R-2800C series engines have been modified from 3.033:1 generator drive ratio to 1.4:1, item 310(a) will be installed).	
	(a) Type P-1, 200 amp.	94 lbs. (217)
	(b) Type P-2, 200 amp.	76 lbs. (217)
311.	Inverters	
	(a) 2 Type MG 149F	44 lbs. (94.5)
320.	2 Landing lights, retractable Type B-3	12 lbs. (300)

Interior Equipment

400.	CAA Approved Aircraft Flight Manual	
	(a) C-46F Manual for 48,000 pounds dated September 23, 1949 and including revisions through August 17, 1951(Rev. 9) issued by Pan American World Airways, Inc. or by Conner Airlines, Inc. prior to May 1, 1955.	
	(b) C-46F Manual for 48,000 pounds dated June 2, 1955 issued by Riddle Airlines, Inc. or Airlift International, Inc. Latest revision is Revision 12, dated May 7, 1964.	
	(c) C-46A or D Manual for 48,000 pounds dated April 29, 1953, issued by Conner Airlines, Inc. prior to June 1, 1955.	
	(d) C-46A or D Manual for 48,000 pounds dated June 2, 1955 issued by Riddle Airlines, Inc., Airlift International, Inc. Latest Revision is Revision 12, dated May 7, 1964.	
	e) C-46R Manual dated March 12, 1957 issued by Riddle Airlines, Inc., or Airlift International, . Latest Revision is Revision 13, dated 9-3-64.	
402.	Instruments	
	Instrument panel in accordance with Riddle Drawing R20-511-7000. R20-511-7000.	
403.	Overhead electrical panel in accordance with Drawing R20-511-7601.	
405.	Oxygen System Installation	
	(a) Oxygen System (Riddle-Airlines Dwg. R20-670-7001)	
410.	Windshield wiper installation Dwg. 20-251-5111	5 lbs. (40)
420.	Automatic Pilot Installation	
	(a) Sperry A-3	46 lbs. (50.5)
	(b) Jack & Heintz A-3A	46 lbs. (50.5)
421.	Autopilot Servos & Drip Pan	28 lbs. (159)
440.	Fire Extinguishing System	
	(Riddle Airlines Report RA-32)	
	(a) CF_3BR for passenger or cargo operation	
	(b) CB for cargo only (See Flight Manual)	
	(c) CO_2 system in accordance with Airforce Technical Order 01-25LA-20S.	
450.	Heating System	
	(a) Riddle Airlines Report RA-06	
460.	Auxiliary Hydraulic pump	
	(a) Pesco-Motor Type D5032 Class A, style 2 - pump PT 1E736CD	

De-Icing Equipment

500.	Wing Deicer boots	
	(a) L.H. Outer Panel, Goodrich 11-517-8-1	17 lbs. (278)
	(b) R.H. Outer Panel, Goodrich 11-517-8-2	17 lbs. (278)
	(c) L.H. Outer Panel, Goodrich 11-517-9-1	18 lbs. (322)
	(d) R.H. Outer Panel, Goodrich 11-517-9-2	19 lbs. (322)
501.	Horizontal Stabilizer Deicer boots	
	(a) 2 Goodrich 11-517-10-1	16 lbs. (743)
502.	Fin Deicer boot	
	(a) Goodrich 11-517-11-1	8 lbs. (775)
503.	Carburetor, Propeller, Pitot and Windshield Anti-icing System	
	(a) Riddle Drawing No. R20-660-7113	

NOTE 1. A current weight and balance report, including listing of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided in each aircraft. (Exception: Air Carriers having an approved weight control system).

NOTE 2. The following placards must be placed in the locations noted:
(a) On the instrument panel in full view of the pilot:
"This airplane shall be operated in accordance with the limitations of the FAA Approved Flight Manual."
(b) For additional placard see FAA Approved Airplane Flight Manual Riddle Airlines Report RA-40.

NOTE 3. Deleted April 10, 1959.

NOTE 4. The following brake blocks are satisfactory replacements for the original blocks in the Hayes H-2-257-1 brakes:
(a) M.I. Williams Enterprises No. MEW-1000
(b) Slick Airways No. 00340
(c) Flying Tiger Line, Inc. PS 265

NOTE 5. Seat installations meeting the requirements of car 4a are eligible for certification in c-46 aircraft.

NOTE 6. The following control surface travel tolerances are applicable for the models indicated:

	C46A, C46D		C-46F	
	Unbalance Permitted	Spanwise C.G. of Surface Airplane Sta.	Unbalance Permitted	Spanwise C.G. of Surface Airplane Sta.
Aileron	5 ± 20 in. lb.	(1)	+5 ± 20 in. lb.	285.5 ± 2.5
Aileron trim tab	(1)	(1)	+12.2 ± 2 in. lb.	200 ± 2
Elevator (each)	(2)	(2)	+410 ± 70 in. lb.	109 ± 2
Elevator vee tab	(2)	(2)	-12.2 ± 1.0 in. lb.	109 ± 2
Elevator spring tab	(2)	(2)	+ 1.0 ± 1.0 in. lb.	37 ± 2
Elevator trim tab	(1)	(1)	+12.0 +1 in. lb. - 5	106 ± 2
Rudder	+170 ± 70 in. lb.		+170 ± 70 in. lb.	108 ± 2
Rudder spring tab	(3)		+35.8 + 0 in. lb.	84 ± 2
Rudder trim tab	(1)		+17.5 + 1.5 in. lb. - 5	151 ± 2

General Notes: The surface tabs should be balanced prior to balancing the control surface to which they are attached. All control rods, etc., should be in their normal position when balancing surface, but disconnected at the control surface horn.
(+) Plus unbalance indicates that the center of gravity of the control surface is aft of the hinge line, i.e., T.E. heavy.

Footnotes:
(1) Not available.
(2) Models C-46A and C-46D require installation of C-46F type elevator prior to certification. Use value shown for C-46F.
(3) Does not apply to C-46A and C-46D.

NOTE 7. (Applies Only to C-46R Aircraft).
A. For Weight Reduction Purposes or where not needed the Lower Cargo Compartment Flooring and Lining Panels may be removed to the extent allowed below.
(1) The Fwd. Compartment Flooring and Panels, except in Heater Area. All remaining openings in Heater Enclosure must be sealed using .020 2024 ST Aluminum Sheet and 1.5" MM #27 Fiber Glass Tape.
(2) All Lining Panels and Flooring in Aft Cargo Compartment.
B. The Compartment Door must be placarded on the outside near the Locking Handle as follows:
(1) "DO NOT LOAD"

.....END.....