DEPARTMENT OF TRANSPORATION FEDERAL AVIATION ADMINISTRATION

6A5 Revision 25 LOCKHEED 1049-54 1049B-55 (Navy R7V-1) 1049C-55 1049D-55 1049E-55 (USAF C-121C) 1049G-82 1049H-82 July 23, 2012

AIRCRAFT SPECIFICATION NO. 6A5

This data sheet which is part of Type Certificate No. 6A5 prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

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Type Certificate Holde	er		1 8 1	Lockheed Martin Aeronautics Company 86 South Cobb Drive Marietta, GA 30063											
Type Certificate Holde	er Rec	cord Lockheed Aircraft Corporation Burbank, California													
<u>I - Model 1049-53 dele</u>	eted Ju	ine 9,	1953	. All	1049-:	53 aire	craft c	onver	ted to	Mode	1 1049	9-54.			
II - Model 1049-54, A	pprov	ed Ma	ay 14,	1952											
Engines			4	4 Wrig	ght Cy	clones	9750	C18CB	8-1 wit	th 16:'	7 redu	ction	gear ra	atio	
Fuel			1	AN gr	ade 11	5/145	(See	NOTI	E 15 f	or eng	ine lir	nits w	hen us	sing lo	w grade fuel)
Engine limits]	Low ir	npelle	r ratio	6.46	:1		C				U	0 ,
U				Μ	laximu	im coi	ntinuo	us:							
					(Se	ea leve	el) 48.	0 in.h	g., 26	00 rpi	m (240	00 hp))		
					(St	raight	line r	nanifo	ld pre	ssure	variati	ion wi	ith alti	tude to	o 5300 ft.)
					4	6.0 in	. hg.,	2600	rpm (2400 1	np)				,
				Т	ake-of	f (2 m	inutes	s):	I \		1 /				
					(Se	a leve	el) 54.	, 5 in.h	g., 29	00 rpi	m (280	00 hp))		
					(St	raight	line r	nanifo	ld pre	ssure	variati	ion wi	ith alti	tude to	o 4500 ft.)
					5	2.5 in	.hg., (2900 1	mm (2	800 h	p).				,
			1	High i	mpelle	er ratio	8.67	:1	r (-		F).				
			-	N	laxim	im co	ntinuo	115.							
				11.	(10) 800	ft) 47	' 5 in	hor 2	600 rī	om (20)00 hr))		
					(St	raight	line r	nanifo	ld nre	ssure	variati	ion wi	'' ith alti	tude to	h
					16	000 f	t) 46	0 in	$h\sigma^2$	600 rr	m(2)	000 hr	nin ann N		5
					10	,000 1		.0	ug., 2	000 1	/// (20	/00 IIp	/).		
Airspeed limits				Vno (N	Vorma	l Oper	ration)		30	0 mph	(260	knots)	True	Ind.
				(4	Above	11,00	0' rec	luce sp	peed	1	0 mph	ı (9	knots)	for ea	ach 000')
			,	Vne (N	Jever	Excee	ብ)			33	8 mnh	(293	knots)	True	Ind
				() one ()	hove	11 00	u) O'rec	hice si	heed	1	2 mph	(2)	knots) for e	nia. Pach
(Nove 11,000 reduce speed 12 mpli (11 kilos) to det									000')						
	Va (Manauwaring) 200 mph (190 kmata) True Ind														
				νη (Γ Vf (Γ	Takeof	fnosi	,, tion-6	0%)		20	2 mph	(184	knote)	True	Ind
Dense March 1 1 2	2	4	5		7	- P001	0	- 10	11	12	- mpn	14	15	1	
Page No. 1 2 Pey No. 25	3	4	3	0	/	ð	9 24	10	11	12	15	14	15		
Kev. NO. 23 -	-	-	-	-	-	-	24	-	-	-	-	-	1 -]	
Page No. 16 17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Rev. No 24	-	-	-	-	-	-	-	-	-	-	-	-	-	24	

	Vf Vf Vf Vlo Vle Mac	 Vf (Approach position-66%) Vf (80%) Vf (Landing position-100%) Vlo (Landing Gear Operation) Vle (Landing Gear Extension) Mach No Never Exceed .54 				 186 mph (161 knots) True Ind. 177 mph (153 knots) True Ind. 171 mph (148 knots) True Ind. 190 mph (165 knots) True Ind. 190 mph (165 knots) True Ind. 			
C.G. range	See	NOTE 1(b)	for require	d loading	and gear r	etraction r	noment.		
	Con	dition V	Weight	Landing	Fwd.	Limit	t Aft.	Limit	
	Talz	off 1	1bs.	gear	sta.	%MA 21.0	<u>C sta.</u>	% Mac	
	Tak	-011 1	98,500*	Down	660.5*	18.0	685.2	32.0	
	_	C	or less	_					
	Land	ling	98,500 r less	Down	660.5	18.0	685.2	32.0	
	Crui	sing 1	20,000*	Up	661.5*	18.6	688.7	34.0	
	Flig	ht c	98,500* or less	Up	655.2*	15.0	688.7	34.0	
	* Str	raight line v	variation bet	ween thes	e values.				
Weight limits (See NOTE 15 for limits when using low grade fuel)	- Land Take Max h 3-en aj	ling 98,5 e-off 120,0 imum zero igher weigh gine ferryir oplicable re	00 lbs. See 00 lbs. (Du fuel weight nt. ng 100,000 strictions.	NOTE 8 mp valves 93,500 lb lbs. See	for higher are requin os. See NC FAA Appr	weight red) DTES 1(e) roved Airp	for fuel loadin blane Flight Ma	g and 8 for nual for	
Minimum crew Passengers	3. F Max num	Pilot and Co imum 88 (O ber and loc	opilot at +1 CAR 4b.433 ation.	90 and Fli 3). See Aj	ight Engine pproved W	eer at +22 Veight and	26. Balance Report	t for actual	
Baggage	Max	imum capa	city of inter	nal baggag	ge and stor	age comp	artments:		
			Vol.	Max.	Floor	Cap.	Compt.		
			<u>(cu. ft.)</u>	loadi	ng psf	<u>(lbs.</u>)	<u>C.Ĝ.</u>		
Fw	vd. cargo compartmer	nt, 6 to 482	72	-	70	1440	(+407.8)		
Fw	vd. cargo compartmer	0 10 482 It.	12		/0	1440	(+407.8)		
a	ft portion F.S. 482 to	638	194		70	3880	(+560)		
Af	t cargo compartment,		220			1600	(. 0.11)		
	wd. portion F.S. /50	to 932	230		/0	4600	(+841)		
a: -(ft portion F.S. 932 to 57 interior	1139.8	160		70	3200	(+1036)		
	Left hand fwd.					450	(+ 497)		
	Right hand fwd.					700	(+ 497)		
W	Left hand aft	r c				600 200	(+1150) (+1075)		
Ga	llev water -67 interio	ors				125	(+1073) (+380)		
Ga	lley installation and s	upplies, 67	interiors	2	45 (a)	120	(1 200)		
	(a)	Galley area uniformly load of 55 contents sh listed on th	as between a distributed l psf on each nall not exce ne Approvec	Stations 20 oad over the side of the ed these le l Equipme	50 and 343 the entire a e 20 inch a oadings. H ent List tog	5.5 are struarea of 45 aisle. Gal Fixed equi- ether with	ncturally satisfar psf or a uniform ley installations pment such as g pertinent weig	ctory for a mly distributed and their galleys shall be hts and arms.	
Fuel capacity	See	NOTE 1(c)	regarding '	Usable fu	el and Sys	tem Oil."			
	Tanl	x = 2 and 3	(inboard)	(790 g	al. ea.) 9	9,480 lbs.	(+692)		
	Tanl	ts 1 and 4	(middle)	(1555 g	al. ea.) 18	,660 lbs. ((+689)		
	Tanl Tanl	ts 2a and 3a ts 5 (center a	a (outboard section) (565 g (730 g	gal. ea.) 6 gallons) 4	,780 lbs. ,380 lbs. ((+687) (+694) when i	nstalled)	
Oil capacity	See	NOTE 1(c)	regarding '	Unusable	Fuel and S	System Oi	1."		

	(a) ((2 inboar 2 outboa	rd tanks (with ard tanks (wi	h aux. tank) th aux. tank	and (58 gal); or (58 ga	.ea.) 870 lb l.ea.) 870 lb	os. (+584) os. (+603).		
	 (b) (2 inboard tanks (without aux. tank) and (55 gal.ea.) 825 lbs. (+584) (2 outboard tanks (without aux. tank) (55 gal.ea.) 825 lbs. (+603). 								
Serial Nos. eligible	1049/4001 through 1049/4024 (See Equipment Item 400)								
Required equipment	In addition to the pertinent required basic equipment specified in CAR 4b, the following items of equipment must be installed: Items 1(a) or (c); 101(a) or (b); 103(a); 104(a); 105(a); 107(a) or (b); 200(a) or (b); 201(a); 202(a)(1), (2) or (3); 203(a) or (b); 204(a)(1), (a)(2) or (b)(1); 205(a) or (b); 206(a) or (b); 300(a); 301(a); 303(a) or (b); 400; 440; 441(a) or (b); 508(a).								
III - Model 1049B-55 (Navy R7V-1), and certain structural changes. This a	Approv irplane	ved Octo is basic	ober 28, 195 ally a cargo	 (Same as rather than p 	Model 104 passenger ca	9-54 except arrier) (See I	engines, desi NOTE 5 for 1	ign weights, nodifications	
Engines	-1). 4 Wri	ght Cyc	lones 972TC	18DA1 with	n 16:7 reduc	tion gear ra	tio and 6.52:	1 Turbo	
	ratio		drive	2					
Fuel	AN σ	rade 115	5/145 (See N	OTE 16 for	engine limi	ts when usir	ng low grade	fuel)	
Engine limits	Low i	impeller	ratio 6.46:1	012 10 101	engine mm	to when ush	ig iow grude	iuci)	
	Max	cimum co	ontinuous:						
	(Sea leve	el) 47.5 in.hg	g., 2600 rpm	n (2600 hp)				
	(Straight	line manifol	d pressure v	ariation wit	h altitude to	6500 ft.) 45	.0 in. hg.,	
	2	2600 rpn	n (2650 hp)						
	Takeoff (2 minutes):								
	(Sea leve	el) 56.5 in.hg	g., 2900 rpm	n (3250 hp)	h . 14 ¹ 400 da 4a	5000 & 52	0 in ha	
	(Straight line manifold pressure variation with altitude to 5000 ft.) 53.0 in.hg.,								
	High impeller ratio 8.67:1								
	Maximum continuous:								
	(9,550 ft.) 48.5 in.hg., 2600 rpm (2400 hp)								
	(Straight	line manifol	d pressure v	ariation wit	h altitude to	16,400 ft.)	47.0 in.hg.,	
	2	2600 rpn	n (2450 hp).						
Airspeed limits	Vno (Normal	Operation)		300 mph ()	260 knots) T	True Ind		
in speed mints	(Above 1	2.500' redu	ce speed	11 mph (10 knots) for ea. additional 2000')				
	Vne (Never E	(xceed)	1	338 mph (293 knots) True Ind.				
	(Above 1	2,500' redu	ce speed	13 mph (11 knots) for ea. additional 2000')				
	Va (Maneuv	ering)		218 mph (189 knots) True Ind.				
	Vf (Takeoff	position-609	%)	220 mph (191 knots) True Ind.				
	Vf (Approac	ch position-6	6%)	200 mph (174 knots) True Ind.				
	VI (Vf (80%) Londing	position 10	ገሚነ	200 mpli (174 kilols) True Ind. 180 mph (156 knots) True Ind				
		Landing	Gear Opera	tion)	190 mph (165 knots) True Ind				
	Vle (Landing	Gear Exten	sion)	190 mph (165 knots) True Ind.				
	Mach	No N	lever Exceed	1.56	1	,			
C.G. range	See N	OTE 1	b) for requir	ed loading a	nd gear retr	action mom	ent.		
	Condi	ition	Weight	Landing	Fwd.	Limit	Aft.	Limit	
			lbs.	gear	sta.	%MAC	sta.	%Mac	
	Take-	ott	135,000*	Down	667.2*	21.0	685.2	32.0	
			103,000* or less	Down	000.3*	18.0	083.2	52.0	
	Landi	ng	110.000*	Down	661.6	18.0	685.2	32.0	
	Land		105,000*	Down	660.5*	18.0	685.2	32.0	
			or less						
	Cruis	ing	133,000*	Up	665.8*	21.0	688.7	34.0	
	Flight	t	90,000*	Up	655.2*	15.0	688.7	34.0	
			or less						

* Straight line variation between these values.

Weight limits (See NOTE 16 for limits when using low grade fuel)	Landing 110,000 lbs. Takeoff 133,000 lbs. #130,000 lbs Maximum zero fuel we 3-engine ferrying 100,	 Landing 110,000 lbs. Takeoff 133,000 lbs. # with auto-feathering (Dump valves are required.) See Equipment Item 1 (b), or (c) or (d) for takeoff weight with auto feathering inoperative. #130,000 lbs. for serial Nos. 4101 through 4139 unless modified in accordance with NOTE 6. Maximum zero fuel weight 105,000 lbs. See NOTE 1(e) for fuel loading. 3-engine ferrying 100,000 lbs. See FAA Approved Airplane Flight Manual for applicable restrictions. 						
Minimum crew	3. Pilot and Co-pilot a	t + 190 and Flig	ht Engineer at	+226.				
Passengers	All Serial Numbers ori conversion to passenge	All Serial Numbers originally certificated as cargo carriers. See NOTE 9 for conversion to passenger configuration.						
Maximum cargo								
			Maximum	Maximum Floor				
	Compartment	Station	Cap. (lbs.)	loading psf	Arm			
	C (Main Cabin) D (Main Cabin) E (Main Cabin) F (Main Cabin)	260-287 287-370 370-444 444-509	1000** 3900 6100 5400	300 300 300 300	274 329 408 477			
	G (Main Cabin)	509-583	6100	300	546			

H (Main Cabin)

I (Main Cabin)

J (Main Cabir 722 000 6100 300 760 K L

6100

6300

583-656

656-732

300

300

620

694

J (Main Cabin)	/32-806	6100	300	/69
K (Main Cabin)	806-879	6100	300	842
L (Main Cabin)	879-953	6100	300	916
M (Main Cabin)	953-1026	6100	300	989
N (Main Cabin)	1026-1158	7200	300	1089
O (Main Cabin)	1158-1258	2900	300	1198
Q (Lower Cargo Compt)	334-482	2800	70	402
R (Lower Cargo Compt)	482-638	5040	70	558
S (Lower Cargo Compt)	750-932	5950	70	821
T (Lower Cargo Compt)	932-1140	6370	70	1004

Maximum combined accumulated load of both cabin and lower cargo compartments from extremities of cabin toward main frames:

Forebo	ody	Afterbody
From Sta. 260	to	From Sta. 1258 forward to:
Sta. 287	300 lbs.	Sta. 1158 2,900 lbs.
Sta. 370	3,900 lbs.	Sta. 1026 7,200 lbs.
Sta. 444	6,900 lbs.	Sta. 953 9,800 lbs.
Sta. 509	9,700 lbs.	Sta. 879 14,100 lbs.
Sta. 583	14,700 lbs.	Sta. 806 18,300 lbs.
Sta. 656	20,800 lbs.	Sta. 732 23,500 lbs.

** Including radio and galley equipment (700#) in compartment C. All cargo loading must be secured with the tie-downs provided since there are no restraining or crash bulkhead provisions.

Fuel capacity

See NOTE 1(c) regarding "Unusable Fuel & System Oil."

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7).
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2) 9 7) 1)

Oil capacity	See NOTE 1(c) regarding "Unus	able Fuel & System Oil."
1 5	2 inboard tanks	(40 gal. ea.) 600 lbs. (+634)
	2 outboard tanks	(40 gal. ea.) 600 lbs. (+636)
	1 auxiliary cell (center section)	(67 gallons) 502 lbs. (+674)
Serial Nos. eligible	1049B/4101 through 1049B/4112 through 1049B/4150; 1049B/415 1049B/4169.	1; 1049B/4122 through 1049B/4130; 1049B/4133 2 through 1049B/4160; and 1049B/4167 through
Required equipment	In addition to the pertinent require	red basic equipment specified in CAR 4b, the following

items of equipment must be installed:
Items 1(b), (c) or (d); 101(c), (d), (e), (f), (g) or (h); 103(b) or (c); 104(b) or (c);
105(a); 107(b); 200(b); 201(a); 202(a)(2) or (3); 203(b); 204(a)(1), (a)(2) or (b)(1);
205(a) or (b); 206(a) or (b); 300(b); 301(a); 303(c) or (e); 400; 440; 441(e); 508(a).

IV - Model 1049C-55, Approved June 9, 1953, and Model 1049E-55, Approved May 26, 1954. (Same as Model 1049-54 except engines, design weights, structural changes of wings, fuselage, nacelles and landing gear, and installation of sealed "Class D" lower cargo compartments. The Model 1049E-55 is the same as the Model 1049C-55 with miscellaneous structural revisions.)

Engines	4 Wright Compound 972TC18DA1 drive ratio. (Also eligible with 972 Item 111 for engine limits with the	with 16:7 reduction gear ratio and 6.52:1 Turbo 2TC18DA3, 988TC18EA3, and 988TC18EA6. See se engines)					
Fuel	AN grade 115/145 (See NOTE 16	for engine limits when using low grade fuel)					
Engine limits	Low impeller ratio 6.46:1						
2	Maximum continuous:						
	(Sea level) 47.5 in.hg., 2600 rpn	n (2600 hp)					
	(Straight line manifold pressure v 2600 rpm (2650 hp)	ariation with altitude to 6500 ft.) 45.0 in. hg.,					
	Takeoff (2 minutes at sea level; 5 r power time with altitude to 75	ninutes at 7500 ft.; straight line variation of takeoff 00 ft.):					
	(Sea level) 56.5 in Hg. 2900 rp	m (3250 hp)					
	(Straight line manifold pressu	re variation with altitude to 5000 ft.) 53.0 in.Hg.,					
	2900 rpm (3250 hp)	, 8,					
	High impeller ratio 8.67:1						
	Maximum continuous:						
	(9550 ft.) 48.5 in.hg., 2600 rpm (2400 hp)						
	(Straight line manifold pressure v 2600 rpm (2450 hp).	ariation with altitude to 16,400 ft.) 47.0 in.hg.,					
Airspeed limits	Vno (Normal Operation)	300 mph (260 knots) True Ind.					
	(Above 12,500' reduce speed	11 mph (10 knots) for each additional 2000')					
	Vne (Never Exceed)	338 mph (293 knots) True Ind.					
	(Above 12,500' reduce speed	13 mph (11 knots) for each additional 2000')					
	Va (Maneuvering)	218 mph (189 knots) True Ind.					
	Vf (Takeoff position-60%)	220 mph (191 knots) True Ind.					
	Vf (Approach position-66%)	200 mph (174 knots) True Ind.					
	Vf (80%)	200 mph (174 knots) True Ind.					
	Vf (Landing position-100%)	180 mph (156 knots) True Ind.					
	Vlo (Landing Gear Operation)	190 mph (165 knots) True Ind.					
	Vle (Landing Gear Extension)	190 mph (165 knots) True Ind.					
	Mach No Never Exceed .56)					

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C.G. range	See NOTE	1(b) for require	d loading an	d gear retract	tion momen	ıt.	
	Condition	Weight	Landing	Fwd. Lir	nit	Aft.]	Limit
		lbs.	gear	sta. 9	%MAC	sta.	%Mac
	Take-off	133,000*	Down	670.3* 2	3.5	685.2	32.0
		90,000*	Down	660.5* 1	8.0	685.2	32.0
		or less					
	Landing	110,000*	Down	664.9 2	0.5	685.2	32.0
		90,000*	Down	660.5* 1	8.0	685.2	32.0
		or less					
	Cruising	133,000*	Up	665.8* 2	1.0	688.7	34.0
	Flight	90,000*	Up	655.2* 1	5.0	688.7	34.0
	U	or less	1				
	* Straight li	ne variation bet	tween these v	values.			
	• •						
Weight limits	Landing	110,000 lbs.	See NOTI	E 13 for highe	er landing v	veight.	
(See NOTE 16 for	Takeoff	133,000 lbs.	. with autof	feathering (Du	imp valves	are requ	lired.
limits when using			See Equip	ment Item 1	b), (c), (d),	(e) or (f)
low grade fuel.)			for takeof	f weight with	autofeather	ring inop	perative,
			and NOTI	E 7 for takeof	f weight w	hen oil t	ransfer
			system is	not installed.	See NOTE	± 12 for	higher
			takeoff we	eight.			
	Maximum z	ero fuel weight	t 103,500 lbs	S. See NOTE	1(e) for fu	el loadii	ıg.
	3-engine fer	rying 100,000	Ibs. See FA	AA Approved	Airplane F	light	
	Manual for	applicable restr	nctions.				
Minimum crew	3. Pilot ar	nd Co-pilot at -	+190 and Fli	ight engineer	at +226.		
Passengers	Maximum 9	9 occupants (p	assengers nli	is crew) (CA)	R 4h 433 ai	nd SR 3	89 effective
1 ussengers	October 27	1952) See A	opproved We	gight and Bala	nce Report	for actu	al number and
	location.	1992.) 500 1		ight und Duid	nee nepon	101 4014	
	1000000						
Baggage	Maximum c	apacity of inter	nal baggage	and storage c	ompartmen	nts:	
			Vol	Max Elo	or Can	Co	mpt
			(cu ft)	loading p	of (lbc)		inpt.
(Λ) Evid cargo	compartment		<u>(cu. 11.)</u>	loading pa	<u>(108.</u>) <u> </u>	.0.
(A) Twu. cargo	comparament,	197	77	70	1500		402)
(P) Ewd correct	on r.s. 334 to	402	11	70	1500	(+	402)
(B) Fwd. calgo	E S 482 to 62	20	104	70	2000		558)
(C) Aft cargo a	1 F.S. 462 10 03	00	194	70	3000	(+	558)
(C) All cargo c	$\sum_{n=1}^{\infty} \frac{750}{50}$ to	022	220	70	4600		021)
(D) Aft correct	011 F.S. 750 10	952	230	70	4000	(+	021)
(D) All cargo c	$\nabla E = 022 \pm 11$	40	104	70	2000	()	1004)
all portion	1 F.S. 932 10 11	40	194	70	0660	· (+	1004)
Coat closet	P- D				200	, (+	1165)
Coat closets L. a	х К.				400	, (+	1103)
Wash water		20 and 1014	1 10" frage		500 11 D JJ) (+	<u>980)</u>
Galley areas bet	ween Stations 9	11 and 1014 and 1	a IU from	airpiane cente	rime K.H.	side is s	af 70 manual
satisfactory for a	i maximum tota	1000000000000000000000000000000000000	pounds, wit	n a maximum	i unit fioor	loading	or 70 pounds
per square foot.							

Galley storage area between Stations 930 and 950 and 10" from airplane centerline L.H. side is structurally satisfactory for a maximum total load of 500 pounds with a maximum unit floor loading of 90 pounds per square foot.

Cabin Cargo Compartment A (optional	al) Fus. Sta. 260-339 R.H.	900 (+309)
Cabin Cargo Compartment B (optional	al) Fus. Sta. 339-467.5	5200* (+403)

*With lower cargo Compartment A empty. Maximum capacity must be decreased by the amount of any load carried in lower cargo Compartment A.

Fuel capacity	See NOTE 1(c) regarding "Usable fuel and System Oil."
	Tanks 2 and 3 (inboard) (790 gal. ea.) 9,480 lbs. (+692)
	Tanks 1 and 4 (middle) (1555 gal. ea.) 18,660 lbs. (+689)
	Tanks 2a and 3a (outboard) (565 gal. ea.) 6,780 lbs. (+687)
	Tank 5 (center section) (730 gal. ea.) 4,380 lbs. (+694)
Oil capacity	See NOTE 1(c) regarding "Unusable Fuel and System Oil "
On capacity	2 inhoard tanks $(40 \text{ gal} \text{ ea}) 600 \text{ lbs} (+634)$
	2 outboard tanks $(40 \text{ gal}, \text{ea}) = 600 \text{ lbs.} (+636)$
	1 auxiliary cell (center sect.) (67 gal. ea.) 502 lbs. (+674)
Serial Nos. eligible	1049C/4501 through 1049C/4548; 1049E/4549 through 1049E/4665, 1049E/4573,
	1049E/4574; 1049E/4578 through 1049E/4581; 1049E/4606, 1049E/4607; 1049E/4613
	through 1049E/4615.
Required equipment	In addition to the pertinent required basic equipment specified in CAR 4b, the following
Required equipment	items of equipment must be installed.
	Items 1(b) (c) (d) (e) or (f): $101(c)$ (d) (e) (f) (g) or (b): $103(b)$ or (c): $104(b)$ or
	(c): $105(a)$: $107(b)$: $200(b)$: $201(a)$: $202(a)(2)$ or (3): $203(b)$: $204(a)(1)$. (a)(2) or (b)(1):
	(0), $100(a)$, $107(b)$, $200(b)$, $201(a)$, $202(a)(2)$ of (0) , $200(b)$, $201(a)(2)$ of $(0)(1)$, $200(a)(2)$ of $(0)(1)$, $205(a)$ or (b) : $206(a)$ or (b) : $300(b)$: $301(a)$: $303(c)$ or (e) : 400 : 440 : $441(c)$. (d) or (f) :
	508(a).
V - Model 1049D-55, Approved	<u>d August 12, 1954.</u> (Same as Model 1049B-55 except for passenger seat installation, additional
emergency exits are installed, an	ad the lower cargo compartments are Class D per CAR 4b-383(d).)
Engines	4 Wright Compound 972TC18DA1 with 16:7 reduction gear ratio and 6.52:1 Turbo
C	drive ratio. (Also eligible with 972TC18DA3, 988TC18EA3 and 988TC18EA6. See
	Item 111 for engine limits with these engines)
Fuel	AN grade 115/145 (See NOTE 16 for engine limits when using low grade fuel)
Engine limits	Low impeller ratio 6.46:1
	Maximum continuous: $(2 - 1 - 1) = 1 = 2(22) = (2(22) + 1)$
	(Sea level) 47.5 in.ng., 2600 rpm (2600 np)
	(Straight line manifold pressure variation with attitude to 6500 ft.) 45.0 m. ng.,
	Takaoff (2 minutes et sea laval: 5 minutes et 7500 ft :
	straight line variation of takeoff power time with altitude to 7500 ft.):
	(Sea level) 56 5 in hg -2900 rpm (3250 hp)
	(Straight line manifold pressure variation with altitude to 5000 ft.) 53.0 in hg
	2900 rpm (3250 hp).
	High impeller ratio 8.67:1
	Maximum continuous:
	(9550 ft.) 48.5 in.hg., 2600 rpm (2400 hp)
	(Straight line manifold pressure variation with altitude to 16,400 ft.)
	47.0 in.hg., 2600 rpm (2450 hp).

Airs	peed	limits

300 mph (260 knots) True Ind. 11 mph (10 knots) for each additional 2000') (Above 12,500' reduce speed 338 mph (293 knots) True Ind. (Above 12,500' reduce speed 13 mph (11 knots) for each additional 2000') 218 mph (189 knots) True Ind.

220 mph (191 knots) True Ind.

200 mph (174 knots) True Ind.

200 mph (174 knots) True Ind.

Vf (Takeoff position-60%) Vf (Approach position-66%)

Vno (Normal Operation)

Vne (Never Exceed)

Va (Maneuvering)

Vf (80%)

Vf (Landing position-100%) 180 mph (156 knots) True Ind.

Vlo (Landing Gear Operation) 190 mph (165 knots) True Ind. Vle (Landing Gear Extension) 190 mph (165 knots) True Ind.

Mach No. - Never Exceed .56

Minimum crew passengers

6A5

(A) See NOTE 1(b) for required loading and gear retraction moment.(A) Passenger or Mixed Cargo-Passenger Loading

Passenger of	r Mixed Carg	o-Passenger	Loading			
Condition	Weight	Landing	Fwd. I	Limit	Aft.I	Limit
	lbs.	gear	sta.	%MAC	sta.	%Mac
Take-off	133,000*	Down	670.23*	23.5	685.2	32.0
	90,000*	Down	660.5*	18.0	685.2	32.0
	or less					
Landing	110,000*	Down	661.6*	20.5	685.2	32.0
	105,000*	Down	660.5*	18.0	685.2	32.0
	or less					
Cruising	133,000*	Up	665.8*	21.0	688.7	34.0
Flight	90,000*	Up	655.2*	15.0	688.7	34.0
-	or less	-				

*Straight line variation between these values.

(B) All Cargo Loading

Condition	Weight	Landing	Fwd. l	Limit	Aft.I	Limit
	lbs.	gear	sta.	%MAC	sta.	%Mac
Take-off	133,000*	Down	670.23*	21.8	685.2	32.0
	105,000*	Down	660.5*	18.0	685.2	32.0
	or less					
Landing	110,000*	Down	661.6*	18.6	685.2	32.0
	105,000*	Down	660.5*	18.0	685.2	32.0
	or less					
Cruising	133,000*	Up	665.8*	21.0	688.7	34.0
Flight	90,000* or less	Up	655.2*	15.0	688.7	34.0

*Straight line variation between these values.

Weight limits	Landing	110,000 lbs.	
(See NOTE 11 for	Takeoff	133,000 lbs.	with autofeathering (Dump valves are required.
higher weights;			See Equipment Item 1(b), (c), (d), (e) or (f)
NOTE 16 for weight			for takeoff weight with autofeathering inoperative,
limits when using low			and NOTE 7 for takeoff weight when oil transfer
grade fuel; NOTE 19			system is not installed. Maximum zero fuel weight
for application of SR-411A)			105,000 lbs. See NOTE 1(e) for fuel loading.
	3-engine ferry applicable rest	ing 100,000 lbs rictions.	s. See FAA Approved Airplane Flight Manual for

3. Pilot and Copilot at +190 and Flight Engineer at +226. Maximum 112 occupants (passengers plus crew) (CAR 4b.433 and SR 389 effective October 27, 1952.) See approved Weight and Balance Report for actual number and location.

8

Maximum

Maximum Floor

Maximum cargo

-	Compartment	Station	Cap. (lbs.)) loading psf	Arm
	A (Main Cabin)	260-339	2900	300	300
	B (Main Cabin)	339-444	7200	300	392
	C (Main Cabin)	444-509	5400	300	477
	D (Main Cabin)	509-583	6100	300	546
	E (Main Cabin)	583-656	6100	300	620
	F (Main Cabin)	656-732	6300	300	694
	G (Main Cabin)	732-806	6100	300	769
	H (Main Cabin)	806-879	6100	300	842
	I (Main Cabin)	879-953	6100	300	916
	I (Main Cabin)	953-1026	6100	300	989
	K (Main Cabin)	1026-1158	7700	300	1089
	I (Main Cabin)	1158-1258	3400	300	1198
	A (Lower Corgo Compt)	224 492	2800	500 70	402
	R (Lower Cargo Compt)	192 629	2800	70	402
	B (Lower Cargo Compt)	402-030	5050	70	230 921
	C (Lower Cargo Compt)	/50-932	5950	70	821
	D (Lower Cargo Compt)	932-1140	6370	70	1004
	Maximum combined accum	ulated load o	of both cabir	and lower cargoco	ompartments
	from extremities of cabin to	ward main fi	rames:		
	Forebody		Afte	erbody	
	From Sta. 260 to:	F	From Sta. 12	258 forward to:	
	Sta. 339 2.900 lbs.		Sta. 1158	3.400 lbs.	
	Sta. 444 7.200 lbs.		Sta. 1026	7,700 lbs.	
	Sta. 509 10,000 lbs.		Sta. 953	10.300 lbs.	
	Sta 583 15 000 lbs		Sta 879	14 600 lbs	
	Sta 656 21 100 lbs		Sta 806	18 800 lbs	
	54. 050 21,100 103.		Sta. 732	24,000 lbs.	
	All cargo loading must be s	ecured with	the tie down	<u>27,000 los.</u>	ara ara no
	restraining or crash bulkhea	d provisions	·	is provided since in	
Eval consoity	See NOTE 1(e) recording "	Unucohlo Eu	al & Sustan	- Oil "	
Fuel capacity	See NOTE I(c) regarding		α System	1 OII.	\ \
	Tanks 2 and 3 (indoard)	(/	90 gal. ea.)	9,480 IDS. $(+692)$).
	Tanks I and 4 (middle)	(15)	55 gal. ea.	18,000 lbs. $(+689)$)
	Tanks 2a and 3a (outboard	l) (5	65 gal. ea.)	6,/80 lbs. (+68/).
	Tank 5 (center se	ection) (7	'30 gallons)	4,380 lbs. (+694)	1
Oil capacity	See NOTE 1(c) regarding "	Unusable Fu	el & Svsten	n Oil."	
1 5	2 inboard tanks	(40 s	val. ea.) 600	1bs. (+634)	
	2 outboard tanks	(40 g	al ea) 600	(+636)	
	1 auxiliary cell (center secti	(10 ± 0.0) (67 s	(all out) = 500	2 lbs. (+674)	
		(0, 5	,unions) 501		
Serial Nos. eligible	1049D/4163 through 1049D	0/4166			
Required equipment	In addition to the pertinent	required basi	c equipmen	t specified in CAR	4b, the following
	items of equipment must be	installed:	_		-
	Items 1(b), (c), (d), (e) or (a	f); 101(c), (d	l), (e), (f), ((g) or (h); 103(b) or	r (c); 104(b) or
	(c); 105(a); 107(b); 200(b);	201(a); 202	(a)(2) or (3)	; 203(b); 204(a)(1)	, (a)(2) or (b)(1);
	205(a) or (b); 206(b); 300(b	o); 301(a); 30	03(c) or (e);	400; 440; 441(g);	508(a).

VI - Model 1049G-82, Approved January 14, 1955. (Same as Model 1049C except engines, propellers, brakes, provisions for tip tanks and structural reinforcements.)

Engines	4 Wright Compound 972TC18DA3 with 16:7 reduction gear ratio and 6.52:1 turbo drive ratio. (Also elig. with 988TC18EA3 & 988TC18EA6. See Item 111 for engine limits with these engines.).
Fuel	AN grade 115/145. (See NOTE 17 for engine limits when using low grade fuel)

Engine limits	Low impell Maximum (Sea le (Straig 2600 Takeoff (2 straight lin (Sea leve (Straight High impell Maximum (10,05 (Straig 2600 r	Low impeller ratio 6.46:1 Maximum continuous: (Sea level) 49.0 in.hg., 2600 rpm (2700 hp) (Straight line manifold pressure variation with altitude to 5800 ft.) 47.0 in. hg., 2600 rpm (2750 hp) Takeoff (2 minutes at sea level; 5 minutes at 7500 ft.; straight line variation of takeoff power time with altitude to 7500 ft.): (Sea level) 56.5 in.hg., 2900 rpm (3250 hp). (Straight line manifold pressure variation with altitude to 5500 ft.) 53.5 in.Hg., 2900 rpm (3250 hp) High impeller ratio 8.67:1 Maximum continuous: (10,050 ft.) 48.5 in.hg., 2600 rpm (2400 hp) (Straight line manifold pressure variation with altitude to 16,400 ft.) 47.0 in.hg. 2600 rpm (2450 hp)					
Airspeed limits	Vno (Norm (Above Vne (Never (Above Va Maneu Vf Takeot Vf (Appro Vf (80%) Vf (Landi Vlo (Landi Vle (Landi Mach No	al Operation) e 12,500' reduct Exceed) e 12,500' reduct vering) ff position-60% pach position-60 ng position-100 ng Gear Opera ng Gear Extens Never Exceed	ce speed ce speed 6%) 6%) 0%) tion) sion) 1.56	300 mph (26 11 mph (10 338 mph (29 13 mph (11) 222 mph (19) 224 mph (19) 200 mph (17 200 mph (17 182 mph (15) 190 mph (16)	1 knots) Tr) knots) for 4 knots) Tr 1 knots) for 3 knots) Tr 5 knots) Tr 4 knots) Tr 4 knots) Tr 8 knots) Tr 5 knots) Tr 5 knots) Tr	ue Ind. • each additi ue Ind. • each additi ue Ind. ue Ind. ue Ind. ue Ind. ue Ind. ue Ind. ue Ind.	ional 2000') ional 2000')
C.G. range	See NOTE Condition	1(b) for require Weight	ed loading Landing	g and gear retr Fwd.	action mon Limit	<u>nent.</u> Aft.I	Limit
	Take-off	lbs. 137,500* 90,000*	gear Down Down	sta. 671.3* 660.5*	%MAC 24.1 18.0	sta. 685.2 685.2	% Mac 32.0 32.0
	Landing	113,000* 90,000*	Down Down	665.8 660.5*	21.0 18.0	685.2 685.2	32.0 32.0
	Cruising Flight	or less 137,500* 90,000* or less	Up Up	667.0* 655.2*	21.7 15.0	688.7 688.7	34.0 34.0
	* Straight li	ine variation be	tween the	ese values.			
Weight limits (See NOTE 17 for weights using low grade fuel)	Landing Takeoff required). autofeatheri Maximum z See NOTE 3-engine fer applicable r	113,000 lbs. 137,500 lbs. See Equipmenting inoperative. zero fuel weigh 1(e) for fuel lo rrying 100,000 estrictions.	with auto Item 1(b tt 103,500 ading. D lbs. See	ofeathering (Du), (e) or (f) for) lbs. (tip tanks e FAA Approv	ump valves takeoff wo s off) 104,2 red Airplan	are eight with a 200 lbs. (tip e Flight Ma	utofeathering tanks on) nual for
Minimum crew	3. Pilot and	d Co-pilot at +	190 and 1	Flight Enginee	er at +226.		
Passengers	Maximum 1 passenger e See approve	112, 104 or 96 xits, respective ed Weight and	occupanta ely. (CAI Balance F	s (passengers J R 4b.433 and S Report for actu	olus crew) SR 389 effe al number a	with 11, 10 ective Octob and locatior	or 9 usable per 27, 1952.)

Maximum capacity of internal baggage and storage compartments:

	Vol.	Max. Floor	Cap.	Compt.
	(cu. ft.)	loading psf	<u>(lbs.</u>)	C.G.
(A) Fwd. cargo compartment,				
fwd. portion F.S. 334 to 482	75	70	1500	(+402)
(B) Fwd. cargo compartment,				
aft portion F.S. 482 to 638	194	70	3880	(+558)
(C) Aft cargo compartment,				
fwd. portion F.S. 750 to 932	230	70	4600	(+821)
(D) Aft cargo compartment,				
aft portion F.S. 932 to 1140	194	70	3880	(+1004)
Coat closet			200	(+1000)
Coat closets L. & R.			400	(+1165)
Wash water			500	(+ 980

Galley areas between Stations 930 and 1014 and 10" from airplane centerline R.H. side is structurally satisfactory for a maximum total load of 2,300 pounds, with a maximum unit floor loading of 70 pounds per square foot.

Galley storage area between Stations 930 and 950 and 10" from airplane centerline L.H. side is structurally satisfactory for a maximum total load of 500 pounds with a maximum unit floor loading of 90 pounds per square foot.

Fuel capacity	See NOTE 1(c) regarding "Unusable Fuel & System Oil."				
	Tanks 2 and 3 (inboard)	(790 gal. ea.)	9480 lbs. (+692).		
	Tanks 1 and 4 (middle)	(1555 gal. ea.)	18660 lbs. (+689)		
	Tanks 2a and 3a (outboard)	(565 gal. ea.)	6780 lbs. (+687).		
	Tank 5 (center section)	(730 gallons)	4380 lbs. (+694)		
	Tanks 1a and 4a (wing tips)	(609 gal. ea.)	7308 lbs. (+688)		
Oil capacity	See NOTE 1(c) regarding "U	nusable Fuel and (Dil System Oil."		
	2 inboard tanks	(42.5 gal. ea.)	638 lbs. (+634)		
	2 outboard tanks	(42.5 gal. ea.)	638 lbs. (+636)		
	1 auxiliary cell (center section) (67 gallons)	502 lbs. (+674)		
Serial Nos. eligible	1049G/4572, 1049G/4575 thr	ough 1049G/4577	, 1049G/4582 through 1049	G/4605;	
	1049G/4608 through 1049G/4	612, 1049G/4616	through 1049G/4699.		
Required equipment	In addition to the pertinent rec	uired basic equip	ment specified in		
	CAR 4b, the following items of equipment must be installed:				
	Items $1(b)$, (e) or (f); $101(i)$, (j), (k), or (l);				
	103(b) or (c); 104(b), (c), or (d); 105(a); 107(b); 200(d); 201(a);				
	202(a)(3) or (a)(4); 203(b); 204(a)(1), (a)(2), (a)(3) or (b)(1);				
	205(a) or (b); 206(c); 300(b) or (c); 301(a); 303(c), (d) or (e);				
	400; 440; 441(h) or (i); 508(c) or (d).			
Model 10/06 55 (119AE C121)	() Approved (Actober 10, 1055	(Same as Model	10/UR 55 except 3/ rectand	ailor	

<u>VII - Model 1049F-55 (USAF C121C)</u>, Approved October 10, 1955. (Same as Model 1049B-55 except 34 rectangular windows replace 17 round windows, Class D lower cargo compartments replace Class C compartments, Solar APU replaces AiResearch APU, and heater is added to nose radome. This airplane is basically a cargo rather than a passenger carrier). (See NOTE 5 for modifications necessary for civil conversion of C121C).

Engines	4 Wright Compound 972TC18DA1 with 16:7 reduction gear ratio and 6.52:1 Turbo drive ratio.
Fuel	Grade 115/145 (See NOTE 16 for engine limits when using low grade fuel)

Engine limits	Low impelle Maximum (Sea leve (Straight 2600 rpn Takeoff (2 straight 1 (Sea leve (Straight 2900 rp High impell Maximum (9550 ft. (Straight li 2600 rpn	er ratio 6.46:1 continuous: el) 47.5 in.hg. line manifold n (2650 hp) e minutes at see ine variation of el) 56.5 in.hg. line manifold om (3250 hp). er ratio 8.67: continuous:) 48.5 in.hg., ine manifold p n (2450 hp).	, 2600 rpm pressure v a level; 5 of takeoff j , 2900 rpm pressure v 1 2600 rpm pressure va	n (2600 hp) variation with a minutes at 750 power time to n (3250 hp) variation with a (2400 hp) riation with al	altitude to 6 00 ft.; 7500 ft.): altitude to 5 titude to 16	500 ft.) 4. 000 ft.) 5. ,400 ft.) 4	5.0 in. hg., 3.0 in.hg., 17.0 in.hg.,
Airspeed limits	Vno (Norm (Above Vne (Never (Above Va (Manee Vf (Takeo Vf (Appro Vf (80%)) Vf (Landi Vlo (Landi Vle (Landi Mach No	al Operation) = 12,500' redu Exceed) = 12,500' redu uvering) ff position-60 pach position-60 pach position-10 ng Gear Opera ng Gear Exter Never Exceed	ace speed (%) (56%) (0%) (ation) (ssion) d .56	300 mph (260 11 mph (10 338 mph (292 13 mph (11) 218 mph (189 220 mph (19) 200 mph (174 200 mph (174 180 mph (150 190 mph (163)	0 knots) Tru) knots) for 3 knots) Tru 1 knots) for 9 knots) Tru 1 knots) Tru 4 knots) Tru 4 knots) Tru 5 knots) Tru 5 knots) Tru 5 knots) Tru	ue Ind. each addit ue Ind. each addit ue Ind. ue Ind. ue Ind. ue Ind. ue Ind. ue Ind.	ional 2000') ional 2000')
C.G. range	See NOTE	1(b) for requin Weight	red loading	g and gear retr Fwd	action mom	<u>ient.</u> Aft I	imit
	condition	lbs.	gear	sta.	%MAC	sta.	%Mac
	Take-off	133,000*	Down	677.2*	21.1	685.2	32.0
		105,000* or less	Down	660.5*	18.0	685.2	32.0
	Landing	110,000*	Down	661.6	18.6	685.2	32.0
		105,000* or less	Down	660.5*	18.0	685.2	32.0
	Cruising	133,000*	Up	665.8*	21.0	688.7	34.0
	Flight	90,000* or less	Up	665.2*	15.0	688.7	34.0
	* Straight li	ne variation b	etween the	ese values.			
Weight limits (See NOTE 16 for weights when using low grade fuel)	Landing Takeoff Maximum z 3-engine fer applicable r	ng 110,000 lbs. off 133,000 lbs. with autofeathering (Dump valves are required.) See Equipment Item 1(b), (e) or (f) for takeoff weight with autofeathering inoperative. mum zero fuel weight 105,000 lbs. See NOTE 1(e) for fuel loading. ine ferrying 100,000 lbs. See FAA Approved Airplane Flight Manual for cable restrictions.					
Minimum crew	3. Pilot and	d Co-pilot at -	+190 and 1	Flight Enginee	er at +226.		
Passengers	All serial m See Note 9	umbers origina for conversion	ally certifient to passer	cated as cargo ger configurat	carriers. ion.		

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Maximum cargo

-			Maximum	Maximum Floor	
	Compartment	Station	Cap. (lbs.)	loading psf	Arm
	C (Main Cabin)	260-287	1000**	« <u>300</u>	274
	D (Main Cabin)	287-420	5900	300	355
	E (Main Cabin)	420-509	7400	300	465
	F (Main Cabin)	509-583	6100	300	546
	G (Main Cabin)	583-656	6100	300	620
	H (Main Cabin)	656-732	6300	300	694
	I (Main Cabin)	732-806	6100	300	769
	J (Main Cabin)	806-879	6100	300	842
	K (Main Cabin)	879-953	6100	300	916
	L (Main Cabin)	953-1026	6100	300	989
	M (Main Cabin)	1026-1158	7200	300	1089
	N (Main Cabin)	1158-1258	2900	300	1198
	P (Lower Cargo Compt)	334-482	2800	70	402
	Q (Lower Cargo Compt)	482-638	5040	70	558
	R (Lower Cargo Compt)	750-932	5950	70	821
	S (Lower Cargo Compt)	932-1140	6370	70	1004
	Maximum combined accur from extremities of cabin t	nulated load of oward main fr	f both cabin ames:	and lower cargocor	mpartments
	F 1 1				
	Forebody		Afte	rbody	
	From Sta. 260 to:	F	rom Sta. 12	58 forward to:	
	Sta. 287 300 lbs		Sta. 1158	2,900 lbs.	
	Sta. 420 5,900 lbs.		Sta. 1026	7,200 lbs.	
	Sta. 509 9,700 lbs.		Sta. 953	9,800 lbs.	
	Sta. 583 14,700 lbs.		Sta. 8/9	14,100 lbs.	
	Sta. 656 20,800 lbs.		Sta. 806	18,300 lbs.	
	♦ ♦ ♦ •		Sta. 732	<u>23,500 lbs.</u>	
	All cargo loading must be restraining or crash bulkhe	secured with t	he tie-down	s provided since the	ere are no
	restraining of crash suikite	ad provisions.			
Fuel capacity	See NOTE 1(c) regarding	"Unusable Fue	el & System	Oil."	
	Tanks 2 and 3 (inboard	l) (79	90 gal. ea.)	9,480 lbs. (+692))
	Tanks 1 and 4 (middle)	(155	55 gal. ea.)	18,660 lbs. (+689)	
	Tanks 2a and 3a (outboar	rd) (50	65 gal. ea.)	6,780 lbs. (+687)	
	Tank 5 (center s	section) (72	30 gallons)	4,380 lbs. (+694)	
Oil capacity	See NOTE 1(c) regarding	"Unusable Fue	el & System	Oil."	
1 2	2 inboard tanks	(42.5	gal. ea.) 63	38 lbs. (+634)	
	2 outboard tanks	(42.5	gal. ea.) 63	38 lbs. (+636)	
	1 auxiliary cell (center sec	tion) (67 g	allons) 50	2 lbs. (+674)	
Serial Nos. eligible	1049F/4170 through 1049	F/4202.			
Required equipment	In addition to the pertinent	required basic	e equipment	specified in CAR 4	b, the following
	items of equipment must b	e installed:		-	C
	1(c); 101(d); 103(b) or (c)	; 104(b), (c) o	r (d); 105(a) and (b); 107(b); 2	00(b), (c) or
	(d); $201(a): 202(a)(2) (a)(3) = a$	r (a)(1), 202/L). 204(a)(1)	$(a)(2)$ or $(b)(1) \cdot 2$	\mathbf{b}
	206(a), $202(a)(2)$, $(a)(3) 0206(b)$ or (d) ; $300(b)$; 301	(a); $303(d)$ or	(e); 400; 44	0; 441(j); 508(a) or	(b).

VIII - Model 1049H-82, Appro (Same as Model 1049D/01-55,	oved Oc except	tober 9, 1950 for engines o	<u>5.</u> of higher powe	er rating,	higher takeoff	weight; and	other min	or changes.)
Engines		4 Wright Compound 972TC18DA3 with 16:7 reduction gear ratio and 6.52 drive ratio. (Also eligible with 988TC18EA3 and 988TC18EA6. See Item engine limits with these engines.)					5.52:1 turbo tem 111 for	
Fuel		Grade 115/1	45. (See NO	TE 17 for	engine limits	when using	low grade	fuel)
Engine limits		Low impelled Maximum c (Sea level) (Straight li 2600 rpm Take-off (2 power time (Sea leve (Straight 2900 rp High impelled Maximum (10,050 f (Straight li 2600 rpm	er ratio 6.46:1 ontinuous: 49.0 in.hg., ; ne manifold p (2750 hp) minutes at sea with altitude () 56.5 in.hg line manifold om (3250 hp) er ratio 8.67: continuous: t.) 48.5 in.hg ne manifold p (2450 hp).	2600 rpm pressure va a level; 5 n to 7500 f ., 2900 rp pressure va 1 ., 2600 rp pressure va	(2700 hp) ariation with al minutes at 750 t.): m (3250 hp). variation with om (2400 hp) ariation with al	ltitude to 580 0 ft.; straigh altitude to 5 ltitude to 16	00 ft.) 47. nt line vari 500 ft.) 5. ,400 ft.) 4	0 in. hg., ation of takeoff 3.5 in.Hg., 7.0 in.hg.,
Airspeed limits		Vno (Norma (Above Vne (Never (Above Va (Maneu Vf (Takeo Vf (Appro Vf (Appro Vf (80%) Vf (Landir Vlo (Landir Vlo (Landir Mach No	al Operation) 12,500' redu Exceed) 12,500' redu ivering) ff position-60 ach position-60 ag position-10 ng Gear Opera ng Gear Exten Never Exceed	ace speed (%) (66%) (00%) (ation) (sion) d .56	300 mph (26 11 mph (10 338 mph (29) 13 mph (11 222 mph (19) 224 mph (19) 200 mph (17) 200 mph (17) 182 mph (15) 190 mph (16) 190 mph (16)	1 knots) Tru 2 knots) for 4 knots) Tru 1 knots) for 3 knots) Tru 5 knots) Tru 4 knots) Tru 8 knots) Tru 5 knots) Tru 5 knots) Tru 5 knots) Tru	ue Ind. each addit ue Ind. ue Ind. ue Ind. ue Ind. ue Ind. ue Ind. ue Ind. ue Ind. ue Ind.	ional 2000') ional 2000')
C.G. range	(A)	See Note 1(1 Passenger or Condition Take-off Landing Cruising Flight	b) for required r <u>Mixed Carg</u> Weight Ibs. 137,500* 90,000* or less 113,000* 90,000* or less 137,500* 90,000* or less	d loading . o-Passeng Landing gear Down Down Down Down Up Up	and gear retrace er Loading 5ta. 671.3* 660.5* 665.8* 660.5* 667.0* 655.2*	ction momer Limit %MAC 24.1 18.0 21.0 18.0 21.7 15.0	<u>Aft.I</u> sta. 685.2 685.2 685.2 685.2 685.2 688.7 688.7	Limit %Mac 32.0 32.0 32.0 32.0 32.0 34.0 34.0

1	5
1	2

	(B)	All Cargo Lo	ading					
		Condition	Weight	Landing	Fwd. L	imit	Aft.I	Limit
			lbs.	gear	sta.	%MAC	sta.	%Mac
		Take-off	137,500*	Down	668.4*	22.4	685.2	32.0
			105,000*	Down	660.5*	18.0	685.2	32.0
			or less	_				
		Landing	113,000*	Down	662.3*	19.0	685.2	32.0
			105,000*	Down	660.5*	18.0	685.2	32.0
		Cresisian	or less	Un	((7.0*	21.7	600 7	24.0
		Cruising	137,000*	Up	007.0* 655.2*	21.7 15.0	088./	34.0
		riigiit	90,000 ·	Op	033.2	15.0	000.7	54.0
		*Straight line	variation bety	ween these va	lues.			
		8						
Weight limits		Landing	113,000 lbs.	See NOTE	14 for hig	her landing	weight.	
(See NOTE 17 for		Takeoff	137,500 lbs.	with autofe	eathering (I	Dump valve	s are requ	ired.
limits when using				See Equipn	nent Item 1	(b), (e) or	(f) for tak	eoff
low grade fuel, and				weight with	h autofeath	ering inope	rative, and	1
Note 19 for				and NOTE	14 for for	higher take	off weigh	t.
application of SR-411A)		Maximum ze	ro fuel weight	108,000 lb	s. (tip tank	s off)		
				.104,200 lb	s. *tip tank	ts on)		
		See NOTE I	(e) for fuel loa	ding.		1		1.6.
		3-engine terr	ying 100,000 .	lbs. See FAA	A Approved	1 Airplane	Flight Mai	nual for
		applicable res	strictions.					
Minimum crew passengers		3. Pilot and	l Copilot at +	190 and Fligh	ht Engineer	at +226.		
Dessongers		Maximum 11	2 accuments (r	accongora pl	us arow) (C	ND /h /22	and CD 2	20 offective
Fassengers		October 27	2 occupants (p	proved Weigl	ht and Bala	nce Report	for actual	number and
		location	1952.) See ap	proved weigh	in and Dala	nee Report	101 actual	number and
Maximum cargo		location.			Maximun	n Maxim	um Floor	
		Compartment	t	Station	Cap. (lbs	.) load	ing psf	Arm
		A (Main Cab	in)	260-339	2900	3	600	300
		B (Main Cab	in)	339-444	7200	3	00	392
		C (Main Cab	in)	444-509	5400	3	00	477
		D (Main Cab	in)	509-583	6100	3	00	546
		E (Main Cab	in)	583-656	6100	3	00	620
		F (Main Cabi	in)	656-732	6300	3	00	694
		G (Main Cab	in)	732-806	6100	3	00	769
		H (Main Cab	in)	806-879	6100	3	00	842
		I (Main Cabi	n)	879-953	6100	3	00	916
		J (Main Cabi	n)	953-1026	6100	3	00	989
		K (Main Cab	in)	1026-1158	7700	3	00	1089
		L (Main Cab	in)	1158-1258	3400	3	00	1198
		A (Lower Ca	rgo Compt)	334-482	2800		70	402
		B (Lower Ca	rgo Compt)	482-638	5040		70	558
		C (Lower Ca	rgo Compt)	/50-932	5950		/0 70	821
		D (Lower Ca	rgo Compt)	932-1140	63/0		/0	1004
		from extremi	ties of cabin to	oward main fi	rames:		r cargo co	inpartments
		Foret	ody		Aft	erbody		
		From Sta. 26	0 to:	F	rom Sta. 1	258 forwar	d to:	
		Sta. 339	2,900 lbs.		Sta. 1158	3,400 lb	s.	
		Sta. 444	7,200 lbs.		Sta. 1026	7,700 lb	8.	
		Sta. 509	10,000 lbs.		Sta. 953	10,300 lb	s.	
		Sta. 583	15,000 lbs.		Sta. 879	14,600 lb	S.	
		Sta. 056	21,100 lbs.		Sta. 800 Sta. 722	10,000 lb	5.	
		All cargo los	ding must he a	secured with t	the tie-dow	ns provided	<u>s.</u> Lsince the	re are no
		i in vargo i0a	and must be s	veedied will l		no provided	· smee ule	ie are no

restraining or crash bulkhead provisions.

Fuel capacity	See NOTE 1(c) regarding "Unusable Fuel & SystemTanks 2 and 3(inboard)(790 gal. ea.Tanks 1 and 4(middle)(1555 gal. ea.Tanks 2a and 3a(outboard)(565 gal. ea.Tank 5(center section)(730 gallons)Tanks 1a and 4a(wing tips)(609 gal. ea)	m Oil.") 9,480 lbs. (+692).) 18,660 lbs. (+689)) 6,780 lbs. (+687).) 4,380 lbs. (+694) 7,308 lbs. (+688)
Oil capacity	See NOTE 1(c) regarding "Unusable Fuel & System2 inboard tanks(42.5 gal. ea.)2 outboard tanks(42.5 gal. ea.)1 auxiliary cell (center section)(67 gallons)	m Oil." 538 lbs. (+634) 538 lbs. (+636) 502 lbs. (+674)
Serial Nos. eligible	1049H/4801 through 1049H/4853	
Required equipment	In addition to the pertinent required basic equipment items of equipment must be installed: Items 1(b), (e) or (f); 101(i), (j), (k), or (l); 103(b) 105(a); 107(b); 200(d); 201(a); 202(a)(3) or (a)(4); (a)(3), or (b)(1); 205(a) or (b); 206(c); 300(b) or (a) 440; 441(g) or (k); 508(c) or (d).	nt specified in CAR 4b, the following or (c); 104(b), (c), or (d); 203(b); 204(a)(1), (a)(2) c); 301(a); 303(c), (d) or (e); 400;
SDECIEICATIONS DEDTINENT TO	ALL MODELS	
Datum	730.2 in. forward of jig point. (Screwhead on bott	om surface of wing 1.8 in. fwd. of
	center line of rearbeam and 3.5 in inboard of wing	sta. 80).
MAC	176 inches. Leading edge of MAC Sta. 628.8.	
Leveling means	Leveling plate under fuselage floor at ref. Sta. 657	
Control surface movements	Main surfaces (booster pressure on) - Elevator	40° up 20° down
	Alleron	25° up 10° down
	Tabs (main surfaces in neutral) - Elevator Aileron Budder	$30^{\circ} \text{ fight } 30^{\circ} \text{ left}$ $22^{\circ} \text{ up } 22^{\circ} \text{ down}$ $12^{\circ} \text{ up } 12^{\circ} \text{ down}$ $25^{\circ} \text{ right } 25^{\circ} \text{ left}$
	Flaps - 41° total angular travel.	25 fight 25 left
Certification basis	Type Certificate No. 6A5 (CAR 4b - as amended the All 1049 Series Models have been examined and for Transport Category A of Annex 8 to the Convention entitled "Airworthiness of Aircraft," as amended to exception: 1. 2.4.4 Stalling, Symmetrical Power. Compliance with the ditching requirements of CAF Maximum approved operational altitude 25 000 ft	o October 1, 1949.) bund to comply with the Standards of on on International Civil Aviation, o December 1949 with the following a 4b has been demonstrated.
Production basis	Production Certificate No. 600.	
Equipment: A plus (+) or minus (- that item is installed. Approval for the instal manufacturer except th obtained by someone of manufactured under a 1 determined if the item approval.) sign preceding the weight of an item of equipment lation of all items of equipment listed herein has been ose items preceded by an asterisk (*). The asterisk of ther than the aircraft manufacturer. An item marked FAA monitored or approved quality control system, is not identified by a Form FAA-186, PMA or other	indicates net weight change when n obtained by the aircraft lenotes that approval has been with an asterisk may not have been and therefore conformity must be evidence of FAA production
Propellers and Propeller Accessories	(Except De-Icing Equipment)	
1a. (1) 4 Propellers - Ham. Std.	hubs 43E60, blades 6901-02	2281 lb. (+509)
(including slingers and sh Diameter: May 15' 1.5	uts) /16" min allowable for repairs 14' 0 3/16"	
No further re	duction permitted	

Pitch settings at 72 in. sta.: Low fwd. 12°, low reverse -21.5°, propeller feathering setting must prevent engine windmilling (Approximately 81.5°) Propellers and

I

	 (2) (3) (4) (5) (6) 	 4 Propeller spinners - Ham. Std. 76832 4 Feathering pumps - Pesco 1E-777-ML-1 (Mod.) 4 Propeller governors Ham. Std. Type 5AA-22-8 or 5U18 (See NOTE 20) 4 Master Synchronizer Generators Kollsman 1135GH-0120304 1 Propeller Synchronizing Control Box Ham. Std. Dwg. 322080 	80 lbs. (+509) 58 lbs. (+604) 56 lbs. (+531) 17 lbs. (+578) 40 lbs. (+193)
b.	(1)	 4 Propellers - Curtiss Electric hubs C634S-S, blades 858-5C4-0 (including slingers and shoes) with or without trailing edge extension. (G & H Series Models equipped with this propeller must use trailing edge extensi Diameter 15'0". 	2586 lbs. (+509) on).
		 Pitch settings at 54 in. sta.: low fwd. 23.7° low reverse -11.8°, propeller feathering pitch setting must prevent engine windmilling (approxim Placard required in full view of flight engineer: "Do not operate propellers in flight below 1500 engine rpm." 	nately 91.2°).
		Max. takeoff wt. auto-feathering inoperative - 129,800 lbs.	
	(2)	4 spinners - Curtiss Type 145491	84 lbs. (+509)
	(3)	4 Alternators - Curtiss Type 124512	16 lbs. (+545)
	(4)	1 Synchronizer Master Unit - Curtiss Type 119778-20	40 lbs. (+195)
	(5)	2 Voltage boosters Curtiss Type 116285-231	40 lbs. (+252)
	(6)	1 Master Unit Filter Curtiss Type 112148-9	6 lbs. (+171)
	(7)	4 Nacelle Filters Curtiss Type 111872	10 lbs. (+590)
c.	(1)	4 Propellers - Ham. Std. hubs 43E60, blades 6903B-0 (including slingers and shoes)	2372 lbs. (+509)
		Diameter: Max. 15' 1-1/16", min. allowable for repairs 14' 9-7/16". No further reduction permitted.	
		Pitch settings at 72 in. sta.: Low fwd. 14°, low reverse -21.5°, propeller feathering	
		pitch setting must prevent engine windmilling (Approximately 80.5°).	
		"Airplane shall be headed into the wind during static	
		run-un when engine speeds exceed 2600 rpm "	
		Max, takeoff wt, with auto-feathering inoperative - 131,500 lbs.	
		or maximum weight with auto feathering operative whichever is less.	
	(2)	4 Propeller spinners - Ham, Std. 83772	84 lbs. $(+509)$
	(3)	4 Propeller Feathering Pumps	
	(0)	(a) Pesco $112577-021-01$	92 lbs. $(+617)$
	(4)	4 Propeller Governors Ham. Std. Type 5AA-22-8 or 5U18 (See NOTE 20)	56 lbs. (+532)
	(5)	4 Synchronizing Generators Kollsman Type 1492-0120304	17 lbs. (+579)
	(6)	1 Synchronizing Control Box Ham. Std. Dwg. 322080	40 lbs. (+193)
d.	(1)	4 Propellers - Curtiss electric hubs C634S-C500, blades 830-21C4-0 (including slingers and shoes)	2610 lbs. (+509)
		Diameter 15'1".	
		Pitch settings at 54 in. sta.: low fwd. 22.3° low reverse	
		-16°, propeller feathering pitch setting must prevent engine	
		windmilling (approximately 90.5°).	
		Placard required in full view of flight engineer:	
		"Do not operate propellers in flight below 1500 engine rpm."	
		Max. takeoff wt. autofeathering inoperative - 129,800 lbs.	
	(2)	4 spinners - Curtiss Type 145491	84 lbs. (+509)
	(3)	4 Alternators - Curtiss Type 124512	16 lbs. (+545)
	(4)	1 Synchronizer Master Unit - Curtiss Type 119778-20	40 lbs. (+195)
	(5)	2 Voltage boosters - Curtiss Type 116285-231	40 lbs. (+252)
	(6)	1 Master Unit Filter - Curtiss Type 112148-9	6 lbs. (+171)
	(7)	4 Nacelle Filters - Curtiss Type 11872	10 lbs. (+590)

(e)	 (1) (2) (3) (4) (5) 	4 Propellers - 6967-0 (nicke Diameter: Ma 14' 9-3/16". Pitch settings Propeller feath windmilling Max. takeoff or maximum 4 Propeller sp 4 Feathering p 4 Propeller Ge 4 Synchronizi	2598 lbs. (+509) 70 lbs. (+509) 92 lbs. (+507) 56 lbs. (+532) 17 lbs. (+579)			
(6)	(6)	1 Synchronizi	ng Control Box - I	Hamilton Standard 322	2080	40 lbs. (+193)
(1)	(1)	 4 Propellers - (a) Hubs C6 (b) Hubs C6 (b) Diameter: 15' 14' 8-3/8". Pitch settings 	34D-A2, Blades 1 34D-A4, Blades 1 0", min. allowable No further reducti at 54 in station	09652-12 (including b) 09652-12 (including sl e for repairs ion permitted. fwd 23° reverse -10	lade heaters) ingers & shoes) °	2988 lbs. (+509) 2934 lbs. (+509)
		Propeller feat	hering nitch setting	g must prevent engine		
		windmilling (a	approximately 88.	6°).		
		Placard requir	red in full view of	flight engineer:		
		"Do not opera	te propellers in fli	ight below 1400 engine	e rpm."	
	(\mathbf{a})	Max. takeoff	wt. autofeathering	inoperative - 130,700	lbs.	150 lbs (+ 500)
	(2)	4 Propeller Sp	Curtiss type 124	512 store state st		158 lbs. (+509)
	(3)	1 Synchronize	er Master Unit - Ci	urtiss type 152923		40 lbs (+195)
	(5)	2 Voltage boo	sters - Curtiss typ	e 116285		40 lbs. (+252)
	(6)	1 Master Unit	Filter - Curtiss ty	vpe 112148-9		6 lbs. (+171)
Engin	ec an	d Engina Aaaa		011.0		
<u>101</u>	Fue (a) (b) (c)	l dump valves (Parker types & Parker types & Parker types 9	(See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 2 9-946-75-M3 and 2 system oil (See N	<u>Oil System</u> arding use of dump val- 2) and 9-946-75 (Mod. 1 9-946-75 M3 1 .319-54637M OTE 1 for definition)	ves) 2)	
<u>100.</u> 101.	Fue (a) (b) (c) Unu	l dump valves (Parker types & Parker types & Parker types & Isable fuel and Airplane	(See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 0-946-75-M3 and 1 system oil (See No Pron. Item	<u>Oil System</u> arding use of dump val ² 2) and 9-946-75 (Mod. 1 9-946-75 M3 1.319-54637M OTE 1 for definition). Center Section	ves) 2) Center Section	
<u>100.</u> 101.	Fue (a) (b) (c) Unu	l dump valves (Parker types & Parker types & Parker types & Isable fuel and Airplane Model	(See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 0-946-75-M3 and 1 system oil (See No Prop. Item Installed	<u>Oil System</u> arding use of dump val ² 2) and 9-946-75 (Mod. 19-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells	ves) 2) Center Section Aux. Oil Tank	
<u>100.</u> 101.	Fue (a) (b) (c) Unt	l dump valves (Parker types & Parker types & Parker types & Isable fuel and Airplane Model	(See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 2-946-75-M3 and system oil (See No Prop. Item Installed	Oil System arding use of dump val- 2) and 9-946-75 (Mod. 9-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed	ves) 2) Center Section Aux. Oil Tank Installed	
<u>100.</u> 101.	Fue (a) (b) (c) Unu (a)	l dump valves (Parker types 8 Parker types 8 Parker types 9 Isable fuel and Airplane Model	(See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 2-946-75-M3 and system oil (See No Prop. Item Installed 1(a)	Oil System rrding use of dump val- 2) and 9-946-75 (Mod. 9-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No	ves) 2) Center Section Aux. Oil Tank Installed n/a	876 lbs. (+633)
100.	(a) (b) (c) (c) (a) (b) (c)	l dump valves (Parker types 8 Parker types 8 Parker types 9 Isable fuel and Airplane Model 1049-54	Sories - Fuer and (See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 9-946-75-M3 and system oil (See No Prop. Item Installed 1(a) 1(a)	Oil System urding use of dump val- 2) and 9-946-75 (Mod. 1 9-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes	ves) 2) Center Section Aux. Oil Tank Installed n/a n/a	876 lbs. (+633) 945 lbs. (+633)
100.	$\begin{array}{c} \text{Fue} \\ \text{(a)} \\ \text{(b)} \\ \text{(c)} \\ \text{Unt} \\ \end{array}$ $\begin{array}{c} \text{(a)} \\ \hline \text{(b)} \\ \text{(c)} \\ \end{array}$	l dump valves (Parker types & Parker types & Parker types & Parker types & Isable fuel and Airplane Model 1049-54	Sories - Fuer and (See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 9-946-75-M3 and system oil (See No Prop. Item Installed 1(a) 1(a) 1(b) or (d) 1(c)	Oil System urding use of dump val- 2) and 9-946-75 (Mod. 1 9-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes Ves	ves) 2) Center Section Aux. Oil Tank Installed n/a N/a Yes	876 lbs. (+633) 945 lbs. (+633) 940 lbs. (+642) 1072 lbs. (+621)
100.	(a) (b) (c) (c) (c) (c) (c) (d) (c)	l dump valves (Parker types & Parker types & Parker types & Isable fuel and Airplane Model 1049-54 1049B-55, 1049D-55	Stories Fuel and (See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 2 3-3046-75 M3 and 2 9-946-75-M3 and 2 system oil (See NO Prop. Item Installed 1(a) 1(b) or (d) 1(c) 1(b) or (d)	Oil System urding use of dump val- 2) and 9-946-75 (Mod. 19-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes Yes No	ves) 2) Center Section Aux. Oil Tank <u>Installed</u> n/a n/a Yes Yes No	876 lbs. (+633) 945 lbs. (+633) 940 lbs. (+642) 1073 lbs. (+631) 860 lbs (+638)
100.	$\begin{array}{c} \text{Fue} \\ \text{(a)} \\ \text{(b)} \\ \text{(c)} \\ \text{Unt} \\ \end{array}$ $\begin{array}{c} \text{(a)} \\ \frac{\text{(b)}}{\text{(c)}} \\ \text{(d)} \\ \text{(e)} \\ \text{(f)} \end{array}$	l dump valves (Parker types & Parker types & Parker types & Isable fuel and Airplane Model 1049-54 1049B-55, 1049B-55, 1049D-55, 1049E-55,	Sories - Fuer and (See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and)-946-75-M3 and)-946-75-M3 and)-946-75-M3 and)-946-75-M3 and) system oil (See No Prop. Item Installed 1(a) 1(b) or (d) 1(c) 1(b) or (d) 1(c)	Oil System arding use of dump val- 2) and 9-946-75 (Mod. 9-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes Yes No No No	ves) 2) Center Section Aux. Oil Tank Installed n/a n/a Yes Yes No No	876 lbs. (+633) 945 lbs. (+633) 940 lbs. (+642) 1073 lbs. (+631) 860 lbs. (+638) 993 lbs. (+627)
100. 101.	Fue (a) (b) (c) Unt (a) (b) (c) (d) (c) (d) (e) (f) (g)	l dump valves (Parker types 8 Parker types 8 Parker types 9 Isable fuel and Airplane Model 1049-54 1049B-55, 1049C-55, 1049D-55, 1049E-55, or	Sories - Fuer and (See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and)-946-75-M3 and	Oil System arding use of dump val- 2) and 9-946-75 (Mod. 9-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes Yes No No Yes	ves) 2) Center Section Aux. Oil Tank Installed n/a n/a Yes Yes No No No No	876 lbs. (+633) 945 lbs. (+633) 940 lbs. (+642) 1073 lbs. (+631) 860 lbs. (+638) 993 lbs. (+627) 929 lbs. (+638)
100. 101.	$\begin{array}{c} \text{(a)} \\ \text{(b)} \\ \text{(c)} \\ \text{(d)} \\ \text{(e)} \\ \text{(f)} \\ \text{(g)} \\ \text{(h)} \end{array}$	l dump valves (Parker types 8 Parker types 8 Parker types 9 Isable fuel and Airplane Model 1049-54 1049B-55, 1049C-55, 1049C-55, 1049E-55, or 1049F-55	Sories - Fuer and (See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and -946-75-M3 and system oil (See No Prop. Item Installed 1(a) 1(b) or (d) 1(c) 1(b) or (d) 1(c) 1(b) or (d) 1(c) 1(b) or (d) 1(c) 1(b) or (d) 1(c) 1(b) or (d) 1(c)	Oil System rrding use of dump val- rrding use of dump val- 2) and 9-946-75 (Mod. 19-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes Yes No No Yes Yes Yes Yes Yes Yes Yes Yes	ves) 2) Center Section Aux. Oil Tank Installed n/a n/a Yes Yes No No No No No No	876 lbs. (+633) 945 lbs. (+633) 940 lbs. (+642) 1073 lbs. (+642) 1073 lbs. (+631) 860 lbs. (+638) 993 lbs. (+627) 929 lbs. (+638) 1062 lbs. (+627)
100. 101.	(a) (b) (c) (c) (c) (c) (c) (d) (c) (d) (c) (f) (g) (h) (i)	l dump valves (Parker types 8 Parker types 8 Parker types 9 Isable fuel and Airplane Model 1049-54 1049B-55, 1049C-55, 1049C-55, 1049E-55, or 1049F-55 1049G-82,	Sories - Fuel and (See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 3-3046-75-M3 and 3-3046-75-M3 and 100 Prop. Item Installed 1(a) 1(b) or (d) 1(c) 1(b) or (d) 1(c) 1(b) or (d) 1(c) 1(b) or (d) 1(c) 1(c) 1(b) or (d) 1(c) 1(Oil System urding use of dump val- 2) and 9-946-75 (Mod. 1-9-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes Yes No No Yes Yes Yes Yes Yes Yes Yes	ves) 2) Center Section Aux. Oil Tank Installed n/a Yes Yes No No No No No Yes	876 lbs. (+633) 945 lbs. (+633) 940 lbs. (+642) 1073 lbs. (+631) 860 lbs. (+638) 993 lbs. (+627) 929 lbs. (+638) 1062 lbs. (+627) 1113 lbs. (+630)
100. 101.	$\begin{array}{c} \text{(a)} \\ \text{(b)} \\ \text{(c)} \\ \text{Unt} \\ \end{array}$	l dump valves (Parker types & Parker types & Parker types & Parker types & Isable fuel and Airplane Model 1049-54 1049B-55, 1049C-55, 1049C-55, 1049C-55, 1049F-55 1049F-55	sorries - Fuer and (See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 2 3-3046-75 M3 and 2 system oil (See NO Prop. Item Installed 1(a) 1(b) or (d) 1(c) 1(e) 1(e)	Oil System urding use of dump vali 2) and 9-946-75 (Mod. 19-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes No No Yes Yes Yes Yes No Yes Yes Yes Yes Yes Yes	ves) 2) Center Section Aux. Oil Tank <u>Installed</u> n/a Na Yes Yes No No No No Yes No Yes No	876 lbs. (+633) 945 lbs. (+633) 940 lbs. (+642) 1073 lbs. (+631) 860 lbs. (+638) 993 lbs. (+627) 929 lbs. (+638) 1062 lbs. (+627) 1113 lbs. (+630) 1033 lbs. (+626)
100. 101.	$\begin{array}{c} \text{(a)} \\ \text{(b)} \\ \text{(c)} \\ (c)$	 I dump valves (Parker types 8 Parker types 8 Parker types 9 Isable fuel and Airplane Model 1049-54 1049B-55, 1049E-55, 1049E-55, 1049F-55 1049G-82, or 1049H-82 	ssories - Fuel and (See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 3-3046-75 M3 and 3-946-75-M3 and system oil (See No Prop. Item Installed 1(a) 1(b) or (d) 1(c) 1(e) 1(e) 1(f) 1(6)	Oil System urding use of dump val- 2) and 9-946-75 (Mod. 1-9-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes No No Yes Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No Yes No No Yes No No Yes No No Yes No No Yes No No No Yes No No No Yes No No No Yes No No No Yes No No No Yes No No No No No No No No No No	ves) 2) Center Section Aux. Oil Tank Installed n/a n/a Yes Yes No No No No Yes No Yes No Yes No	876 lbs. (+633) 945 lbs. (+633) 940 lbs. (+642) 1073 lbs. (+631) 860 lbs. (+638) 993 lbs. (+627) 929 lbs. (+638) 1062 lbs. (+627) 1113 lbs. (+630) 1033 lbs. (+626) 975 lbs. (+641)
100. 101.	$\begin{array}{c} \text{(a)} \\ \text{(b)} \\ \text{(c)} \\ \text{(c)} \\ \text{(c)} \\ \text{(c)} \\ \text{(d)} \\ \text{(c)} \\ \text{(d)} \\ \text{(e)} \\ \text{(f)} \\ \text{(i)} \\ \text{(i)} \\ \text{(j)} \\ \text{(k)} \\ \text{(l)} \end{array}$	l dump valves (Parker types & Parker types & Parker types & Parker types & Isable fuel and Airplane Model 1049-54 1049B-55, 1049B-55, 1049D-55, 1049F-55 1049G-82, or 1049H-82	ssories - Fuel and (See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 2 3-3046-75 M3 and 2 system oil (See No Prop. Item Installed 1(a) 1(b) or (d) 1(c) 1(e) 1(f) 1(f)	Oil System arding use of dump val- 2) and 9-946-75 (Mod. 1-9-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes No Yes Yes No Yes No Yes No Yes No Yes No Yes No	ves) 2) Center Section Aux. Oil Tank Installed n/a n/a Yes No No No No Yes No Yes No Yes No Yes No Yes No	876 lbs. (+633) 945 lbs. (+633) 940 lbs. (+642) 1073 lbs. (+641) 860 lbs. (+638) 993 lbs. (+627) 929 lbs. (+638) 1062 lbs. (+627) 1113 lbs. (+630) 1033 lbs. (+626) 975 lbs. (+641) 895 lbs. (+637)
100. 101. 102.	(a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	l dump valves (Parker types & Parker types & Parker types & Parker types & Isable fuel and Airplane Model 1049-54 1049B-55, 1049B-55, 1049B-55, 1049F-55 1049G-82, or 1049H-82 ters Jack and Hein Eclipse Type	Image: solution of the second secon	Oil System urding use of dump val- 2) and 9-946-75 (Mod. 19-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes No Yes Yes No	ves) 2) Center Section Aux. Oil Tank Installed n/a n/a Yes Yes No No Yes No Yes No Yes No Yes No Yes No Yes No	876 lbs. (+633) 945 lbs. (+633) 940 lbs. (+642) 1073 lbs. (+631) 860 lbs. (+638) 993 lbs. (+627) 929 lbs. (+638) 1062 lbs. (+627) 1113 lbs. (+630) 1033 lbs. (+626) 975 lbs. (+641) 895 lbs. (+637) 105 lbs. (+585) 113 lbs. (+585)
100. 101. 102.	(a) (b) (c) (c) (c) (c) (c) (d) (c) (d) (c) (f) (j) (k) (j) (k) (j) (k) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	l dump valves (Parker types & Parker types & Parker types & Parker types & Parker types & Isable fuel and Airplane Model 1049-54 1049B-55, 1049C-55, 1049C-55, 1049C-55, 1049G-82, or 1049H-82 ters Jack and Hein Eclipse Type Jack and Hein	ssories - Fuer and (See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 2-346-75 M3 and 2-946-75-M3 and system oil (See No Prop. Item Installed 1(a) 1(a) 1(b) or (d) 1(c) 1(b) or (d) 1(c) 1(b) or (d) 1(c) 1(b) or (d) 1(c) 1(f) 1(f) 1(f) 36E00-4 - Model tz Type JH6 ER - 36E00-4 - Model	Oil System arding use of dump val- 2) and 9-946-75 (Mod. 19-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes Yes No No Yes Yes No No Yes No No Yes No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No No Yes No No No Yes No No No No No Yes No No No No Yes No No No No No No No No No No	ves) 2) Center Section Aux. Oil Tank Installed n/a n/a Yes No No No No No Yes No No Yes No No Yes No No Yes No No Yes No	876 lbs. (+633) 945 lbs. (+633) 940 lbs. (+642) 1073 lbs. (+631) 860 lbs. (+638) 993 lbs. (+627) 929 lbs. (+638) 1062 lbs. (+627) 1113 lbs. (+630) 1033 lbs. (+626) 975 lbs. (+641) 895 lbs. (+641) 895 lbs. (+637) 105 lbs. (+585) 113 lbs. (+585) 113 lbs. (+596)
100. 101. 102.	$\begin{array}{c} \text{(a)} \\ \text{(b)} \\ \text{(c)} \\ \text{(c)} \\ \text{(d)} \\ \text{(c)} \\ \text{(d)} \\ \text{(e)} \\ \text{(f)} \\ \text{(g)} \\ \text{(i)} \\ \text{(j)} \\ \text{(k)} \\ \text{(l)} \\ \text{Starr} \\ \text{(a)} \\ \text{(b)} \\ \text{(c)} \\ \text{(d)} \\ \text{(c)} \\ \text{(d)} \\ \text{(e)} \\ \text{(d)} \\ \text{(d)} \\ \text{(e)} \\ \text{(d)} \\ ($	l dump valves (Parker types & Parker types & Parker types & Parker types & Parker types & Parker types & Isable fuel and Airplane Model 1049-54 10498-55, 1049C-55, 1049C-55, 1049C-55, 1049E-55, 1049F-55 1049G-82, or 1049H-82 ters Jack and Hein Eclipse Type & Jack and Hein Eclipse Type &	Image: solution of the second secon	Oil System arding use of dump val- 2) and 9-946-75 (Mod. 19-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes Yes No No Yes Yes No No Yes No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No No Yes No No Yes No No No Yes No No No Yes No No No Yes No No No No Yes No No No No No No No No No No	ves) 2) Center Section Aux. Oil Tank Installed n/a n/a Yes Yes No No No Yes No	876 lbs. (+633) $945 lbs. (+633)$ $940 lbs. (+642)$ $1073 lbs. (+631)$ $860 lbs. (+638)$ $993 lbs. (+627)$ $929 lbs. (+638)$ $1062 lbs. (+627)$ $1113 lbs. (+630)$ $1033 lbs. (+626)$ $975 lbs. (+641)$ $895 lbs. (+637)$ $105 lbs. (+585)$ $113 lbs. (+586)$ $113 lbs. (+596)$ $113 lbs. (+596)$ $113 lbs. (+596)$
100. 101. 102.	$\begin{array}{c} \text{(a)} \\ \text{(b)} \\ \text{(c)} \\ \text{(b)} \\ \text{(c)} \\ \text{(c)} \\ \text{(d)} \\ \text{(c)} \\ \text{(d)} \\ \text{(f)} \\ \text{(j)} \\ \text{(k)} \\ \text{(l)} \\ \text{(l)} \\ \text{(c)} \\ \text{(d)} \\ \text{(c)} \\ \text{(d)} \\ \text{(c)} \\ \text{(d)} \\ \text{(c)} \\ \text{(d)} \\ \text{(f)} \\ \text{(f)} \end{array}$	l dump valves (Parker types 8 Parker types 8 Parker types 9 Isable fuel and Airplane Model 1049-54 1049B-55, 1049C-55, 1049C-55, 1049C-55, 1049F-55 1049F-55 1049G-82, or 1049H-82 ters Jack and Hein Eclipse Type AN 4116R6 - Jack and Hein	Image: Source Section Full and Graph (See NOTE 3 rega 3-3046-75 (Mod. 2 3-3046-75 M3 and 2 3-3046-75 M3 and 2 3-3046-75 M3 and 2 system oil (See No Prop. Item Installed 1(a) 1(a) 1(b) or (d) 1(c) 1(e) 1(f) 1(f) 36E00-4 - Model tz Type JH6 ER - 36E00-4 - Models Model 1049B tz Type JH6CF.	Oil System rrding use of dump val- 2) and 9-946-75 (Mod. 19-946-75 M3 1.319-54637M OTE 1 for definition). Center Section Fuel Cells Installed No Yes Yes Yes Yes Yes Yes No Yes Yes No No Yes No Yes No Yes No Yes No Yes No No Yes No No Yes No Yes No Yes No No Yes No No Yes No Yes No No Yes No No Yes No Yes No No Yes No No Yes No No Yes No Yes No No Yes No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes No No Yes Yes Yes Yes No Yes Yes No Yes Yes Yes Yes Yes Yes Yes Yes	ves) 2) Center Section Aux. Oil Tank Installed n/a n/a Yes Yes No No No No Yes No No Yes No	876 lbs. (+633) 945 lbs. (+633) 940 lbs. (+642) 1073 lbs. (+642) 1073 lbs. (+631) 860 lbs. (+638) 993 lbs. (+627) 929 lbs. (+638) 1062 lbs. (+627) 1113 lbs. (+630) 1033 lbs. (+626) 975 lbs. (+641) 895 lbs. (+641) 895 lbs. (+641) 895 lbs. (+637) 105 lbs. (+585) 113 lbs. (+585) 105 lbs. (+596) 113 lbs. (+596) 113 lbs. (+596) 107 lbs. (+596)

103	4 Oil Coolers	
105.	(a) AiResearch Type 86909-23 - Model 1049-54	185 lbs (+586)
	(b) AiResearch Type 87162-24 - Models 1049B and 1049C	210 lbs. (+585)
	(c) AiResearch Type 87242-24 - Models 1049B and 1049C	210 lbs. (+585)
104.	4 Engine-driven fuel pumps	× ,
	(a) Thompson Type TF-2100 - Model 1049-54	17 lbs. (+571)
	(b) Pesco Type 2P-771-CE-1 - Models 1049B and 1049C	17 lbs. (+583)
	(c) AN4102-1 - Model 1049B	17 lbs. (+583)
	(d) Thompson Type TF2100	17 lbs. (+583)
105.	Auxiliary fuel pumps	
	(a) 6 for tanks 1, 2, 3, 4, 2a, 3a	
	(1) Thompson TF-52300-1	48 lbs. (+712)
	(b) 1 for tank No. 5 (center section) (See NOTE 7)	
	(1) Thompson Type TF-42300-1	8 lbs. (+692)
106.	4 De-icer or vacuum pumps	
	(a) Pesco Type 3P-485 - Model 1049-54 installation	40 lbs. (+586)
	(b) Pesco Type 3P-485 - Models 1049B and 1049C	40 lbs. (+592)
107.	4 Hydraulic pumps	
	(a) Vickers Type AA20511 - Model 1049-54 installation	102 lbs. (+583)
	(b) Vickers Type AA20510 - Models 1049B and 1049C	112 lbs. (+595)
	(c) Vickers Type AA20513	112 lbs. (+595)
108.	Auxiliary Oil pumps (See NOTE 7)	
	(a) Pesco Type 012634-010 - hydraulic	12 lbs. (+642)
	(b) Pesco Type 112127-010 - electric	40 lbs. (+650)
109.	Tip tank installation, consisting of:	
	Two tip tank assemblies per LAC Drawing 316076 including	521 lbs. (+704)
	Undrainable Fuel (29 lbs.) and Unusable Fuel (34 lbs.)	
	NOTE: When operating without tip tanks, it is necessary to	
	correct for the addition of wing tips as follows:	
	Two wing tips - removable (including deicer boots)	57 lbs. (+711)
110.	Omitted.	
111.	Optional Engines	
	(a) 4 Wright Compound 988TC18EA3 or 988TC18EA6 with 16:7 reduction	
	gear ratio and 6.52:1 turbo drive ratio. (When these	EA3: 14,580 lbs. (+554)
	optional engines are installed, the dash number on	EA6: 14,700 lbs. (+554)
	the airplane model designation becomes -03 or -06	
	respectively)	
	Engine limits: (With fuel grade 115/145) (See NOTE 17 for engine	
	limits when using low grade fuel)	
	Low impeller ratio 6.46:1	
	Maximum continuous: $(S_{12}, I_{12}, I_{12}) = 10$ in $H_{12} = 2(50, I_{12}, I_{12})$	
	(Sea level) 51.0 lif. Hg., 2650 rpm (2860 np)	
	(Straight line manifold pressure variation with	
	annual to 4800 II.	
	49.5 III. Hg., 2030 Ipin (2920 Ip) Takaoff (2 minutes at see level, 5 minutes at 7500 ft .	
	straight line variation of takeoff power time with altitude	
	to 7500 ft)	
	(5 control) (See level) 58 5 in Hg. 2000 mm (2400 hn)	
	(Straight line manifold pressure variation with altitude	
	to 4000 ft)	
	56.0 in Hg = 2000 rnm (3400 hn)	
	High impeller ratio 8 67:1	
	Maximum continuous:	
	(10,000 ft) 48.5 in Hg - 2600 rpm (2410 hp)	
	(Straight line manifold pressure variation with altitude	
	to 16 400 ft.)	
	$47.0 \text{ in Hg}_{-} 2600 \text{ rpm} (2450 \text{ hp})$	
	NOTE: Installation to be in accordance with Lockheed Service Bulletin No	2939
	When Propeller Item 1(c) is used in conjunction with the above en	gines
	the power of ratings of the Wright 972TC18DA1 engine must be	ised.
	1	

	(b)	4 Wright Compound 972TC18DA3 with 16:7 reduction gear ratio	14,200 lbs. (+554)
		and 6.52:1 turbo drive ratio	
		Engine limits:	
		Low imperier ratio 0.46:1	
		Maximum continuous: (See level) 40.0 in Hg = 2600 rpm (2700 hp)	
		(Straight line manifold pressure variation with altitude	
		to 5500 ft.)	
		53.5 in.Hg., 2900 rpm (3250 hp)	
		High impeller ratio 8.67:1	
		Maximum continuous:	
		(10,050 ft.) 48.5 in.Hg., 2600 rpm (2400 hp)	
		(Straight line manifold pressure variation with	
		altitude to 16,400 ft.)	
		47.0 in.Hg., 2600 rpm (2450 hp)	D
		NOTE: Installation to be in accordance with Lockheed Service Bulletin No. 1049/S	B-2514.
Landi	ng G	רבים אוניים פון איניים איניים איניים פון איניים איניים איניים איניים איניים איניים איניים איניים איניים איניים איניים איניים	
200	$\frac{16}{2}$ m	ain gear shock struts	
200.	(a)	Cleveland Type 9040 - Model 1049-54	986 lbs. (+713)
	(b)	Cleveland Type 9106 - Models 1049B and 1049C	1040 lbs. (+713)
	(c)	Cleveland Type 9106A	1048 lbs. (+713)
	(d)	Cleveland Type 9291B	1048 lbs. (+713)
201.	Nos	se gear shock strut	
	(a)	Cleveland Type 9054	480 lbs. (+195)
202.	4 m	ain wheel-brake assemblies	
	(a)	17.00-20, Type III	
		(1) Goodyear Model LF20DHBM Wheel Assembly No. 9540552	512 lbs. (+708)
		* or Wheel Assembly No. 9540832	546 lbs. $(+708)$
		Brake Assembly No. 9540528 (inboard)	408 lbs. (+708)
		Brake Assembly No. 9340333 (outboard)	240 IDS. (+708)
		(2) Goodrich Model 1754M Wheel Assembly No. H_{-3} -735M	$240 \text{ IDS.} (\pm 708)$ 812 lbs (± 708)
		(2) Goodinen Model 1754M Wheel Assembly No. H-5-755M Brake Assembly No. G-2-597 (2 per wheel)	240 lbs. (+708)
		(3) Goodyear	240 103. (1700)
		Wheel Assembly No. 9540753	554 lbs. (+708)
		Brake Assembly No. 9540754 (outboard)	249 lbs. $(+708)$
		Brake Assembly No. 9540755 (inboard)	457 lbs. (+708)
		(4) Goodrich	
		Wheel Assembly No. H-3-772	884 lbs. (+708)
		Brake Assembly No. G-2-639 (2 per wheel)	264 lbs. (+708)
203.	4 m	ain wheel tires and tubes Type III	
	(a)	17.00-20, 20-ply rating nylon	
	a	(Use actual weight) Maximum, incl. air	884 lbs. (+7/08)
	(b)	17.00-20, 22-ply rating nylon	004.11 - (+700)
204	2 N	(Use actual weight) Maximum, incl. air	884 Ibs. $(+708)$
204.	(2)	AxQ Q Type VII	
	(a)	(1) Goodrich Assembly No. H-3-592M-1 (no fairing)	68 lbs $(+184)$
		(1) Goodrich Assembly No. H-3-592M (with fairing)	74 lbs. (+184)
		(3) Goodrich Assembly No. H-3-753 (no fairing)	73 lbs. $(+184)$
	(b)	33", S.C., Type I	
	()	(1) Bendix Assembly No. 57608M	62 lbs. (+184)
205.	2 N	ose wheel 10-ply rating nylon tires	
	(a)	34x9.9, Type VII B (with regular tubes) Use actual weight)	(+184)
	(b)	33", S.C., Type I (with regular tubes) Use actual weight	(+184)
206.	2 N	lain gear drag strut dampers	
	(a)	L.A.C. Dwg. No. 307503	176 lbs. (+701)
	(b)	L.A.C. Dwg. No. 310618	180 lbs. $(+701)$
	(C)	L.A.C. Dwg. No. 409080	185 IDS. (+701)

Electrical Equipment

300.	Generators	
	(a) 4 D.C. Eclipse Type 30E02 - Model 1049-54 installation	254 lbs. (+584)
	(b) 4 D.C. Eclipse Type 30E02 - Model 1049B and 1049C	254 lbs. (+597)
	(c) 6 D.C. Eclipse Type 30E02-(9)	381 lbs. (+594)
301.	Batteries	
	(a) 2 24 Volt, 36 A.H.	152 lbs. (+283)
303.	Alternators	
	(a) 2 Pioneer Type 1631-7	19 lbs. (+588)
	(b) 2 Pioneer Type 1632-1	12 lbs. (+588)
	(c) 2 Eclipse Type 28E04	21 lbs. (+601)
	(d) 2 Eclipse Type 28E04	21 lbs. (+582)
	(e) Inverter (Bendix Model K-2496)	13 lbs. (+130)

Interior Equipment

400. FAA Approved Airplane Flight Manual. (A manual containing information required for the Airplane Flight Manual may be carried in lieu thereof in aircraft operated under the provisions of Parts 40, 41 and 42 of the Civil Air Regulations.) The following table identifies the airplane flight manuals and revisions thereto currently approved for each airplane:

each a	n plane.			
		Lockheed	Date of	
	Serial	Report	Latest	For Aircraft
Model	Number	Number	Revision	with Item:
1049-54	4001 thru 4024	7787	4-14-58	
1049B-55	4101 thru 4111	(All of these seria	l numbered airc	raft delivered
	4122 thru 4130	as Model R7V-1 o	or C121C. App	roved Manuals must
	4133 thru 4150	be provided at tim	e of conversion	to Model 1049B-55
	4152 thru 4160	or 1049F-55 per N	NOTE 5(d).)	
	4167 thru 4169			
1049F-55	4170 thru 4202			
1049C-55	4503, 4504, 4506	9153	6-27-58	1(b) or 1(d)
1049E-55	4507, 4509 thru	9154	5-29-58	1(c)
1049E/01-55	4552, 4554 thru			
1049E/02-55	4557, 4561 thru			
	4565, 4573, 4574			
	4578 thru 4581,			
	4606, 4607, 4613			
	thru 4615			
1049G-82	4572, 4575 thru	10051 (with	10-1-58	1(f)
	4577	Log of Pages i)		
	4553, 4558, 4559, 4560,	10051 (with		
	4629, 4630, 4631, 4635	Log of Pages Ai)		
	4641, 4643	10051 (with		
	,	Log of Pages Bi)		
	4682, 4683	10051 (with		
		Log of Pages Ci)		
	4679 4680	10051 (with		
	1075, 1000	Log of Pages Di)		
1049C-55	4501 4502 4505	10051 (with		
Modified to	4508	Log of Pages Fi)		
1049G/02-82	1500			
1049G-82	4582 thru 4601	10052 (with	10-1-58	1(e)
1010002	4648 thru 4652	Log of Pages i)	10 1 50	1(0)
	4654 4656 4658	205 01 1 4505 1)		
	4602 thru 4605	10052 (with	_	
	4637 4640 4642	Log of Pages Ai)		
	4647	Log of Tages Al)		
	4610 thru 4612	10052 (with	_	
	1010 difu 1012	Log of Pages Ri)		
	4620 thru 4627	10052 (with		
	4668 thru 4671	Log of Dages Ci)		
	4634 4639	LUG UI FAGES CI)		

		Lockheed	Date of	
	Serial	Report	Latest	For Aircraft
Model	Number	Number	Revision	with Item:
	4616 thru 4618	10052 (with		
		Log of Page Di)		
	4628, 4646, 4666,	10052 (with		
	4667, 4686, 4687	Log of Pages Ei)		
	4619	10052 (with		
		Log of Pages Fi)		
	4636, 4674	10052 (with		
	,	Log of Pages Gi)		
	4644, 4645	10052 (with		
		Log of Pages Hi)		
	4653, 4655, 4657,	10052 (with		
	4659 thru 4665	Log of Pages Ii)		
	4673 4676	10052 (with		
	1075, 1070	Log of Pages Ki)		
	4672 4677 4678	10052 (with		
	+072, +077, +078	Log of Pages Li)		
	1681 1681 1685	$\frac{10052 \text{ (with}}{10052 \text{ (with})}$		
	4081, 4084, 4085	Log of Dagos Mi)		
	1622 1622 1675	$\frac{10052 \text{ (with}}{10052 \text{ (with})}$		
	4032, 4033, 4073	Log of Dogog Ni)		
10400/01 92	4165 4166	Log of Pages INI)	1 12 50	1/L)
1049D/01-82	4105, 4100	11020 (with Least Decay)	1-12-39	1(0)
104011	4901 4902	Log of Page 1)	10 1 50	1(6)
1049H	4801, 4803		10-1-38	1(1)
	4002 4005 4	Log of Pages Ai)	1 12 50	1(1)
	4802, 4805 thru	11020 (with	1-12-59	1(D)
	4808	Log of Pages Bi)	10.1.50	1/) 1/)
	4828, 4829, 4831,	11020 (with	10-1-58	1(c) or 1(e)
10.1077.001.00	4832	Log of Pages Fi)	10.00.00	
1049H/01-03	4839, 4842, 4844,	11020 (with	10-23-58	
or	4845	Log of Pages Ci)		
1049H/01-03	4804, 4809 thru 4812,	11020 (with		
Modified to	4814, 4815, 4816,	Log of Pages Di)		
1049H/02-03	4819, 4822, 4827,			
1049H/05-03	4852, 4853		_	
1049H/06-03	4813, 4817, 4818, 4820,	11020 (with		
	4821, 4823 thru 4826	Log of Pages Ei)		
	4830	11020 (with		
		Log of Pages Gi)		
	4833, 4834, 4837,	11020 (with		
	4838	Log of Pages Hi)		
	4835, 4836	11020 (with		<u>1(f)</u>
		Log of Pages Ji)		
	4840, 4841, 4843	11020 (with		1(c) or 1(e)
		Log of Pages Li)		
	4846, 4847	11020 (with		
		Log of Pages Mi)		
1049D/01-82	4163, 4164	11020 (with	1-12-59	1(b)
Modified to		Log of Pages Ki)		
1049H/03-82		2 2 /		
1049H/02-03	4850, 4851	11020 (with	1-12-59	
Modified to	-	Log of Pages Ni)		
1049H/07-03		2 2 /		

82 lbs. (+620)

401.	Sur	ace Control Equipment						
	(a)	Automatic pilot						
	. ,	(1) Pioneer PB-10 (3 s	141 lbs. (+700)					
		NOTE: The following it	information ma	y be used wit	h Mode	el 1049 only.		
		When using automa	atic pilot in cru	ise configurat	ions,	·		
		minimum terrain cl	earance is 500	ft. When usi	ng auto	matic		
		nilot during approa	ch minimum	ltitude is 200	ft nile	ot's		
		seat belt fastened a	nd hand on cor	trol wheel (Minimu	um		
		altitude for each ea	se dees pet ev	mulo opy hig	hor			
		minimum energia	se does not ove	Movimum and	nci ad far a	utanilat		
			ial altitude.) (I	Maximum spe	ed for a	lutopilot		
		15 338 MPH)						
		Servo stall forces measu	red at the pilot	's controls:				
		Elevator 3	0 lbs. +	0 lbs.	-10 lbs			
		Aileron 3	0 lbs. +	0 lbs.	-10 lbs			
		Rudder 9	5 lbs. +	0 lbs.	-30 lbs			
		(These forces have not b	been demonstra	ted for Flight	Path C	ontrol)		
		(2) Pioneer PB-10 (3 s	ervos 15601-1/	A or 15613-1,	1 serve	o 15620-2A.)	141 lbs. (+700)	
		Maximum speed fo (294 knots)	r operation wit	h autopilot is	338 MI	PH		
		(See FAA Approve	d Airplane Fli	pht Manual fo	r altitud	le		
		loss during autopile	t malfunction)	i unnuu			
		loss during autopric	n manufiction.)				
					г	Forgues Massured at		
		Commonweat	Server Stall Day		1	lorques Measureu at		
		Component	servo Stall For	ces Measured	2	ervos with Control		
			at Pilot's	Controls		Cable Disconnected		
		Elevator 4	10 lbs. + 0 lbs	., -14 lbs.	3	10 in. lbs. + 10%		
		Aileron	19 lbs. $+0$ lbs	., - 6 lbs.	2	25 in. lbs. $\pm 10\%$		
		Rudder 8	30 lbs. + 0 lbs	., -30 lbs.	4	00 in. lbs. + 10%		
		(These forces are sa	atisfactory for	Flight Path Co	ontrol)			
		(3) Lear L-5 in accord 118AP, elevator an Maximum speed fo (See FAA approved altitude loss during Servo torques meas Rudder 2 Aileron 1 Elevator 1	d rudder trim s r operation with d Lear Airpland autopilot malf sured in in. lbs 80 max. 22 75 max. 14 82 max. 15	bwg. 70002 service 2216A th autopilot is e Flight Manu unction). . at the servos 25 min. 40 min. 54 min.	2 (3 ma 325 mp al Supp	oh. Jement for	165 lbs. (+067)	
		(These torques are	satisfactory for	automatic ap	proach)			
	(b)	Elevator boost unit - P/I	N 308575 or 32	22645			108 lbs. (+1420)	
	(c)	Rudder boost unit - P/N	308576 or 322	2646			105 lbs. (+1417)	
	(d)	2 Aileron boost units P/	N 289283-602				71 lbs. (+734)	
420.	2 ca	bin superchargers						
	(a)	AiResearch Type 56930	(with snood)				187 lbs. (+634)	
	(b)	Airesearch Type 57910					193 lbs. (+634)	
	(c)	AiResearch Type 57910	В				202 lbs. (+642)	
	(d)	Airesearch Type 57970						
421.	2 Si	percharger drive shaft ar	nd disconnect a	ssemblies				
	(a)	LAC 31145 shaft assem	bly and guard	installation ne	r LAC			
	(u)	Dwg No 308479	ory and gaara	instantation pe			109 lbs (+613)	
	(b)	$I \land C 311/42$ shaft asser	nbly and guard	installation n	or I AC	1	109 105. (1015)	
	(0)	Dwg No 211441	nory and guard	i ilistallatioli p			100 lbs (+617)	
	(\cdot)	Dwg. No. 311441		· · · · · · · · · · · · · · ·	TAC		100 lbs. (+017)	
	(C)	LAC 313908 shall asser	noly and guard	i installation p	er LAC			
		Dwg. INO. 313904			T		82 lbs. (+620)	
	(d)	LAC 329552 shaft asser	noly and guard	i installation p	er LAC			
	<i>,</i> .	Dwg. No. 315904			_		82 lbs. $(+620)$	
	(e)	L.A.C. 469864 shaft as	sembly and gua	ard installation	1 per LA	4C		
		Dwg. No. 470286.					82 lbs. (+620)	
	(f)	L.A.C. 470093 shaft as	sembly and gua	ard installation	1 per LA	AC		

Dwg. No. 470286.

400	(g)	AiResearch 205400 shaft and guard installation per LAC Dwg. No. RR1393	80 lbs. (+620)
422.	2 C (a)	abin heaters Surface combustion Type A77A63	42 lbs. (+800)
423.	2 R	ecirculating fans	
	(a) (b)	Dynamic Air Type 8862B-8B	74 lbs. $(+800)$
474	(U) Cal	in refrigeration installation	$70108.(\pm 000)$
121.	(a)	2 Cooling units. AiResearch Type 56910-1 and 2	47 lbs. (+744)
	(b)	2 Heat exchange cooling blowers. AiResearch Type 30980	45 lbs. (+759)
	(c)	2 Primary heat exchangers, AiResearch Type 19658	70 lbs. (+740)
	(d)	2 Secondary heat exchangers, AiResearch Type 81118	82 lbs. (+747)
	(e)	2 Water separators, AiResearch Type 81148-3 and -4	39 lbs. (+730)
440.	Em	ergency ladder or emergency chute	
	See	Approved Master Equipment List for approved locations,	
	ty	pes, weights and arms for various configurations.	
441.	Fix	ed Oxygen system	
	(a)	Model 1049-54 installed in accordance with LAC Dwg. No. 309287, including:	27.11 + (+2.0)
		(1) One Kidde Type 870324 cylinder (2) 2 Macka (full face or eval pasal with goggles)	2/10S. (+20)
	(h)	(2) 5 Masks (full fact of Ovar-Maski will goggles) Model 1049-54 installed in accordance with LAC	Negligible
	(0)	Dwg No. 311142 including:	
		(1) 3 Kidde Type 870326 cylinders LAC Dwg No. 654112	177 lbs (+254)
		(2) 3 Masks. TWA 1-45981-1	Negligible
	(c)	Model 1049C-55-81 installed in accordance with LAC Dwg. No.	66
		313262, including:	
		(1) 2 Kidde Type 870275 cylinders LAC Dwg. No. 654092	68 lbs. (+218)
	(d)	Model 1049C-55-81 installed in accordance with LAC Dwg.	
		No. 318611, including:	
		(1) One Kidde Type 870326 cylinder LAC Dwg. No. 654112	63 lbs. (+218)
	(e)	Model 1049B-55-75 installed in accordance with LAC Dwg.	
		No. 311168, including:	
	(f)	(1) 3 Kidde Type 8/055/ cylinders LAC Dwg. No. 654114	69 lbs. $(+224)$
	(1)	Model 1049C-55-94 installed in accordance with LAC Dwg. No.	
		521501, including: (1) One Kidde Type 870 cylinder (LAC Dwg, NO, 654002)	$34 \text{ lbs} (\pm 231)$
	(σ)	Model 1049D-55-85 installed in accordance with LAC Dwg. No.	$5+108.(\pm 251)$
	(6)	322662 including:	
		(1) 1 Kidde Type 870275	
	(h)	Model 1049G-82-101 installed in accordance with LAC Dwg. No.	
		465081 including:	
		(1) 2 Kidde Type 870326 cylinders LAC Dwg. No. 654112	125 lbs. (+215)
	(i)	Model 1049G-82-102 installed in accordance with LAC Dwg.	
		No. 328201 including:	
		(1) 2 Kidde Type 870275 cylinders LAC Dwg. No. 654092	68 lbs. (+218)
	(j)	Model 1049F-55-96 installed in accordance with LAC Dwg.	
		No. 315939, including:	
		(1) Three Kidde Type 870275 cylinders (LAC Dwg. No. 654114)	69 lbs. (+224)
	(K)	Model 1049H-82-133 installed in accordance with LAC Dwg.	
		No. 490938, including: (1) Two Kidda Two 870275 aulindors LAC Dwg, No. 654002	64 lbs (+210)
		(1) I wo Kidde Type 870275 Cylliders LAC Dwg. No. 054092	$04108.(\pm 219)$
De-ici	ng E	auinment	
500.	Wi	g de-icer boots	
	(a)	Goodrich Type 21 Pneumatic	150 lbs. (+642)
	(b)	Goodrich Type 22 Pneumatic	165 lbs. (+640)
501.	Stal	bilizer de-icer boots	. ,
	(a)	Goodrich Type 21 Pneumatic	68 lbs. (+1345)
_	(b)	Goodrich Type 22 Pneumatic	76 lbs. (+1345)
502.	Fin	de-icer boots	
	(a)	Goodrich Type 21 Pneumatic	39 lbs. $(+1365)$

508. Windshield wipers

(a)	1 Dual Marquette (electric) installed in accordance with	17 lbs. (+189)
	LAC Dwg. No. 309368	
(b)	1 Dual Marquette installed in accordance with LAC Drawing No. 325296	18 lbs. (+189)
(c)	1 Dual Alco installed in accordance with LAC Dwg. No. 326072	13 lbs. (+183)
(d)	2 wipers Alco installed in accordance with LAC Dwg. No. 327329	11 lbs. (+163)

- NOTE 1. (a) Current weight and balance report including list of equipment included in certificated weight empty, and loading instructions, must be in each aircraft at the time of original certification and at all times thereafter (except in the case of air carrier operators having an approved weight control system). See approved Master Equipment List (LAC Report 8097) for list of approved items of equipment in addition to those items listed in this specification.
 - (b) The airplane must be loaded so that the C.G. is within the specified limits at all times, with the effects of fuel use, gear retraction, and movement of crew and passengers from their assigned positions being considered (retraction of the main and nose gears causes the C.G. to move forward, a value of 186,000 in. lbs. is a satisfactory approximation of the change in moment for all approved wheel items). At takeoff, the airplane shall be loaded so that, due to fuel use, the C.G. cannot move forward of 18% MAC. A 34% aft C.G. limit (gear retracted) for cruising flight may be used when the effect of passenger and crew movements from their assigned positions has been taken into account.
 - (c) <u>"Unusable Fuel and System Oil"</u> and all hydraulic fluid must be included in the certificated weight empty. (See Item 101)

<u>Unusable fuel</u> is that quantity of fuel in the system and in the tanks which is unavailable to the engines under critical flight conditions as defined in CAR 4b.494. Thus <u>unusable</u> fuel, includes "system fuel" which is defined as the quantity required to fill the system and tanks to the tank outlet level when the airplane is in the ground level attitude. The fuel gages are calibrated with the unusable fuel level as the zero datum. The total amount of fuel (Unusable included in Item 101) is as follows:

		Center Section Fuel	Usable Fuel	Unusable Fuel
	Model	Cells Installed	(lbs.)	(lbs.)
	1049-54	Yes	39,300	491
		No	34,920	422
	1049B-55**			
or	1049C-55**	Yes	39,300*	457
or	1049D-55**	No	34,920*	388
or	1049E-55**			
or	1049F-55**			
or	1049G-82**			
or	1049H-82**			
10490	G-82, 10498-82			
	with tip tanks	Yes	46,608	520

*The total usable fuel must be limited to 28,800 lbs. when the oil transfer system is not installed (See NOTE 7). ** No tip tanks (See ITEM 109).

System oil is that amount of oil required to fill the oil systems and tanks to the tank outlets to the engines. The propeller feathering oil is not considered usable oil, and, when applicable, is included in "System oil." The oil tank capacities shown in this specification include only the usable oil for which the tanks are placarded. Dipstick readings indicate the amount of usable oil.

			With Oil			
		With Aux.	Transfer	Prop. Item	Usable	System Oil
	Model	Oil Tanks	System	Installed	Oil (lbs.)	(lbs.)
or	1049-54	Yes		1(a)	1740	454
		No		1(a)	1650	454
	1049B-55		Yes	1(b) or (d)	1702	483
or	1049C-55		Yes	1(c)	1702	616
or	1049D-55		No	1(b) or (d)	1200	472
or	1049E-55		No	1(c)	1200	605
or	1049F-55					
	1049G-82		Yes	1(e)	1702	656
or	1049H-82		Yes	1(f)	1702	518
			No	1(e)	1200	645
			No	1(f)	1200	507

	Gallons Remaining in Tanks						
(A) Model		Tanks	Tanks	Tanks	Tanks		
	Tank 5	2 & 3	1&4	2a & 3a	1a & 4a		Remarks
1049-54	-	45 ea.	139 ea.	152 ea.	-		
1049B-55		45 ea.	145 ea.	149 ea.	-		No standpipes in Tanks
	See						2 & 3 - 4" connector
1049C-55		145 ea.	145 ea.	149 ea.	-	(D)	Standpipes installed in Tanks
	Foot-						2 & 3 - 4" connector
1049D-55		174 ea.	145 ea.	149 ea.	-	(D)	Standpipes installed in Tanks
	note						2 & 3 - 2-1/2" connector
1049E-55		71 ea.	145 ea.	149 ea.	-		No standpipes in Tanks
or	Below						2 & 3 - 2-1/2" connector
1049F-55							
1049G-82		45 ea.	(C) 175 ea.	(C) 175 ea.	-		No Standpipes in Tanks
							2 & 3 - 4" connector
1049H-82		145 ea.	(C) 175 ea.	(C) 175 ea.	-	(D)	Standpipes installed in Tanks
							2 & 3 - 4" connector
1049G-03							
or							
1049H-03							
1049G-82		45 ea.	(C) 175 ea.	(C) 175 ea.	15 ea.		No Standpipes in Tanks
							2 & 3 - 4" connector
1049H-82		145 ea.	(C) 175 ea.	(C) 175 ea.	15 ea.	(D)	Standpipes installed in Tanks
							2 & 3 - 4" connector
1049G-03							
or							
1049H-03							

(d) <u>Fuel dumping.</u> When fuel dump valves (Item 100) are installed per NOTE 3, the amount of usable fuel, over and above the unusable fuel listed in Item 101, remaining after dumping is as follows:

The indicated combinations of undumpable fuel and the corresponding standpipe arrangement apply to any model within a given block.

(Same as amount prior to dumping (no dump valves in this tank).

Standpipe height increased to accommodate EA-3 engines.

Operational zero fuel weight must not exceed the design landing weight minus the total undumpable fuel weight (including fuel in tank No. 5 at take-off), but in any case must not exceed design zero fuel weight. (The above undumpable fuel quantities at 6 lbs. per gallon should be used in this determination).

- (e) Fuel loading and usage.
 - (1) Fuel must be distributed and used in a manner that will permit compliance with the lateral balance limitations in the FAA Approved Airplane Flight Manual.
 - (2) For minimum fuel at any takeoff weight, refer to fuel loading and usage chart in the pertinent Approved Operating Manual.
 - (3) Fuel loaded in Tank No. 5 will affect the maximum zero fuel gross weight as follows:

	Model	Maximum Zero Fuel Weight
	1049-54	93,500 lbs. less weight of fuel in Tank 5
		or 95,500 lbs. less weight of fuel in Tank 5 (see Note 6)
	1049B-55	105,000 lbs. less weight of fuel in Tank 5
or	1049F-55	-
	1049C-55	103,500 lbs. less weight of fuel in Tank 5 in excess of 1500 lbs.
r	1049E-55	
r	1049G-82	
	1049D-55	105,000 lbs. less weight of fuel in Tank 5
or	1049D/01-55	108,000 lbs. less weight of fuel in Tank 5
r	1049H-82	(See Note 11)
	1049G-82	104,200 lbs. less weight of fuel in Tank 5
	with tip tanks	-

(4) By reason of structural limitations, the following fuel quantities shall not be exceeded during landing operations:

		÷		-		
	Model	Tank 5	Tanks 2 & 3	Tanks 1 & 4	Tanks 2a & 3a	Tanks 1a & 4a
	1049-54	730 gal.	790 gal. ea.	1200 gal. ea.	515 gal. ea	
	1049-55					
or	1049C-55		No limi	itations.		
or	1049D-55		(Tanks 2a and 4	4a not installed)		
or	1049E-55					
or	1049F-55					
or	1049G-82					
or	1049H-82					
	1049G-82	730 gal.	790 gal. ea.	1555 gal. ea	565 gal. ea.	200 gal. ea.

NOTE 2. The following placards must be installed:

- (a) In full view of the pilots and flight engineer:
 - (1) "This airplane must be fueled and the fuel used in accordance with instructions contained in the FAA approved Airplane Flight Manual."
 - "This airplane shall be operated in accordance with the Operating Limitations specified in the FAA (2)Approved Airplane Flight Manual."
- (b) On the forward side of door at Station 303.5 for the -67 interior, or door at Station 339 for -81 interior: "This door must be locked open during all take-offs and landings."
- NOTE 3. Fuel dump valves (Item 100) must be installed for operation of the airplane at weights in excess of maximum landing weight. Refer to CAA Approved Airplane Flight Manual for limitations and cautionary procedures to be observed during the dumping of fuel.
- NOTE 4. The electric drive on the elevator trim tab mechanism on the control pedestal, formerly considered as an integral part of the airplane, may be retained or removed at the option of the operator.
- NOTE 5. Prior to civil certification of each military R7V-1 or C121-C aircraft of the Model 1049B-55 or 1049F-55 series, the following modifications will be required:
 - (a) The position and fuselage lights installation must be modified to conform to FAA requirements.
 - (b) On R7V-1 aircraft, fire detecting and extinguishing equipment must be installed in the lower baggage compartments in accordance with CAR 4b.383(c).
 - (c) All military special equipment must be removed.
 - (d) FAA approved operating manual (Airplane Flight Manual) (Item 400) must be provided.
 - (e) Airplanes bearing manufacturer's numbers 4102, 4103, 4104 and 4106 must be inspected for corrosion of the integrally stiffened machined plates of the inner wing lower surface. In order to accomplish this, the sealing of integral fuel tanks in this area must be removed. If detrimental corrosion is found, contact Lockheed Aircraft Corporation for corrective measures.
 - (f) Parachute flares must be installed.
 - (g) Airspeed placards limiting Vno and Vne in accordance with airspeed limits of Part III of this specification must be installed in full view of the pilots.
 - (h) Placards must be installed in the cabin which will insure that an aisle way will be maintained throughout the entire length of the cabin to:
 - (1) Provide access to an emergency exit over the wing for smoke evacuation purposes.
 - (2) Provide access to all cargo in the cabin area to facilitate fire fighting with a hand extinguisher.
 - (i) Placards must be installed to warn ground and flight personnel that the airplane must not be flown with the cargo

doors removed or unlatched.

- (i) Revise the engine nameplate to include the corresponding civil model designation (972TC18DA1) and Type Certificate No. (272).
- (k) Compliance with Airworthiness Directive Note No. 55-23-2 or Lockheed Service Bulletin No. 1049/SB-2753 must be accomplished for Serial Nos. 4144 and up.
- NOTE 6. Lockheed Serial Nos. 4101 through 4139 of Model 1049B (Navy R7V-1) are eligible for certification at 130,000 pounds takeoff weight only. To be eligible for certification at 133,000 pounds takeoff weight, the following items must be accomplished:

(1) Fuel loading and usage procedure must be in accordance with that described in Lockheed Report No. 9154.

(2) Reinforce fuselage main frame and fuselage skin in accordance with Lockheed Rapid Revision Dwg. No. 173.

- NOTE 7. When auxiliary oil tank and oil transfer systems are not used on Model 1049B-55 and 1049C-55, total usable fuel must be limited to 4800 gallons (28,800 lbs.).
- NOTE 8. Model 1049-54 aircraft are eligible for certification at a landing weight of 101,500 lbs. and a maximum zero fuel weight of 95,500 lbs. when modified in accordance with Lockheed Service Bulletins No. 1049/SB2202, 1049/SB2223 and 1049/SB2224. These modifications include reinforcements of the fuselage and wings, revised orifice plates in the main landing gear oleos, and revised piston assemblies in the main landing gear drag link shock struts.
- NOTE 9. If cargo aircraft (Model 1049B-55 or 1049F-55) are converted for passenger operation or combination passengercargo operation, approved modifications must be incorporated to show compliance with CAR 4b.433, 4b.434 and SR389 effective October 27, 1952, or Amendment 4b-4, effective December 20, 1951.
- NOTE 10. In accordance with the agreement between the Department of Defense and the Civil Aeronautics Board, all air carrier operators utilizing aircraft which have been modified under the Civil Reserve Air Fleet Program, Part I, Phase II, may deduct the added weight of the military modification up to a maximum of 50 pounds for each aircraft so modified.
- NOTE 11. Model 1049D-55 is eligible for landing weight of 113,000 lbs., takeoff weight of 135,400 lbs., and maximum zero fuel weight of 108,000 lbs., when larger brakes are installed, stronger main landing gear side struts and drag strut dampers are installed and other minor modifications accomplished. These changes are described in Lockheed Service Bulletin 2373, 2504, 2508, 2509, 2529 and 2599. Upon completion of all of these items, the airplane is redesignated as Model 1049D/01-55.
- NOTE 12. Models 1049C-55 and 1049E-55 are eligible for a takeoff weight of 135,400 lbs. when stronger main landing gear side struts and drag strut dampers, speed recovery modifications, propeller spinner afterbodies, fuselage and wing reinforcements and propeller blade trailing edge fairings (on those airplanes having Curtiss 858 propellers) are installed. Lockheed Service Bulletin 2300, 2301, 2302, 2303, 2329, 2330, 2500, 2508, 2509 and 2599 describe those modifications required for Model 1049C. Service Bulletins 2500, 2508, 2509 and 2599 describe those required for Model 1049E. Upon completion of all of these items, the airplane is re-designated as Model 1049E/01-55.
- NOTE 13. Model 1049E/01-55 (See NOTE 12) is eligible for a landing weight of 113,000 lbs. when the landing gear incorporates wheel and brake assemblies as described under equipment items 202(a)(3), or (a)(4). The airplane is then designated as Model 1049E/02-055.
- NOTE 14. Model 1049H-82 is eligible for increased takeoff, landing and zero fuel weights when certain specific modifications are incorporated. Upon completion of the required items the aircraft model is redesignated. The redesignated aircraft with the required modifications and weight limitations are listed below.

A. Model 1049H/01-03 or 1049H/01-06

This model is basically a 1049H with the wing structure reinforced according to Lockheed Drawing No. 329998-505 "Wing Group Installation" and Item 111 (a) optional engines and propeller Item 1(e) are installed.

	Tip Tanks Off	Tip Tanks On
Gross Weight	140,000	140,000
Landing Weight	113,000	113,000
Zero Fuel Weight	109,500	106,700

B. Model 1049H/02-03 or 1049H/02-06

This model is a 1049H/01 modified in accordance with Lockheed Service Bulletin No. 3041. This results in a change in landing weight to 114,500 lbs. for both tip tanks on or off configurations.

- C. Model 1049H/03. See NOTE 18.
- D. Model 1049H/04-82

This model is basically a 1049H modified in accordance with Lockheed Service Bulletin No. 3041 making this model eligible for the following landing and zero fuel weights:

	Tip Tanks Off	Tip Tanks On
Landing Weight	114,500	114,500

Zero Fuel Weight	109,500	104.200

E. Model 1049H/05-03 or 1049H/05-06

This model is basically a 1049H/01 modified in accordance with Lockheed Service Bulletin No. 3060 rendering this model eligible for the following weights:

	Tip Tanks Off	Tip Tanks On
Takeoff Weight	142,100	142,100
Landing Weight	113,000	113,000
Zero Fuel Weight	108,000	108,000

F. Model 1049H/06-03 or 1049H/06-06

This model is basically a 1049H/06 modified in accordance with Lockheed Service Bulletin No. 3060 rendering this model eligible for the following weights:

	Tip Tanks Off	Tip Tanks On
Takeoff Weight	142,100	142,100
Landing Weight	114,500	114,500
Zero Fuel Weight	109,500	109,500

G. Model 1049H/07-03 or 1049H/07-06

This model is basically a 1049H/06 with the takeoff weight limited because of the substitution of propeller Item 1(b) for Item 1(e). The operational weights are as follows:

	Tip Tanks Off	Tip Tanks On
Takeoff Weight	141,700	141,700
Landing Weight	114,500	114,500
Zero Fuel Weight	109,500	109,500

NOTE 15. The 975C18CB1 engine is eligible for use with grade 100/130 or 108/135 fuel at the following ratings: Lower impeller ratio 6.46:1

Maximum continuous: (Sea level) 43.5 in.Hg., 2600 rpm (2150 hp) (Straight line manifold pressure variation with altitude to 8700 ft.) 40.5 in.Hg., 2600 rpm (2150 hp) Takeoff (2 minutes): (Sea level) 47.0 in.Hg., 2600 rpm (2350 hp) (Straight line manifold pressure variation with altitude to 5900 ft.) 45.0 in.Hg., 2600 rpm (2350 hp) High impeller ratio 8.67:1 Maximum continuous: (14,000 ft.) 42.0 in.Hg., 2600 rpm (1800 hp) (Straight line manifold pressure variation with altitude to 18,800 ft.) 41.0 in.Hg., 2600 rpm (1800 hp) When using the above grade fuel and power ratings, the airplane weight limitations are as follows: Landing: 91,000 lbs. Takeoff 100,000 lbs. (Dump valves are required) Maximum zero fuel weight: 87,332 lbs. NOTE 16. The 972TC18CDA1 engine is eligible for use with grade 100/130 or 108/135 fuel at the following ratings with automatic rich mixture settings only for all operations including cruise:: Lower impeller ratio 6.46:1 Maximum continuous: (Sea level) 43.5 in.Hg., 2600 rpm (2380 hp) (Straight line manifold pressure variation with altitude to 9100 ft.) 41.0 in.Hg., 2600 rpm (2450 hp) Takeoff (2 minutes at sea level; 5 minutes at 7500 ft. (Straight line variation of takeoff power time with altitude to 7500 ft.) (Sea level) 51.0 in.Hg., 2900 rpm (2880 hp) (Straight line manifold pressure variation with altitude to 8100 ft.) 47.5 in.Hg., 2900 rpm (2950 hp)

High impeller ratio 8.67:1	
Operation with grade 100/13) fuel not permitted.
When using the above grade	fuel and power ratings, the airplane weight limitations are as follows:
Landing:	101,500 lbs.
Takeoff	120,000 lbs. (Dump valves are required)
Maximum zero fuel weight:	95,884 lbs. (with 2-1/2 inch connector tubes)
C	95,560 lbs. (with 4 inch connector tubes)
NOTE 17. The 972TC18DA3, 988TC18EA3 and fuel	988TC18EA6 engines are eligible for use with grade 100/130 or 108/135
at the following ratings with automatic	rich mixture settings only for all operations including cruise::
Lower impeller ratio 6.46:1	
Maximum continuous:	
(Sea level) 44.0 in.Hg.,	2600 rpm (2380 hp)
(Straight line manifold p	ressure variation with altitude to 9400 ft.)
41.5 in.Hg., 260	00 rpm (2450 hp)
Takeoff (2 minutes at sea lev	el: 5 minutes at 7500 ft.:
straight line variation of	takeoff power time with altitude to 7500 ft.):
(Sea level) 51.0 in.Hg.	2900 rpm (2880 hp)
(Straight line manifold n	ressure variation with altitude to 8500 ft.)
48.0 in Hg. 290	00 rpm (2950 hp)
High impeller ratio 8.67:1	
Operation with grade 100/13) fuel not permitted.
	-

When using the above grade fuel and power ratings, the airplane weight limitations are as follows:

Landing:	101,500 lbs.
Takeoff	120,000 lbs. (Dump valves are required)
Maximum zero fuel weight:	96,750 lbs. (Tip tanks off) Standard configuration)
	96,580 lbs. (Tip tanks on)
	95,560 lbs. (Tip tanks off and stand pipe in tanks 2 and 3)
	95,380 lbs. (Tip tanks on and stand pipe in tanks 2 and 3)

- NOTE 18. Model 1049D/01 may be modified to Model 1049H when modified in accordance with Lockheed Service Bulletin No. 2505. Upon completion of this item, the airplane is redesignated as 1049H/03-82.
- NOTE 19. In accordance with Civil Aeronautics Board Special Regulation 411A, aircraft operated by "Air Carriers" for cargo operation only, are permitted to increase the zero fuel weight and landing weight by 5 per cent of the zero fuel weight. For aircraft covered by this specification, the landing and maximum zero fuel weights may be increased as follows for airplanes equipped with Hamilton Standard and Dural propellers and with 858 trailing edge propellers, respectively:

Tip Tanks		Landing Weight		Zero Fue	l Weight
		ON	OFF	ON	OFF
Hamilton Standard Propellers		(Equipment Ite	ems 1(c) and 1(e))		
Model 1049C &)	(1)	115,210	115,175	109,410	108,675
1049E & 1049E/01)	(2)	115,210	115,175	109,090	108,675
1049E/02	(1)	117,200	117,200	109,410	108,675
	(2)	117,200	117,200	109,410	108,675
1049G (equip. item 1(e	e) only)	118,210	118,175	109,410	108,675
1049H		118,210	118,400	109,410	113,400
1049H/01		118,335	118,400	112,035	113,400
1049H/02		119,835	119,975	112,035	114,975
1049H/05		118,400	118,400	113,400	113,400
1049H/06		119,975	119,975	114,975	114,975

	Landing `	Weight	Zero Fuel	l Weight
	ON	OFF	ON	OFF
	(Equipment Ite	m 1(f))		
(1)	115,210	115,175	109,410	108,675
(2)	115,210	115,175	109,090	108,675
(1)	116,600	116,600	109,410	108,675
(2)	116,600	116,600	109,410	108,675
	117,600	117,600	109,410	108,675
	117,600	117,600	109,410	112,860
	118,335	118,400	112,035	113,400
	119,835	119,975	112,035	114,975
	118,400	118,400	113,400	113,400
	119,975	114,975	114,975	114,975
	(Equipment Ite	m 1(b))		
(1)	115,210	115,175	109,410	108,675
(2)	115,210	115,175	109,090	108,675
(1)	115,600	115,600	109,410	108,675
(2)	115,600	115,600	109,410	108,675
	115,600	115,600	109,410	111,220
	116,850	116,850	109,410	112,110
	116,850	116,850	109,410	112,110
	118,800	118,800	113,880	114,060
	 (1) (2) (1) (2) (1) (2) (1) (2) 	$\begin{tabular}{ c c c c c } \hline Landing \\ \hline ON \\ \hline (Equipment Ite \\ (1) & 115,210 \\ (2) & 115,210 \\ (1) & 116,600 \\ (2) & 116,600 \\ 117,600 \\ 117,600 \\ 118,335 \\ 119,835 \\ 119,835 \\ 119,835 \\ 118,400 \\ 119,975 \\ \hline (Equipment Ite \\ (1) & 115,210 \\ (2) & 115,210 \\ (1) & 115,600 \\ (2) & 115,600 \\ 115,600 \\ 115,600 \\ 116,850 \\ 116,850 \\ 118,800 \\ \hline \end{tabular}$	$\begin{tabular}{ c c c c c } \hline Landing Weight & OFF & OFF & OFF & (Equipment Item 1(f)) & & & & & & & & & & & & & & & & & & $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

(1) Standpipes in tanks 2 and 3 with 2-1/2" connecting tube.

(2) Standpipes in tanks 2 and 3 with 4" connecting tube.

In addition to the operator's normal inspection program, aircraft operated in accordance with SR-411A must be inspected with the "Inspection Procedures for Cargo Aircraft Operated at Gross Weights Above Certificated Gross Weights" (Lockheed Report No. 11414, Pages 27 and 28) as revised and approved by the FAA. Requests for changes in the inspection procedure must be forwarded to the manufacturer for his recommendations and submittal to the FAA for approval.

The increased weights authorized in accordance with SR-411A do not apply to foreign operators when the aircraft is operated in the United States.

FAA Approved Airplane Flight Manual revision, including performance information for operation at the increased weights, should be obtained from the manufacturer or from the organization performing the modifications for cargo operation and submitting the corresponding Manual Supplement for FAA approval.

NOTE 20. Propeller governor Type 5U18 is eligible for use only on aircraft equipped with Wright 975C18CB-1 engines.

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