

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

LTC-11  
Revision 5  
Cal Pacific Airmotive  
P-51C  
P-51D (USAF F-51D)  
P-51K (USAF F-51K)  
November 18, 2009

LIMITED TYPE CERTIFICATE DATA SHEET NO. 11

This data sheet, which is part of Limited Type Certificate No. 11, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Code of Federal Regulations.

Type Certificate Holder	Cal Pacific Airmotive, Inc. 1330 Mercer Way Salinas, California 93905
Type Certificate Ownership Record	Cal Pacific Airmotive, Inc. became holder of LTC-11 effective July 26, 2007  Lindair, Inc. was previous holder of LTC-11 effective July 23, 1985  Piper Aircraft Corporation was holder of LTC-11 effective December 1, 1971  Cavalier Aircraft Corp. was holder of LTC-11 effective August 16, 1966  De Panti Aviation Co., Inc., Minneapolis, Minnesota was the original holder of LTC-11 effective April 10, 1947

North American Model P-51C, P-51D (USAF F-51D), P-51K (USAF F-51K) (Limited Category), Approved April 10, 1947.

Engine	Rolls-Royce V-1650-3 or-7															
Fuel	Grade 100/ 130, 100LL															
Engine Limits	<p>V-1650-3: Maximum continuous (low blower) (17,400 ft.) 46 in. Hg., 2700 rpm (1110 hp) Maximum continuous (high blower) (29,500 ft.) 46 in. Hg., 2700 rpm (950 hp) Takeoff (five minutes) (Sea level) 60 in. Hg., 3000 rpm (1380 hp)</p> <p>V-1650-7: Maximum continuous (low blower) (11,300 ft.) 46 in. Hg., 2700 rpm (1180 hp) Maximum continuous (high blower) (23,400 ft.) 46 in. Hg., 2700 rpm (1065 hp) Takeoff (five minutes) (Sea level) 61 in. Hg., 3000 rpm (1490 hp)</p>															
Propeller and Propeller limits	<p>P-51C, and P-51D, Diameter 11'2", Governor 4G10, Hamilton Standard 24D50 hubs</p> <p>V-1650-7 Engine</p> <table border="0" style="margin-left: 20px;"> <tr> <td>Blades</td> <td colspan="2">Stop settings at 42" sta.</td> </tr> <tr> <td></td> <td>Low</td> <td>High</td> </tr> <tr> <td>J6523A-24</td> <td>23.2 degrees</td> <td>65.2 degrees</td> </tr> <tr> <td>J6487A-24</td> <td>"</td> <td>"</td> </tr> <tr> <td>K6523A-24</td> <td>"</td> <td>"</td> </tr> </table>	Blades	Stop settings at 42" sta.			Low	High	J6523A-24	23.2 degrees	65.2 degrees	J6487A-24	"	"	K6523A-24	"	"
Blades	Stop settings at 42" sta.															
	Low	High														
J6523A-24	23.2 degrees	65.2 degrees														
J6487A-24	"	"														
K6523A-24	"	"														

This revision adds reference to the F-51D, and F-51K, adds list of T.O.'s with eligible serial numbers, adds propeller limits, and makes other minor corrections

	J6487A-24	“	“
	6547A-6	“	“
	V-1650-3 Engine		
	Blades	Stop settings at 42” sta.	
		Low	High
	J6523A-24	23.2 degrees	65.2 degrees
	J6487A-24	“	“
	K6523A-24	“	“
	J6487A-24	“	“
	6547A-6	“	“
	P-51K, Diameter 11’0”, Aeroproducts A-542A-1, blade number A20-156-24M		
		Stop settings at 42” sta.	
	Engine	Low	High
	V-1650-7	22.8 degrees	57.8 degrees
	V-1650-3	21.0 degrees	56.0 degrees
Airspeed limits	(See note 2 for additional placarded limitations.)		
	Altitude	Maximum Glide or Dive Speed	
	0 to 10,000	505 mph	
	10,000 to 20,000	400 mph	
	20,000 to 30,000	325 mph	
	Level flight or climb speed	325 mph	
C.G. Range	21 percent to 31 percent MAC gear down. (Landing gear retraction has negligible effect on C.G. movement.)		
Datum	139 inches forward of jig point (Tapped hole on bottom of wing center rib.)		
M.A.C.	79.6 inches, L.E. MAC 119.1 inches		
Leveling means	P-51C: Longitudinal Leveling: Lugs mounted on left longeron aft of pilot seat Lateral leveling: Lugs mounted on upper left and right longeron located aft of pilots seat		
	P-51D and P-51K Longitudinal Leveling: Lugs mounted in cockpit on the side of the upper left longeron Lateral leveling: Lugs mounted on upper left and right longeron located aft of engine fire wall.		
Maximum weight	10,500 lbs.		
Minimum crew	One Pilot		
Number of seats	One		
Maximum Baggage	None		
Fuel capacity	Forward two wing tanks, 92 U.S. gal., 163.0 inches aft of datum; aft fuselage tank, 65 U.S. gal., 210.0 inches aft of datum		
Oil capacity	Oil tank capacity 12.5 U.S. gal., 116.0 inches aft of datum Total oil system capacity. 21.2 U.S. gal		
Coolant Capacity	Engine Coolant System, 16.7 U.S. gal. After Coolant System 4.8 U.S gal. Total Coolant System capacity 21.5 U.S .gal., 124.0 Inches aft of datum		
Maximum Operating Altitude	41,900 feet		
Other operating limitations	P-51C, Army T.O. AN-01-60JD-1		

P-51D and P-51K, Army TO AN01-60JE

Serial numbers Eligible	All original block serial numbers P-51C, P-51D (USAF F-51D), P-51K (USAF F-51K) models. P-51B-1-NA serial number 43-12252 (see note 6)
Certification basis	CAR 09 effective November 21, 1946 (Limited Type Certificate No. 11 issued April 10, 1947)
Production basis	Production certificate 724NM. Production of parts allowed under this PC. Production of new aircraft not allowed.
Export Eligibility	New parts produced under PC 724NM are eligible for a Certificate of Airworthiness for export. Complete aircraft not eligible for a Certificate of Airworthiness for export.

Equipment:

No Equipment other than engines and propellers are specified. However, such equipment as required by Federal Regulations for the particular operation authorized for civil registered aircraft must be installed. Also, any additional equipment necessary for the proper operation of the aircraft must be installed. In addition, the aircraft may incorporate such military equipment (except armament) as was originally incorporated in the type for military or naval service. Additional equipment may be installed as can be substantiated on the basis that it presents no obvious hazard to safety.

Note 1. – Weight and Balance Report including list of equipment included in the certificated empty weight must be submitted for each aircraft. Army or Navy weight records in current condition may be submitted in lieu of an actual weight. The equipment list need include no more than the following:

- (a) Required equipment as defined under “Equipment” above.
- (b) Additional items as may be reasonably considered removable and are so located or of such weight that their removal or addition could noticeably affect the weight and balance of the aircraft. Items built into the aircraft structure need not be listed. The equipment list must be prepared by the applicant for the approval of the certificating FAA representative, and in such form that it can be attached to the FAA Operating Limitations.

Note 2. – The following placards must be prominently displayed in the position indicated:

- (a) In the cockpit full view of all passengers: “This is a military type aircraft and under the Federal Regulations shall not be used for the carriage of passengers or cargo for compensation or hire.” The placard and lettering shall be of type which can be read easily from any seat in the cabin.
- (b) In the cockpit in full view of the pilot:
  - (1) A dive limits placard in accordance with, T.O. AN-01-60J-25 for all models.
  - (2) “Do not extend full flaps above 165 mph.”
  - (3) “Do not operate landing gear above 170 mph.”
- (c) The airspeed indicator shall be marked as follows:
  - (1) A red radial line at 505 mph.
  - (2) A green radial line at 325 mph.
  - (3) A yellow arc (precautionary range) shall extend from the green radial line to the red radial line.

Note 3. – The following statement must appear on the operations Limitations:

“This airplane must be operated at all times within the limitations set forth in Army Technical Order No. AN-01-60JD-1 for the P-51C, AN-01-60JE-1 for the P-51D (F-51D) and P-51K (F51-K), and T.O. 01-60-123, 01-60-126 and 01-60J-26 for applicable models, except for limitations specifically called out in LTC-11 in which case the values given in LTC-11 must be observed. A copy of the applicable Army Technical Orders and LTC-11 must be carried during flight.” In all cases it will be the responsibility of the applicant to secure a copy of the correct Technical Orders. The FAA does not have these documents available for distribution.

Note 4. – All structural repairs should be made in accordance with Army Technical Orders AN-01-60-3 for all models, or alternately use AN-01-60JD-3 for the P-51C and AN-01-60JE-3 for the P-51D and P-51K. If any repairs or modifications are made prior to or subsequent to airworthiness certification, it is the responsibility of the owner to furnish sufficient evidence to an FAA representative to show that the modified airplane maintains the same degree of airworthiness as the original. The FAA can give no technical assistance on such matters since complete structural data for surplus military aircraft LTC’s is not required by the regulations and is therefore not available in the FAA

Note 5. – Prior to obtaining certification for night operation, the following modifications to the exterior lighting must be made in order to comply with the general requirements of the Civil Air Regulations.

- (a) Position Lights:
  - (1) Wing tip – If Type A-7 or A-8 light assemblies are installed, they must be replaced with type certificated light assemblies. If Type A-9 (AN-3033-10 or AN-3033-5 through 8) light assemblies are installed,

they may be satisfactorily modified by painting the sand blasted portion of the inner surface of the AN-1042-3 and -4 covers black. The AN-3033-9 or AN-3033-1 through -4 light assemblies are satisfactory without modification.

- (2) Tail – the Type D-1 (AN-3091-1 through -3) and the Type D-2 (AN-3092-1 through-3) light assemblies are unsatisfactory and must be replaced with type certificated units.
- (b) Position Light installation: The position lights shall be installed to comply with the requirements of the CAR, Parts 15.2 and 003.538.
- (c) Position Light circuit and control: The Position light (wing tips and tail) shall be controlled by one SPST switch,. The circuit should be protected by its own fuse or circuit breaker. The individual wing tip and tail light switches with dim and bright positions shall be removed and the dimming resistors presently installed shall be disconnected.
- (d) Other exterior lights: With the exception of the landing lights, any other exterior light are not required and may be removed if so desired.

Note 6. - The P-51B-1 and P-51C-1 series of aircraft are identical in dimension and performance, having minor and insignificant differences in internal configuration. The noted P-51B-1 serial numbers are included based on a finding of identity with the P-51C-1 model. All information on this TCDS for the P-51C model is applicable to the P-51B model

Note 7. - The following Mandatory Technical and Service Change orders pertinent to models and serial numbers as indicated are listed for your information and must be complied with prior to certification. The FAA does not have copies of these publications available for distribution. Also, FAA inspectors do not have such material. The applicable Technical Orders and compliance data are also listed in the airplane's "Historical Records", A.A.F forms 60A, 60B, and 61 accompanying the airplane. All serial number references to the P-51C and P-51K models also apply to the F-51C and F-51K models respectively. Refer to Technical Order for serial no's if not indicated in the following table.

No. and Date	Title	Serial No's Applicable
01-60-95 May 29, 1945	Rework of landing gear fairing door actuator mechanism	P-51D 44-11153 to 44-11352 44-13253 to 44-15752, 44-63160 P-51K 44-11353 to 44-11952
01-60-97 February 27, 1945	Inspection and rework of elevator and rudder front beams	P-51B 43-12093 to 43-12492 43-6313 to 43-7202 42-106429 to 42-106538 42-106541 to 42-106978 43-24752 to 43-24901 P-51C 42-102979 to 42-103978 43-24902 to 43-35251 44-10753 to 44-11152  P-51D 44-13253 to 44-15752 44-63160 to 44-63161 44-63162 to 44-63559 44-11153 to 44-11352  P-51K 44-11353 to 44-11752 44-11753 to 44-12052
1-60-100 August 31, 1945	Installation of metal covered elevators	P-51D 44-11153 to 44-11352 44-13253 to 44-15752 44-63160 to 44-64159 44-72027 to 44-73826 P-51K 44-11353 to 44-12752
01-60-102	Installation of cotter pin in	P-51D

November 2 1945	main landing gear operating Strut end fitting	44-11153 to 44-11352 44-12853 to 44-13252 44-13253 to 44-15752 44-63160 to 44-64159 44-72027 to 44-73026 P-51K 44-11353 to 44-12852
01-60-113 September 20, 1945	Inspection and re-work if windshield frame and canopy mechanism	All P-51D and P-51K Series
01-60-116 July 7, 1945	Inspection and replacement of rudder, elevator trim tabs	P-51D 44-12853 to 44-13252 44-72328 to 44-74498 44-84390 to 44-84614 P-51K 44-12473 to 44-12852
01-60-128 September 23, 1946	Modification of landing gear warning and indicating system	P51D 44-12853 to 44-13019 44-13040 to 44-13130 44-13141 to 44-13180 44-13182 to 44-13252 44-63160 to 44-64159 44-72027 to 44-75026 45-11690 to 45-11742 45-11343 to 45-11654 44-13020 to 44-13039 44-13131 to 44-13140 44-13181 45-11655 to 45-11689
01-60J-12 February 12, 1944	Rework of tail wheel idler Camshaft declutching cable	P-51C 42-102979 to 42-102988
01-60J-17 April 2, 1945	Installation of fuselage fuel tank grounding jack	P-51B 43-12093 to 43-12492 43-6313 to 43-7202 42-106429 to 42-106538 42-106541 to 42-106638 P-51C 42-102979 to 42-103778 P-51D 44-13253 and 44-13254
01-60J-18 January 15, 1945	Reinforcement of horizontal and stabilizer fin	P-51B 43-6313 to 43-7202 43-12093 to 43-12492 42-106429 to 42-106538 42-106541 to 42-106765 42-106766 to 42-106963 42-106964 to 42-106996 42-106967 to 42-106978 43-24752 to 43-24901 P-51C 42-102797 to 42-103307 42-103308 to 42-103538 42-103539 to 42-103578 43-24902 to 43-25251 44-10753 to 44-11152  P-51D 44-13253 to 4-13256

		44-13257 and 44-13258 44-13259 to 44-13267 44-13268 to 44-15052 44-11153 to 44-11352 42-106540 P-51K 44-11353 to 44-11376
01-60J-21 June 2, 1944	Inspection of engine mount attaching nuts	P-51B series P-51C Prior to AF No. 43-25051 P-51D Prior to AF No. 44-13832
01-60J-22 June 1, 1944	Inspection of landing gear uplock & main gear fairing door locks	P51C and D Series
01-60J-23 January 18, 1945	Modification of coolant expansion tank assembly	P-51B 43-6713 to 43-7202 42-106429 to 42-106538 P-51C 42-103579 to 42-103978 43-24902 to 43-25112 P-51B, P-51D 42-106539 to 42-106978 43-24752 to 43-24899 P-51C 43-24902 to 43-25112 P-51D 44-13253 to 44-13962
01-60J-24 November 2, 1944	Rework of coolant and oil exit flap actuators, types R-4250	P-51B 43-12093 to 43-12492 43-6313 to 43-7202 42-106429 to 42-106978 43-24752 to 43-24901 P-51C 42-102979 to 42-103978 43-24902 to 43-25251 44-10753 to 44-11152 P-51D 44-13253 to 44-14789 44-11153 to 44-11226
1-60J-27 October 20, 1944	Replacement of main fuel cell drain nipple	P-51B 42-106429 to 42-106538 42-106541 to 42-106978 43-7113 to 43-7202 43-24752 to 43-24840 P-51C 42-102979 to 42-103653 P-51D 44-13253 to 44-13258
01-60J-29 September 18, 1944	Installation of elevator inertia weight	P-51B 42-106429 to 42-106538 42-106541 to 42-106978 43-6313 to 43-7202 43-12093 to 43-12492 43-24752 to 43-24901 P-51C 42-102979 to 42-103978 43-24902 to 43-25251

		44-10753 to 44-11152 P-51D 42-106539 and 42-106540 44-11153 to 44-11252 44-13253 to 44-14552
01-60J-34 February 16, 1945	Replacement of fuel hose from selector valve to shut off valve	P-51C 42-102979 to 42-103978 43-24902 to 43-25251 44-10753 to 44-10902 P-51D 44-13253 to 44-14252
01-60J-36 November 20, 1944	Rework of coolant lines to prevent coolant lines chafing at fire wall.	P-51B 42-106429 to 42-106538 42-106541 to 42-106978 43-6313 to 43-7202 43-12093 to 43-12492 43-24752 to 42-24901
01-60J-36 continued		P-51C 42-102979 to 42-03978 43-24902 to 43-25251 44-10753 to 44-11152
01-60J-41 January 16, 1945	Reposition of fuel booster resistor	P-51B 42-106429 to 42-106538 42-106541 to 42-106978 43-6313 to 43-7202 43-12093 to 43-12492 43-24752 to 43-24901 P-51C 42-102979 to 42-103978 43-24902 to 43-25251 44-10753 to 44-11152 P-51D 44-11153 to 44-11352 44-13253 to 44-14052 P-51K 44-11353 to 44-11552
01-60J-42 July 2, 1945	Replacement of fuel selector switch	P-51B 43-12093 to 43-12492 43-6313 to 43-7202 42-106429 to 42-106538 42-106541 to 42-106978 43-24752 to 43-24901 P-51C 42-102979 to 42-103978 43-24902 to 43-25251 44-10753 to 44-11152 P-51D 44-13253 to 44-15752 44-63160 to 44-63959 44-11153 to 44-11352 P-51K 44-11353 to 44-12152
01-60J-45 February 22, 1945	Inspection and replacement of coolant header tank inlet hose	P-51B, P-51C, P-51D and K Series
01-60J-49 March 31, 1945	Replacement of spinner front section dowel retaining Plate	P-51K 44-11353 to 44-11552

		44-11553 to 44-11555
01-60JD-17 June 12, 1944	Replacement of propeller control front bell crank	P-51B 43-12093 to 43-12492 43-6313 to 43-6712
		P-51C 42-102979 to 42-103178
01-60JD-23 May 20, 1944	Replacement of left aileron Counterbalance assembly	P-51B 43-6313 to 43-7012 43-7113
		P-51C 42-102979 to 42-103178
01-60JD-24 December 11, 1943	Installation of rivets in upper longeron	P-51C 42-102979 to 42-103038 42-103040 to 42-103051
01-60JD-24 continued		42-103053
01-60JD-25 February 12, 1944	Rework of fuel gage and addition of accumulators to fuel vent system	P-51B 43-12099 to 43-12103 43-12105 to 43-12106 43-12108 to 43-12109 43-12111 to 43-12112 43-12114 to 43-12119 43-12121 and 43-12131 43-12135 to 43-12136 43-12139 to 43-12144 43-12293 to 43-12295 43-12296 43-12298 to 43-12299 43-12333 43-12349 to 43-12350 43-12357 and 43-12369 43-12371 and 43-12385 43-12093 to 43-12095 43-12110 and 43-12150 43-12304 and 43-12334 43-12388 to 43-12389 43-12396
		P-51C 42-102979 42-102980 to 42-102988
01-60JD-43 December 20, 1944	Installation of dorsal fin and reverse boost tab	P-51B 43-12093 to 43-12492 43-6313 to 43-7202 42-106429 to 42-106538 42-106541 to 42-106978 43-24752 to 43-24901
		P-51C 42-102979 to 42-103978 43-24902 to 43-25251
01-60JE-11 September 4, 1944	Installation on landing gear fairing door cable	P-51D 44-13253 to 44-13612
01-60JE-31 July 4, 1945	Inspection and replacement of Main coolant lines	P-51D 44-74536 to 44-74726 44-74728 to 44-74739 44-74741 to 44-74746 44-74748 to 44-74750 44-74752 to 44-74753

44-74755 to 44-74761  
44-74763 to 44-74770  
44-74778 to 44-74779  
44-74781 to 44-74782  
44-74784 to 44-74785  
44-74792 to 44-74797

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