

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

2A11  
Revision 5

LOCKHEED  
402-2

July 23, 2012

TYPE CERTIFICATE DATA SHEET NO. 2A11

This data sheet which is a part of type certificate No. 2A11 prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Civil Air Regulations.

Type Certificate Holder                      Lockheed Martin Aeronautics Company  
86 South Cobb Drive  
Marietta, GA 30063

Type Certificate Holder Record            Lockheed Aircraft International  
510 West Sixth Street  
Los Angeles 14, California

I - Model 402-2, 6 PCLM (Normal Category), Approved April 5, 1960

Engines    Continental IO-470-R (See NOTE 3 for serial No. 1)  
Continental TSIO-470-B

Fuel    Continental IO-470-R Engine:  
91/96 minimum grade aviation gasoline  
Continental TSIO-470-B Engine:  
100/130 minimum grade aviation gasoline

Engine limits                                  Continental IO-470-R Engine:  
For all operations, 2600 r.p.m. (250 hp.)  
Continental TSIO-470-B Engine:  
For all operations:  
2600 r.p.m., 35 in.Hg. (260 hp.) sea level  
2600 r.p.m., 35 in.Hg. (260 hp.) 12,500 ft.

Propeller and propeller limits            McCauley D2A36C33/90M-4  
Diameter: Maximum 86 in., minimum allowable for repairs 84 in.  
No further reduction permitted.  
Continental IO-470-R Engine:  
Pitch Setting at 36 in. radius:  
Low 9.0°, High 22.3°  
Continental TSIO-470-B Engine:  
Pitch setting at 36 in. radius:  
Low 10.0°, High 27.5°  
(See NOTE 3 for serial No. 1)

Airspeed limits                                Never exceed                      176 m.p.h.                      (153 knots)  
Maximum structural cruising            140 m.p.h.                      (122 knots)  
Maneuvering                                133 m.p.h.                      (116 knots)  
Flaps extended                              100 m.p.h.                      ( 87 knots)

C.G. range                                    (+211.1) to (+216.5) at 3532 lb.  
(+204.5) to (+216.5) at 2700 lb. or less  
Straight line variation between (+204.5) at 2700 lb. and (+211.1) at 3532 lb.

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Empty weight C.G. range	None.																				
Datum	191.67 in. forward of leading edge of wing at wing root; L. E. MAC (+192.43); MAC length 65.33 in.																				
Leveling means	Cabin floor - left center seat rail inside left cabin door.																				
Maximum weight	3532 lb.																				
No. seats	2 (+202); 2 (+230) or (+236); 2 (+261)																				
Maximum baggage	200 lb. (+85)																				
Fuel capacity	57 gal. total; 49 gal. usable (2 wing tanks +219) See NOTE 1 for unusable fuel.																				
Oil capacity	3 gal. (+135) (Unusable Oil - 4 qt.) Applicable to either engine. See NOTE 1 for system oil.																				
Control surface movements	<table><tr><td>Wing Flaps</td><td>Down</td><td><math>27^{\circ} \pm 1^{\circ}</math></td><td></td></tr><tr><td>Aileron</td><td>Up</td><td><math>10^{\circ} \pm 1^{\circ}</math></td><td>Down <math>11^{\circ} \pm 1^{\circ}</math></td></tr><tr><td>Elevator</td><td>Up</td><td><math>25^{\circ} \pm 1/2^{\circ}</math></td><td>Down <math>16^{\circ} \pm 1^{\circ}</math></td></tr><tr><td>Rudder</td><td>Right</td><td><math>20^{\circ} \pm 1^{\circ}</math></td><td>Left <math>19^{\circ} \pm 1^{\circ}</math></td></tr><tr><td>Horizontal Stabilizer</td><td>(Minus)</td><td><math>1/2^{\circ} \pm 1/2^{\circ}</math> to</td><td>(Minus) <math>5\ 1/2^{\circ} \pm 1/2^{\circ}</math></td></tr></table>	Wing Flaps	Down	$27^{\circ} \pm 1^{\circ}$		Aileron	Up	$10^{\circ} \pm 1^{\circ}$	Down $11^{\circ} \pm 1^{\circ}$	Elevator	Up	$25^{\circ} \pm 1/2^{\circ}$	Down $16^{\circ} \pm 1^{\circ}$	Rudder	Right	$20^{\circ} \pm 1^{\circ}$	Left $19^{\circ} \pm 1^{\circ}$	Horizontal Stabilizer	(Minus)	$1/2^{\circ} \pm 1/2^{\circ}$ to	(Minus) $5\ 1/2^{\circ} \pm 1/2^{\circ}$
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Serial Nos. eligible	1, 2, 1007, 1009, 1010, 1011, 1016, 1019, 1020, 1021, and 1025. <i>See NOTE 3 for special configuration eligible for Serial No. 1 only.</i>																				
Certification basis	CAR 3 effective May 15, 1956 through amendments 3-5 effective October 1, 1959.  Type Certificate No. 2A11 issued April 5, 1960 Date of Application for Type Certificate March 31, 1959																				
Production basis	None. Prior to original certification of each aircraft, a FAA representative must perform a detailed inspection for workmanship, material and conformity with the approved technical data, and a check of the flight characteristics.																				
Equipment	<p>The basic required equipment as prescribed in the applicable airworthiness regulations (SEE Certification Basis) must be installed in the aircraft for certification. In addition, the following items of equipment are required:</p> <p>(a) All items noted as standard equipment in the Manufacturer's approved equipment list.</p> <p>(b) Continental IO-470-R Engine: FAA Approved Airplane Flight Manual dated January 10, 1961. Continental TSIO-470-B Engine: FAA Approved Airplane Flight Manual dated December 14, 1960. (See NOTE 3 for serial No. 1)</p>																				

NOTE 1. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be provided for each aircraft at the time of original certification.

The certificated empty weight and corresponding center of gravity locations must include system oil of 1 lb. at (+135) and unusable fuel of 48 lb. at (+219).

NOTE 2. The following placard must be displayed in front and in clear view of pilots:

"THIS AIRPLANE MUST BE OPERATED AS A NORMAL CATEGORY AIRPLANE IN COMPLIANCE WITH THE OPERATING LIMITATIONS STATED IN THE FORM OF PLACARDS, MARKINGS, AND MANUAL."

- NOTE 3. Airplane Serial No. 1 is the same as Serial No. 2 and subsequent when equipped with the Continental IO-470-G Engine, McCauley Propeller Model B2A36C31/90M-4 and associated cowling, engine baffling and structural changes in accordance with Lockheed Report ER- 4325. Fuel, Oil, and Propeller Limits are same as for the IO-470-R Engine except that fuel capacity is 60 gal. total, 52 gal. usable. FAA Approved Airplane Flight Manual dated April 5, 1960 is required with this installation.  
NOTES 1 and 2 are applicable.
- NOTE 4. Model 402-2 aircraft, manufactured in Mexico by Lockheed Azcarate S.A., may become eligible for U.S. airworthiness certificate upon compliance with the provisions of CAR 1.67(b), subject, in addition, to the following conditions which are stipulated in the Provisional Agreement, dated July 19, 1961, between the Governments of the United States and Mexico:
- (1) Application is made for issuance of a United States airworthiness certificate within 30 days after the date the Mexican airworthiness certificate was issued;
  - (2) The Mexican Government certifies that such individual airplane conforms to the type design approved by the United States and is in a safe operating condition; and,
  - (3) An FAA representative conducts a satisfactory airworthiness inspection in the United States, before issuing the airworthiness certificate.
- NOTE 5. Ski installation may be made in accordance with Lockheed Aircraft International drawing list revision dated March 5, 1962, (Report ER4326). Fluidyne Flight Manual Supplement dated February 12, 1962, is applicable to this installation.

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