

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

AL-2  
Revision 3  
S and R AVIATION SERVICES  
(NORTH AMERICAN)  
RB-25  
B-25  
B-25A  
B-25B  
B-25C  
B-25D  
B-25G  
B-25H  
B-25J  
B-25N  
TB-25J  
TB-25K  
TB-25L  
TB-25M  
TB-25N  
January 29, 2014

LIMITED TYPE CERTIFICATE DATA SHEET NO. AL-2

This data sheet, which is part of Limited Type Certificate No. LTC-2, 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                    S and R Aviation Services, Inc.  
7000 Merrill Avenue, Suite 19  
Chino, California 91710

Type Certificate Ownership Record    S and R Aviation Services, Inc. became holder of LTC-2 effective December 30, 2009

Shell Aviation Corp. New York, New York was original holder of LTC-2 effective December 6, 1946 (Note: Shell Oil Company assumed ownership of LTC-2 effective December 11, 2000, after company dissolution; however, LTC-2 was not reissued in their name.)

North American (Army) RB-25, B-25C, B-25G, B-25H, B-25J (Approved 12/6/46), B-25N, TB-25N (Approved 8/11/58), B-25, B-25A, B-25B, B-25D, TB-25J, TB-25K, TB-25L, TB-25M (Approved January 29, 2014).  
(Eligible for certification in Limited Category only.)

Engines                                        RB-25, B-25, B-25A, B-25B, B-25C, B-25D, B-25G, B-25H, B-25J and TB-25J models:  
2 Wright R-2600-13 or -29

RB-25, B-25, B-25A, B-25B, B-25C, B-25D, B-25G, B-25H, B-25J, B-25N, TB-25J, TB-25K, TB-25L, TB-25M and TB-25N models:  
2 Wright R-2600-29A or -35 (See Note 6)

Fuel    Grade 100/130, 100LL

Engine Limits                                R-2600-13 engines:  
Maximum continuous (low blower)  
(S.L.) 39.5 in.Hg., 2400 rpm (1500 hp)  
(6700') 37.5 in.Hg., 2400 rpm (1500 hp)  
Maximum continuous (high blower)  
(13,000') 41.0 in.Hg., 2400 rpm (1350 hp)  
(9700') 42.0 in.Hg., 2400 rpm (1350 hp)  
Takeoff (low blower) (five minutes)  
(S.L.) 44.5 in.Hg., 2600 rpm (1700 hp)

This revision adds the additional models, and also adds reference to those models in the associated placards, maintenance manuals, Technical Orders, reference to allowable engines, eligible serial numbers, and to flight manual limitations.

	<p>R-2600-29 engines:  Maximum continuous (low blower)  (S.L.) 40.5 in.Hg., 2400 rpm (1500 hp)  (5000') 39.0 in.Hg., 2400 rpm (1500 hp)  Maximum continuous (high blower)  (14,500') 41.0 in.Hg., 2400 rpm (1350 hp)  (8700') 43.5 in.Hg., 2400 rpm (1350 hp)  Take-off (lower blower) (five minutes)  (S.L.) 44.5 in.Hg., 2600 rpm (1700 hp)</p> <p>R-2600-29A and 35:  Maximum continuous (low blower)  (S.L.) 40.0 in.Hg., 2400 rpm (1500 hp)  (6700') 38.0 in.Hg., 2400 rpm (1500 hp)  Maximum continuous (high blower)  (13,000') 41.5 in.Hg., 2400 rpm (1350 hp)  (9700') 42.5 in.Hg., 2400 rpm (1350 hp)  Takeoff (low blower) (five minutes)  (S.L.) 44.0 in.Hg., 2600 rpm (1700 hp)</p>
Propeller and Propeller limits	<p>Hamilton Standard 23E50 hubs with following blades:  (a) 6359-18 to -20. Diameter 12' 6-3/8" maximum,  12' 3-1/4" minimum  (b) 6359-24 to -26, Diameter 12' 3/8" maximum,  11' 9-1/4" minimum  Pitch setting at 42" sta.: 24 degrees low; 90 degrees maximum high  Placard required: "Avoid continuous operation between 2100 and 2250 rpm."  Governor 4G8</p>
Airspeed limits	<p>Glide or dive - 340 mph True Ind.  Level flight or climb - 272 mph True Ind. (See note 2)  Maximum flap speed - 170 mph True Ind.</p>
C.G. Range	20 percent MAC to 30 percent MAC (235.9" to 247.5" aft of datum)
Datum	200.0 inches forward of wing leading edge at fuselage root
M.A.C.	116.16 inches (L.E. MAC located 212.7" aft of datum)
Leveling means	Leveling lugs in bomb bay.
Maximum weight	Takeoff 34,000 lbs., landing 32,200 lbs.
Minimum crew	2 (Pilot and Co-pilot)
Number of seats	7
Maximum Baggage	3800 lbs. See loading chart.
Fuel capacity	Front main tank (2), 184 gal. each, 244.0 inches aft of datum; Rear main tank (2), 151 gal. each, 276.0 inches aft of datum; Auxiliary tank (2), 152 gal. each, 268.0 inches aft of datum
Oil capacity	Nacelle tank (2), 37.5 gal. each, 246.0 inches aft of datum
Maximum Operating Altitude	28,000 feet
Other operating limitations	<p>Model RB-25: Army T.O. No. AN01-60GA-1  Model B-25: Army T.O. No. AN01-60GA-1  Model B-25A: Army T.O. No. AN01-60GA-1  Model B-25B: Army T.O. No. AN01-60GA-1  Model B-25C: Army T.O. No. AN01-60GB-1  Model B-25D: Army T.O. No. AN01-60GB-1</p>

	Model B-25G: Army T.O. No. AN01-60GC-1 Model B-25H: Army T.O. No. AN01-60GD-1 Model B-25J: Army T.O. No. AN01-60GE-1 Model TB-25J: USAF T.O. 1B-25(T)J-1 Model TB-25K, TB-25L, TB-25M, B-25N and TB-25N: USAF T.O. 1B-25(T)K-1 or T.O. 1B-25(T)L-1 or T.O. 1B-25(T)M-1 or T.O. 1B-25(T)N-1
Serial numbers Eligible	All original block serial numbers for RB-25, B-25, B-25A, B-25B, B-25C, B-25D, B-25G, B-25H, B-25J, TB-25J, TB-25K, TB-25L, TB-25M, B-25N, TB-25N models
Certification basis	CAR 09 effective November 21, 1946 (Limited Type Certificate No. 2 issued December 6, 1946)
Production basis	None may be produced under this approval.
Export Eligibility	Not eligible.

**Equipment:**

No equipment other than engines and propellers are specified. However, such equipment as required by CAR Part 43.30 for the particular operation authorized must be installed; as well as any additional equipment necessary for the proper operation of the aircraft. In addition, the aircraft may incorporate such military equipment (except armament) as was originally incorporated in the type for military 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 certificated empty weight must be submitted for each aircraft. Military 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 pertinent operating limitations.

NOTE 2. The following placards must be prominently displayed:

- (a) In the passenger compartment: "This is a military type aircraft and under the Federal Aviation Regulations shall not be used for the carriage of passengers or cargo for compensation or hire". The placard and lettering shall be of a type which can be read easily from any seat in the cabin.
- (b) In the cockpit, in full view of the pilot:
  - "Maximum airspeed with landing gear, flaps or landing light extended 170 mph."
  - "Do not operate landing gear or flaps with emergency operating equipment at speeds greater than 150 mph."
  - "Do not operate de-icers at speeds greater than 230 mph."
  - "This airplane must be operated at all times within the limitations set forth in T.O. AN01-60GA-1 for (RB-25, B-25, B-25A and B-25B), T.O. AN01-60GB-1 (for B-25C and B-25D), T.O. AN-01-60GC-1 (for B-25G), T.O. AN01-60GD-1 (for B-25H), T.O. AN01-60GE-1 (for B-25J), T.O. 1B-25(T)J-1 (for TB-25J), T.O. 1B-25(T)K-1, T.O. 1B-25(T)L-1, T.O. 1B-25(T)M-1 or T.O. 1B-25(T)N-1 (for TB-25K, TB-25L, TB-25M, B-25N and TB-25N) except for limitations specifically called out in Limited Type Certificate Data Sheet No. AL-2, in which case the values given in the specification must be observed. A copy of the pertinent Technical Order must be carried in the aircraft during flight."

In all cases it will be the responsibility of the applicant to secure a copy of the correct T.O. The FAA does not have these documents available for distribution.

NOTE 3. All structural repairs should be made in accordance with the following Army T.O.s: AN01-60G-3 or 1B-25J-3. Refer to North American Maintenance Manual for B-25, B-25A, B-25B, B-25C and B-25D, T.O. 01-60GC-2 for B-25G; 01-60GD-2 for B-25H; 01-60GE-2 for B-25J and T.O. 1B-25(T)J-2 for B-25J, TB-25J, TB-25K, TB-25L, TB-25M, B-25N and TB-25N for maintenance instructions. If any repairs or modifications (other than those covered in the pertinent military repair manual) are made prior to or subsequent to civil certification, it is the responsibility of the owner to furnish sufficient evidence to the 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 Limited Type Certificate aircraft are not required by Part 9 and therefore are not available in the FAA.

NOTE 4. For certification for night flying the following must be accomplished:

- (a) Replace the wing position lights with certificated units or satisfactorily modify the lights if necessary. NOTE: Type A-9 position lights (AN-3033-5 thru -8 may be satisfactorily modified by painting the inside frosted portion of the cover black. Type A-9 (AN-3033-1 thru -4) are satisfactory without modification.
- (b) Replace the tail light with a certificated unit.
- (c) If "Bright and Dim" functions are provided for the position lights, either the resistors should be disconnected from the circuits, and a single-pole-single-throw switch should be used to replace the two single-pole-double-throw switches presently installed for wing-tip and tail lights, or the switches should be placarded to indicate that only the "bright condition" should be used and the tail light and wing tip lights should be connected to operate on one switch.

NOTE 5. At the time of original certification it will be necessary (and the responsibility of the applicant) to show that all outstanding Army Technical Orders which are important to safety of flight have been complied with. The applicant should submit to the inspector, at the time of his inspection, such data as may be necessary to show that the airplane is eligible for certification. The following mandatory Army Technical Orders, pertinent to models and serial numbers as indicated, must be complied with prior to certification. The applicable T.O.s and compliance data are also listed in the airplanes "Historical Records", AAF Forms 60A, 60B and 61, accompanying the airplanes:

<u>T. O. No. &amp; Date</u>	<u>Title</u>	<u>AAF Serial Nos. Affected</u>
01-60G-42 10/12/43	Replacement of Right Upper Hinge Bracket	RB-25: All Serial Numbers B-25: All Serial Numbers B-25A: All Serial Numbers B-25B: All Serial Numbers B-25C: 41-12435 to 41-13296 42-32233 to 42-32463 42-53332 to 42-53493 B-25D: 41-29648 to 41-30407 B-25G: See T. O. for Serial Numbers
01-60G-44 12/9/43	Rework of No. 1 Exhaust Stack and Installation of Replacement Exhaust Stack Clamps	
01-60G-56 6/20/44	Modification of Oil Tank and Feathering Oil Lines	B-25C: 42-32233 to 42-32532 42-53332 to 42-53493 42-64502 to 42-64801 B-25D: 41-29648 to 41-30847 42-87113 to 42-87612 43-3280 to 43-3869 B-25G: 42-64802 to 42-65201 B-25H: 43-4105 to 43-4334 B-25J: 43-3870 to 43-4104
01-60G-71 5/22/44	Removal of Lead Seals, Main Landing Gear Timing Valves	RB-25: All Serial Numbers B-25C: 41-12434 to 41-13296 42-32233 to 42-32532 42-53332 to 42-53493 42-64502 to 42-64801 B-25D: 41-29648 to 41-30847 42-87113 to 42-87612 43-3280 to 43-3619 B-25G: 42-32384 to 42-32388 42-64802 to 42-65201 B-25H: 43-4105 to 43-4689
01-60G-72A 6/26/44	Replacing Restricted Fitting on Oil Dilution System	B-25D: 43-3420 to 43-3869 B-25H: 43-4405 to 43-4544 B-25J: 43-3870- to 43-4024
01-60G-77 5/12/44	Rework of Nose Landing Gear Down-Lock Piston	RB-25: All Serial Numbers B-25D: 42-87139 to 42-87612 43-3280 to 43-3869 B-25G: 42-65052 to 42-65201 B-25H: 43-4105 to 43-4645 B-25J: 43-3870 to 43-4104

01-60G-80 7/27/44	Replacement of Emergency Fuel Shut-off Valve Control Knobs and Removal of Control Locks	RB-25: All Serial Numbers B-25H: 43-4105 to 43-4644 43-4705 B-25J: 43-3870 to 43-4104 43-27473 to 43-27632
01-60G-81	Replacement of Booster Coil with Starting Vibrator	RB-25: All Serial Numbers B-25C: 41-12434 to 41-13296 42-32233 to 42-32532 42-53332 to 43-53493 42-64502 to 42-64701 B-25D: 41-29648 to 41-30532 B-25G: 42-32384 to 42-32388
01-60G-90 1/12/45	Installation of Heater Fuel Pressure Safety Switch	B-25H: 43-4405 to 43-4804 B-25J: 43-3870 to 43-4104 43-27473 to 43-28112
01-60G-92 2/5/45	Installation of Main Landing Gear-Up Lock Springs and Bolts	RB-25: All Serial Numbers B-25C: 42-32383 to 42-32532 42-64502 to 42-64702 B-25D: 41-30173 to 41-30847 42-87113 to 42-87612 43-3280 to 43-3869 B-25G: 42-32384 to 42-32388 42-64802 to 42-65101 B-25H: 43-4105 to 43-5104 B-25J: 43-3870 to 43-4104 43-27473 to 43-28222 43-35946 to 43-36245 43-28711 to 44-29110
01-60G-96 5/15/45	Installation of Phosphor-Bronze Poppets in Landing Gear Cross Flow & Shuttle Valve Assemblies	B-25C: 42-32383 to 42-32532 42-64502 to 42-64801 B-25D: 41-30173 to 41-30847 42-87113 to 42-87612 43-3280 to 43-3869 B-25G: 42-32384 to 42-32388 42-64802 to 42-65201 B-25H 43-4105 to 43-5104 B-25J 43-3870 to 43-4104 43-27473 to 43-28222 43-35946 to 43-36245 44-28711 to 44-29010
01-60G-97 1/24/45	Installation of Hydraulic Nose Wheel Operating Strut Stop	RB-25: All Serial Numbers B-25C: 42-32383 to 42-32532 42-64502 to 42-64801 B-25D: 41-30173 to 41-30847 42-87113 to 42-87612 43-3280 to 43-3869 B-25G: 42-32384 to 42-32388 42-64802 to 42-65201 B-25H: 43-4105 to 43-4804 B-25J: 43-3870 to 43-4104 43-27473 to 43-27792
01-60G-97A 3/10/45	Installation of Hydraulic Nose Wheel Operating Strut Stop	RB-25: All Serial Numbers B-25C: 42-32383 to 42-32532 42-64502 to 42-64801 B-25D: 41-30173 to 41-30847 42-87113 to 42-87612 43-3280 to 43-3869 B-25G: 42-32384 to 42-32388 42-64802 to 42-65201 B-25H: 43-4105 to 43-4804 B-25J: 43-3870 to 43-4104 43-27473 to 43-27792

01-60G-103 4/19/45	Installation of Warning Placards at Bombardier's and Pilot's Escape Hatches and Windows	RB-25: All Serial Numbers B-25C: 41-12434 to 41-13296 42-32233 to 42-32532 42-53332 to 42-53493 42-64502 to 42-64801 B-25D: 41-29648 to 41-30847 42-87113 to 42-87612 43-3280 to 43-3869 B-25G: 42-32384 to 43-32388 42-64802 to 42-65201 B-25H: 42-4105 to 43-5104 B-25J: 43-3870 to 43-4104 43-27473 to 43-28222 43-35946 to 43-36245 44-28711 to 44-30432
01-60G-109	Inspection & Rework of Control Column	RB-25: All Serial Numbers B-25C: 41-12457 to 41-12479 41-12517 to 41-13296 42-32233 to 42-32532 42-53332 to 42-53493 42-64502 to 42-64801 B-25D: 41-29848 to 41-30847 42-87113 to 42-87138 B-25G 42-32384 to 42-32388 B-25 Series: All Serial Numbers
01-60G-114 7/16/45	Installation of Cylinder Drain Lines	B-25 Series: All Serial Numbers
01-60G-119 11/25/46	Modification of No. 1 Exhaust Stack Bracket	B-25 Series: All Serial Numbers
01-60GB-46 11/24/43	Removal of Check Valves from Stewart – Warner Heating System	B-25C: 41-12435 to 41-13296 42-32233 to 42-32532 42-53332 to 42-53493 42-64502 to 42-64551 B-25D: 41-29648 to 41-30847 42-87113 to 42-87612 43-3280 to 43-3869
01-60GB-58 4/8/44	Rework of Auxiliary Landing Gear Door Assembly	B-25C: 41-12435 to 41-13296 42-32233 to 42-32532 42-53332 to 42-53493 B-25D: 41-29648 to 41-30847 42-87113 to 42-87612 43-3280 to 43-3869
01-60GB-62 6/14/43	Installation of Auxiliary Fuel System Drain	B-25C: 41-12817 to 41-13296 42-32233 to 42-32382 42-53332 to 42-53493 B-25D: 41-29648 to 41-30847 42-87113 to 42-87612 43-3280 to 43-3869
01-60GB-63B 5/2/44	Removal of Check & Relief Valve from Fuel & Drain System	B-25C: 41-12434 to 41-12876
01-60GB-91 11/29/44	Inspection of Flap Hinge Bracket Attaching Bolts	B-25C: 41-12434 to 41-13296 42-53332 to 42-53493 B-25D: 41-29648 to 41-30847 42-87113 to 42-87612 43-3280 to 43-3869
01-60GC-21 10/20/44	Installation of External Nose Hood Latch Assembly	B-25G: 42-64802 to 42-65201
01-60GC-21A 11/5/44	Installation of External Nose Hood Latch Assembly	B-25G: 42-64802 to 42-65201
01-60GE-16 12/21/44	Inspection and re-routing of Generator Coolant Duct	B-25 Series: All Serial Numbers
01-60GE-20 4/18/45	Reinforcement of Engine Nose Ring Cowl	B-25J: 43-3870 to 43-4104 43-27473 to 43-28222 43-35946 to 43-36245 44-28711 to 43-30410

01-60GE-20A 5/10/45	Reinforcement of Engine Nose Ring Cowl	B-25J: 43-3870 to 43-4104 43-27473 to 43-28222 43-35946 to 43-36245 44-28711 to 43-30410
01-60GE-21 4/11/45	Installation of Windshield Defroster Control	B-25J: 44-29111 and up
01-60GE-22 4/7/45	Replacement of Phenolic Poppet in Emergency Landing Gear System Relief Valve	B-25J: 44-29111 to 44-29914
01-60GE-24 7/3/45	Replacement of Engine CO-2 Fire Extinguisher Tubing Ring Cowl Clips	B-25J: 43-3870 to 43-4104 43-27473 to 43-28222 43-35946 to 43-36245 44-28711 to 44-30310 44-30491 to 44-30625
01-60GE-26 6/26/45	Replacement of Poppet in Emergency Hydraulic Brake Control Ratchet Valve	B-25J: 44-29111 to 44-29914
01-60GE-31 9/20/45	Replacement of Landing Gear Up Position Indicator Switches	B-25J: 44-29111 to 44-29911 44-29913 to 44-30970 44-30972 to 44-31049
01-60GE-32 9/17/45	Rework of Hydraulic Main and Auxiliary Landing Gear Up and Down Latch Assemblies	B-25J: 43-3870 to 43-4104 43-27473 to 42-28222 44-28711 to 44-30710
01-60GE-34 4/29/46	Installation of Landing Gear Down Lock Indicator Lights	B-25J: 43-3870 to 43-4104 43-27473 to 43-28222 44-28711 to 44-30710
1B25-23 11/19/47	Safetying of Rudder and Elevator Control Stop Adjusting Bolts	B-25G: All Serial Numbers B-25J: All Serial Numbers
1B25-518 4/24/55	Inspection of Main Landing Lock Switch Screws	B-25 Series: All Serial Numbers
1B25-526 12/8/55	Inspection of Horizontal Stabilizer Attach Bolts	B-25 Series: All Serial Numbers
1B25-543 3/6/57	Removal of Wire Stop Limiting Throttle Travel on R-2600-35 Engines	B-25 Series: All Serial Numbers

NOTE 6. The following Curtis-Wright R-2600-20 stud assemblies may be used to replace, in any quantity, the stud assemblies on the R-2600-35 model:

Front Stud Assembly P/N 421573 may be used to replace P/Ns 429127, 423013 or 416431N2.  
Rear Stud Assembly P/N 421574 may be used to replace P/Ns 429128, 423014 or 417474N2.

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