SECTION 1

GENERAL DESCRIPTION

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1-1. GENERAL DESCRIPTION.

1-2. SKYMASTER, 337 and T337 SERIES.

1-3. DESCRIPTION. Cessna Skymaster Series aircraft, described in this manual, are twin-engine, high-wing monoplanes of all-metal, semimonocoque construction. The aircraft employs a fully-retractable tricycle landing gear with spring-steel main gear struts. The steerable nose gear is an air/oil filled oleo strut. The landing gear is electrically-actuated. The wing flaps are electrically-actuated and flight adjustable trim is provided for the rudder and elevator systems. Four-place seating is standard, but provisions are made for the addition of optional seats. The engines are placed in tandem on the fuselage centerline and the empennage is mounted on twin tail booms. The aircraft is powered by two six-cylinder, horizontally-opposed, air-cooled, fuel-injected Continental engines. Each engine turns an all-metal, constant-speed, full-feathering propeller. A turbocharged version of this aircraft is offered in the T337 Model beginning 1978 model year.

1-4. AIRCRAFT SPECIFICATIONS. Leading particulars of these aircraft, with dimensions based on gross weight, are listed in figure 1-1. If these dimensions are to be used for constructing a hangar or computing clearances, remember that such factors as tire pressures, tire sizes and load distribution may result in some dimensions that are considerably different from those listed.

1-5. STATIONS. A station diagram is included in figure 1-2 to assist in locating equipment when a written description is inadequate or impractical.

1-6. TORQUE VALUES. A chart of recommended nut torques is provided in figure 1-3. These values are recommended for all installation procedures contained in this manual, except where other values are stipulated. They are not to be used for checking tightness of installed parts during service.

MODELS 337 AND T337 SERIES

GROSS WEIGHT	
Take Off	4630 lbs
Landing	4400 lbs
FUEL CAPACITY	
1974 MODELS	
Total - (Standard Range Installation)	92.8 gal. (556.8 lbs.)*
Usable	92.0 gal. (552 lbs.)*
Total - (Long Range Installation)	125 gal. (750 lbs.)*
Usable	118 gal. (708 lbs.)*
1975 MODELS	
Total - (Standard Range Installation)	92.8 gal. (556.8 lbs.)*
Usable	92.0 gal. (552 lbs.)*
Total - (Long Range Installation)	150.6 gal. (903.6 lbs.)*
Usable	148.0 gal. (888.0 lbs.)*
1976 MODELS, AND ON	
Total - (Standard Range Installation)	90.6 gal. (543.6 lbs.)*
Usable.	88.0 gal. (528.0 lbs.)*
Total - (Long Range Installation)	150.6 gal. (903.6 lbs.)*
Usable.	148.0 gal. (888.0 lbs.)*
OIL CAPACITY	
Both Engines - Without Oil Filter	16 qt
Both Engines - External Oil Filter (Optional)	18 qt**
ENGINE MODEL	
Fuel Injected	CONTINENTAL IO-360
Turbocharged (Optional Beginning Serial 33701816)	CONTINENTAL TSIO - 360
PROPELLER (Constant - Speed, Full-Feathering, Forward Engine)	78" McCauley
PROPELLER (Constant - Speed, Full-Feathering, Rear Engine)	76" McCauley
MAIN WHEEL TIRES	
Size (Standard)	6.00 x 6, 8-Ply Rating
Pressure	55 psi***
Size (Optional)	18 x 5.5, 8-Ply Rating
Pressure	70 psi***
NOSE WHEEL TIRE	
Size	15.0 x 6.00 x 6, 4-Ply Rating
Pressure	42 psi***
NOSE GEAR STRUT PRESSURE (Strut Extended)	35 psi
WHEEL ALIGNMENT (At Empty Weight)	
Camber	4°± 1°30'
Toe-In (Total-Both Wheels)	0 to .06
AILERON TRAVEL	
Up	21°± 2°
Down	14°30'± 2°
WING FLAP TRAVEL	
Inboard Flaps	0° to 25°, +1°-2°
Outboard Flaps	0° to 25°, +1°-2°
RUDDER TRAVEL (Perpendicular to Rudder Hinge Centerline)	
Outboard	25°± 2°
Inboard	17°, +0°-2°
RUDDER TRAVEL (Parallel to Fin Water Line)	
Outboard	22°± 2°
Inboard	15°, +0°-2°

Figure 1-1. Aircraft Specifications (Sheet 1 of 2)

ELEVATOR TRAVEL	
Up	26° ± 1°
Down	15° ± 2°
ELEVATOR TRIM TAB TRAVEL	
Up	15° ± 1°
Down, with Flaps Up	0° ± 1°
Down, with Full Flaps	15° ± 1°
PRINCIPAL DIMENSIONS	
Wing Span	458.00"
Tail Span (Overall)	128.52"
Length	357.00"
Fin Height (Maximum with Nose Gear Depressed)	106.31"
Track Width	98.00"
BATTERY LOCATION	Left Side of Front Firewall

* FIGURED AT 6 POUNDS PER GALLON

** ONE ADDITIONAL QUART OF OIL IS REQUIRED FOR EACH ENGINE WHENEVER THE OPTIONAL OIL FILTER IS CHANGED.

*** AT TIRE INSTALLATION, TO AVOID TIRE SLIPPAGE AND TO SET TIRE BEAD ON RIM, OVER PRESSURE NOSE WHEEL TIRE TO 55 PSI, AND THEN REDUCE TIRE PRESSURE TO 42 PSI. OVER PRESSURE STANDARD (6.00 x 6) MAIN WHEEL TIRES TO 70 PSI, AND THEN REDUCE TIRE PRESSURE TO 55 PSI. OVER PRESSURE OPTIONAL (18 x 5.5) MAIN WHEEL TIRES TO 80 PSI, AND THEN REDUCE TIRE PRESSURE TO 70 PSI.

SHOP NOTES:

Figure 1-1. Aircraft Specifications (Sheet 2 of 2)

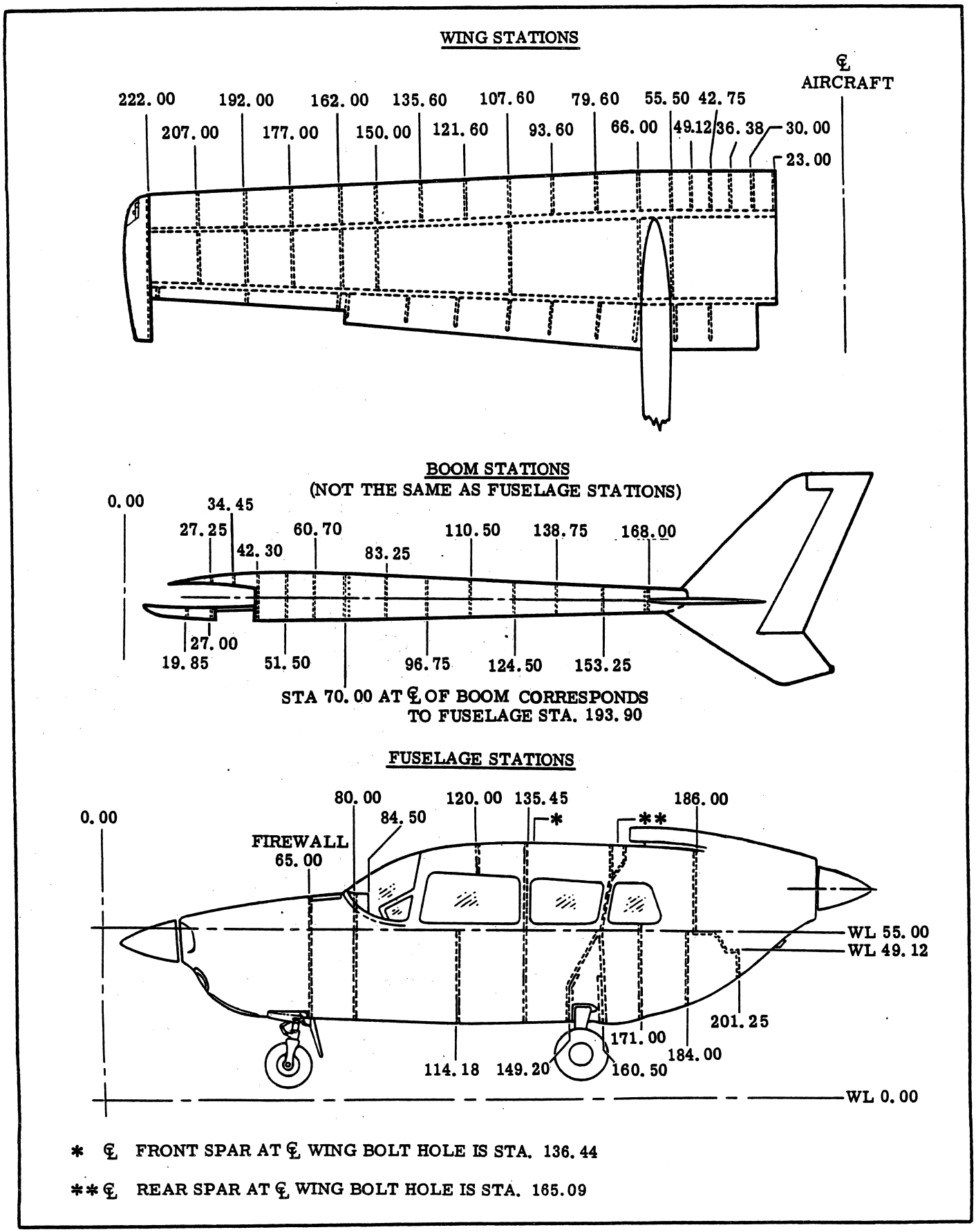

Figure 1-2. Fuselage, Wing and Boom Stations