SECTION 6
WEIGHT & BALANCE/ EQUIPMENT LIST

TABLE OF CONTENTS

INTRODUCTION

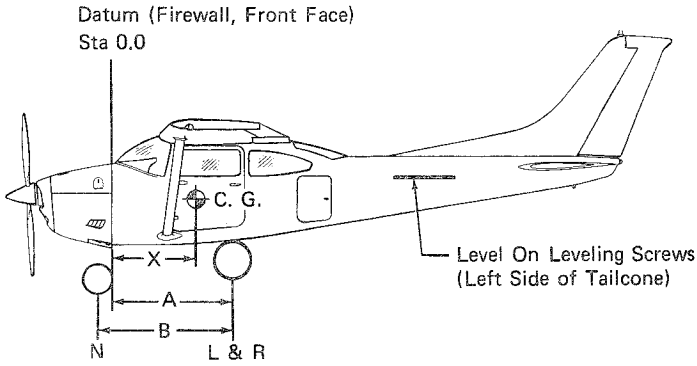
This section describes the procedure for establishing the basic empty weight and moment of the airplane. Sample forms are provided for reference. Procedures for calculating the weight and moment for various operations are also provided. A comprehensive list of all Cessna equipment available for this airplane is included at the back of this section.

It should be noted that specific information regarding the weight, arm, moment and installed equipment list for this airplane can only be found in the appropriate weight and balance records carried in the airplane.

It is the responsibility of the pilot to ensure that the airplane is loaded properly.

AIRPLANE WEIGHING PROCEDURES

1. Preparation:
   a. Inflate tires to recommended operating pressures.
   b. Remove the fuel tank sump quick-drain fittings and fuel selector valve drain plug to drain all fuel.
   c. Remove oil sump drain plug to drain all oil.
   d. Move sliding seats to the most forward position.
   e. Raise flaps to the fully retracted position.
   f. Place all control surfaces in neutral position.
2. Leveling:
   a. Place scales under each wheel (minimum scale capacity, 1000 pounds).
   b. Deflate nose tire and/or lower or raise the nose strut to properly center bubble on level (see figure 6-1).
3. Weighing:
   a. With the airplane level and brakes released, record the weight shown on each scale. Deduct the tare, if any, from each reading.
4. Measuring:
   a. Obtain measurement A by measuring horizontally (along the airplane center line) from a line stretched between the main wheel centers to a plumb bob dropped from the firewall.
   b. Obtain measurement B by measuring horizontally and parallel to the airplane center line, from center of nose wheel axle, left side, to a plumb bob dropped from the line between the main wheel centers. Repeat on right side and average the measurements.
5. Using weights from item 3 and measurements from item 4, the airplane weight and C.G. can be determined.
6. Basic Empty Weight may be determined by completing figure 6-1.



Scale Position	Scale Reading	Tare	Symbol	Net Weight
Left Wheel			L	
Right Wheel			R	
Nose Wheel			N	
Sum of Net Weights (As Weighed)			W	

$$X = ARM = \frac{(A) - (N) \times (B)}{W};\quad X = \frac{(\quad) - (\quad) \times (\quad)}{(\quad)} = (\quad)\ IN.$$

Item	Weight (Lbs.)	X C.G. Arm (In.) =	Moment/1000 (Lbs.-In.)
Airplane Weight (From Item 5, page 6-3)			
Add Oil:			
No Oil Filter (12 Qts at 7.5 Lbs/Gal)		-15.0	
With Oil Filter (13 Qts at 7.5 Lbs/Gal)		-15.0	
Add:			
Unusable Fuel (4 Gal at 6 Lbs/Gal)	24	48.0	1.2
Equipment Changes			
Airplane Basic Empty Weight			

Figure 6-1. Sample Airplane Weighing

SAMPLE WEIGHT AND BALANCE RECORD

(Continuous History of Changes in Structure or Equipment Affecting Weight and Balance)

AIRPLANE MODEL			SERIAL NUMBER						PAGE NUMBER	
DATE	ITEM NO.		DESCRIPTION OF ARTICLE OR MODIFICATION	WEIGHT CHANGE						RUNNING BASIC EMPTY WEIGHT	
				ADDED (+)			REMOVED (-)				
	In	Out		Wt. (lb.)	Arm (In.)	Moment /1000	Wt. (lb.)	Arm (In.)	Moment /1000	Wt. (lb.)	Moment /1000

Figure 6-2. Sample Weight and Balance Record

WEIGHT AND BALANCE

The following information will enable you to operate your Cessna within the prescribed weight and center of gravity limitations. To figure weight and balance, use the Sample Problem, Loading Graph, and Center of Gravity Moment Envelope as follows:

Take the basic empty weight and moment from appropriate weight and balance records carried in your airplane, and enter them in the column titled YOUR AIRPLANE on the Sample Loading Problem.

NOTE

In addition to the basic empty weight and moment noted on these records, the C.G. arm (fuselage station) is also shown, but need not be used on the Sample Loading Problem. The moment which is shown must be divided by 1000 and this value used as the moment/1000 on the loading problem.

Use the Loading Graph to determine the moment/1000 for each additional item to be carried; then list these on the loading problem.

NOTE

Loading Graph information for the pilot, passengers, baggage/cargo and hatshelf is based on seats positioned for average occupants and baggage/cargo or hatshelf items loaded in the center of these areas as shown on the Loading Arrangements diagram. For loadings which may differ from these, the Sample Loading Problem lists fuselage stations for these items to indicate their forward and aft C.G. range limitation (seat travel and baggage/cargo or hatshelf area limitation). Additional moment calculations, based on the actual weight and C.G. arm (fuselage station) of the item being loaded, must be made if the position of the load is different from that shown on the Loading Graph.

Total the weights and moments/1000 and plot these values on the Center of Gravity Moment Envelope to determine whether the point falls within the envelope, and if the loading is acceptable.

BAGGAGE AND CARGO TIE-DOWN

A nylon baggage net having six tie-down straps is provided as standard equipment to secure baggage in the area aft of the rear seat and on the hatshelf. Six eyebolts serve as attaching points for the net. Two

eyebolts for the forward tie-down straps are mounted on the cabin floor near each sidewall just forward of the baggage door approximately at station 92; two center eyebolts mount on the floor slightly inboard of each sidewall just aft of the baggage door approximately at station 109; the two aft eyebolts secure at the top of the rear baggage wall at station 124. If a child's seat is installed, only the center and aft eyebolts will be needed for securing the net in the area remaining behind the seat. A placard on the baggage door defines the weight limitations in the baggage areas.

A cargo tie-down kit consisting of nine tie-down attachments is available if it is desired to remove the rear seat (and child's seat, if installed) and utilize the rear cabin area to haul cargo. Two tie-down attachments clamp to the aft end of the two outboard front seat rails and are locked in place by a bolt which must be tightened to a minimum of fifty inch pounds. Seven tie-down attachments bolt to standard attach points in the cabin floor, including three rear seat mounting points. The seven attach points are located as follows: two are located slightly inboard and just aft of the rear doorposts approximately at station 69; two utilize the aft outboard mounting points of the rear seat; one utilizes the rearmost mounting point of the aft center attach point for the rear seat approximately at station 84 (a second mounting point is located just forward of this point but is not used); and two are located just forward of the center baggage net tie-down eyebolts approximately at station 108. The maximum allowable floor loading of the rear cabin area is 200 pounds/square foot; however, when items with small or sharp support areas are carried, the installation of a 1/4" plywood floor is recommended to protect the airplane structure. The maximum rated load weight capacity for each of the seven tie-downs is 140 pounds and for the two seat rail tie-downs is 100 pounds. Rope, strap, or cable used for tie-down should be rated at a minimum of ten times the load weight capacity of the tie-down fittings used. Weight and balance calculations for cargo in the area of the rear seat, baggage and hatshelf area can be figured on the Loading Graph using the lines labeled 2nd Row Passengers or Cargo and/or Baggage or Passengers on Child's Seat.

LOADING ARRANGEMENTS

*Pilot or passenger center of gravity on adjustable seats positioned for average occupant. Numbers in parentheses indicate forward and aft limits of occupant center of gravity range.

**Arms measured to the center of the areas shown.

NOTE:
The aft baggage wall (approximate station 124) can be used as a convenient interior reference point for determining the location of baggage area fuselage stations.

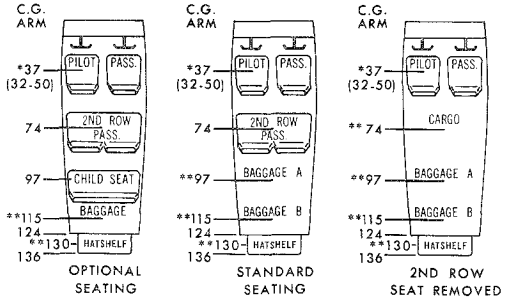
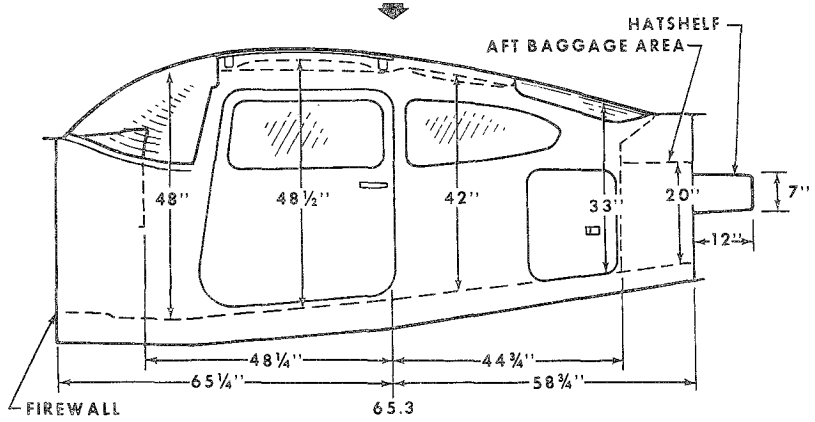


Figure 6-3. Loading Arrangements

CABIN HEIGHT MEASUREMENTS



DOOR OPENING DIMENSIONS

	WIDTH (TOP)	WIDTH (BOTTOM)	HEIGHT (FRONT)	HEIGHT (REAR)
CABIN DOOR	32"	36½"	41"	38½"
BAGGAGE DOOR	15¾"	15¾"	22"	20½"

WIDTH
⊛ LWR WINDOW LINE
* CABIN FLOOR

CABIN WIDTH MEASUREMENTS

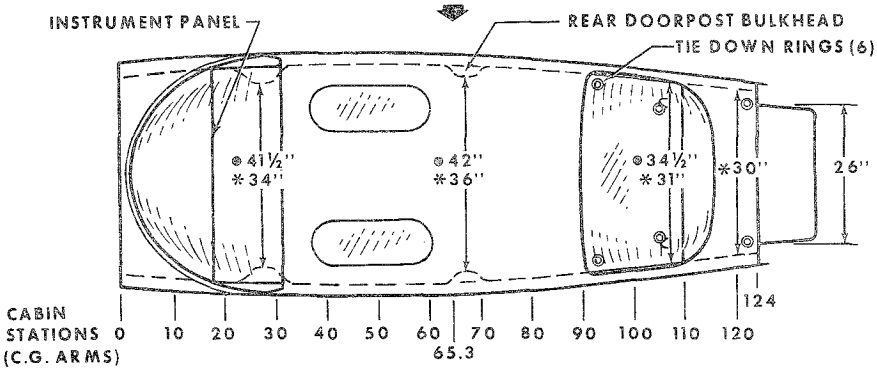
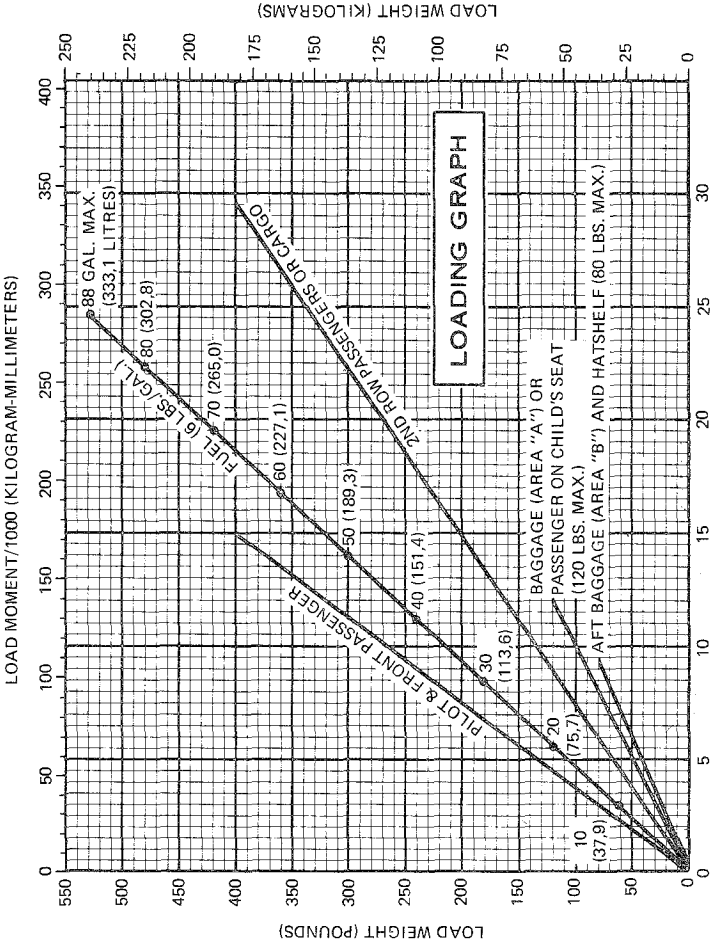


Figure 6-4. Internal Cabin Dimensions

SAMPLE LOADING PROBLEM	SAMPLE AIRPLANE		YOUR AIRPLANE	
	Weight (lbs.)	Moment (lb.-ins. /1000)	Weight (lbs.)	Moment (lb.-ins. /1000)
1. Basic Empty Weight (Use the data pertaining to your airplane as it is presently equipped. Includes unusable fuel and full oil)	1800	63.3		
2. Usable Fuel (At 6 Lbs./Gal.) Standard Tanks (88 Gal. Maximum)				
Reduced Fuel (65 Gal.)	390	18.1		
3. Pilot and Front Passenger (Station 32 to 50)	340	12.6		
4. Second Row Passengers	340	25.2		
Cargo Replacing Second Row Seats (Sta. 65 to 82)				
5. Baggage (Area "A") or Passenger on Child's Seat (Sta. 82 to 108) 120 Lbs. Maximum	90	8.7		
6. Baggage-Aft (Area "B") and Hatshelf (Sta. 108 to 136) 80 Lbs. Maximum				
7. RAMP WEIGHT AND MOMENT	2960	127.9		
8. Fuel allowance for engine start, taxi and runup	-10	-.5		
9. TAKEOFF WEIGHT AND MOMENT (Subtract step 8 from step 7)	2950	127.4		
10. Locate this point (2950 at 127.4) on the Center of Gravity Moment Envelope, and since this point falls within the envelope, the loading is acceptable.				

Figure 6-5. Sample Loading Problem



NOTES:
1. Line representing adjustable seats shows pilot and front seat passenger center of gravity on adjustable seats positioned for an average occupant. Refer to the Loading Arrangements diagram for forward and aft limits of occupant C.G. range.
2. Hatshelf Maximum Load 25 Lbs.

Figure 6-6. Loading Graph

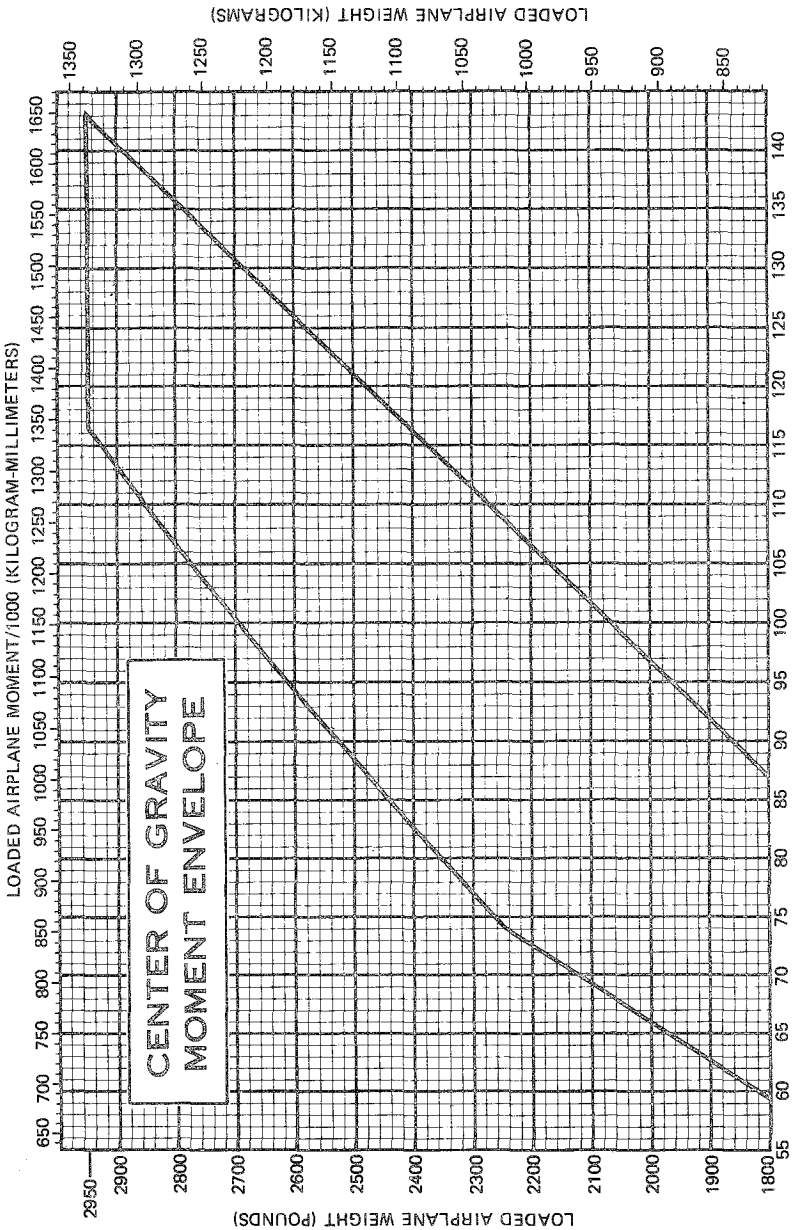


Figure 6-7. Center of Gravity Moment Envelope

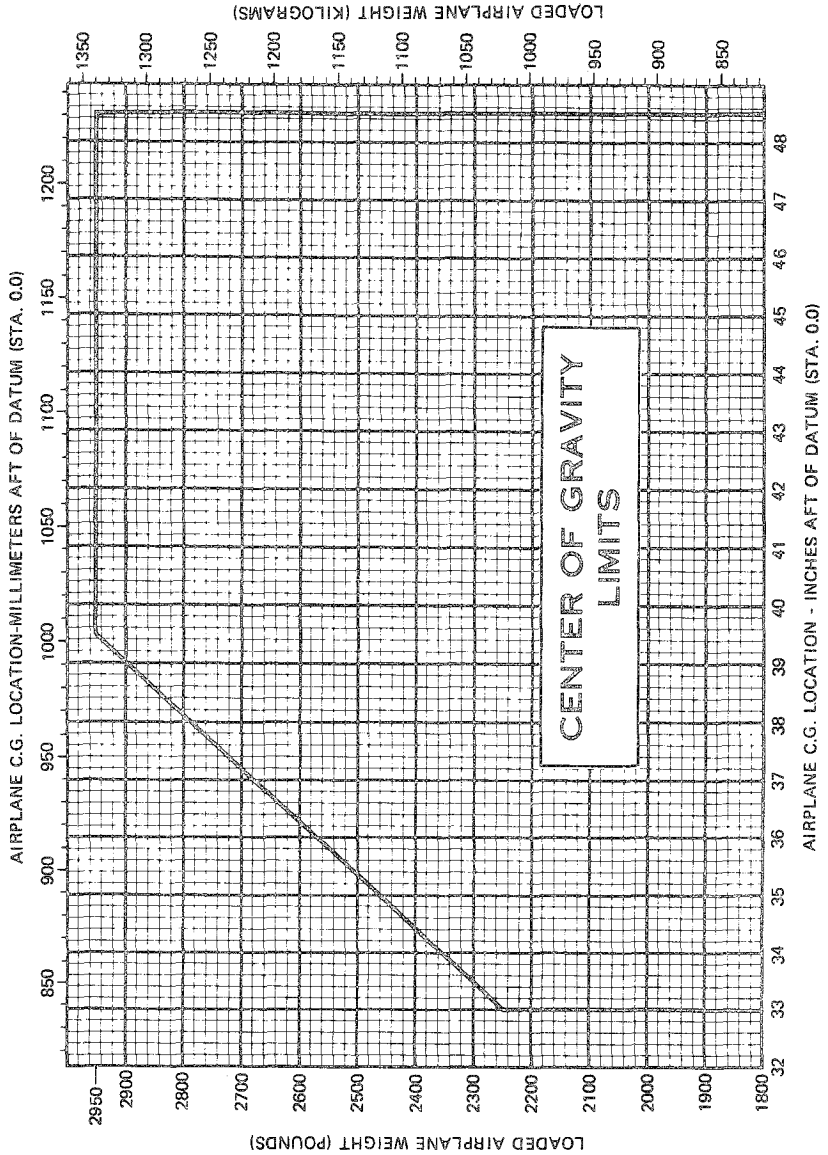


Figure 6-8. Center of Gravity Limits

EQUIPMENT LIST

The following equipment list is a comprehensive list of all Cessna equipment available for this airplane. A separate equipment list of items installed in your specific airplane is provided in your aircraft file. The following list and the specific list for your airplane have a similar order of listing.

This equipment list provides the following information:

An **item number** gives the identification number for the item. Each number is prefixed with a letter which identifies the **descriptive** grouping (example: A. Powerplant & Accessories) under which it is listed. Suffix letters identify the equipment as a required item, a standard item or an optional item. Suffix letters are as follows:

-R = required items of equipment for FAA certification
-S = standard equipment items
-O = optional equipment items replacing required or standard items
-A = optional equipment items which are in addition to required or standard items

A **reference drawing** column provides the drawing number for the item.

NOTE

If additional equipment is to be installed, it must be done in accordance with the reference drawing, accessory kit instructions, or a separate FAA approval.

Columns showing **weight (in pounds)** and **arm (in inches)** provide the weight and center of gravity location for the equipment.

NOTE

Unless otherwise indicated, true values (not net change values) for the weight and arm are shown. Positive arms are distances aft of the airplane datum; negative arms are distances forward of the datum.

NOTE

Asterisks (*) after the item weight and arm indicate complete assembly installations. Some major components of the assembly are listed on the lines immediately following. The summation of these major components does not necessarily equal the complete assembly installation.

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
	A. POWERPLANT & ACCESSORIES			
A01-R	ENGINE, CONTINENTAL O-470-U SPEC. 3	0750201	446.0*	-17.6*
	TWO MAGNETOS WITH IMPULSE COUPLING	SLICK 662	12.9	-12.0
	OIL COOLER-HARRISON	TCM 627392	4.6	-31.5
	TWELVE 18MM X 3/4 20-3A SPARK PLUGS	SH 200A	2.8	-19.0
	STARTER, 24 VOLT PRESTOLITE	TCT 635994	17.8	-4.5
	CARBURETOR, MARVEL SCHEBLER	MA-4-5	5.8	-9.6
A05-R	FILTER, CARBURETOR AIR	0750038-4	1.0	-33.0
A09-R	ALTERNATOR, 28 VOLT, 60 AMP	C611003-0102	10.8	-15.5
A17-U	OIL COOLER, NON-CONGEAL MODINE 1E-1605-D	TCM639171	1.5	-31.5
	REPLACES OIL			
	CHANGES ENGINE DESIGNATION TO O-470-U			
	SPECIFICATION 4 (NET CHANGE)			
A21-A	FILTER INSTALLATION, FULL FLOW ENGINE OIL	0750606-11	4.5*	-3.4*
	ADAPTOR ASSEMBLY	1259922-2101	1.5	-4.2
	FILTER CAN ASSEMBLY	C2945005-0101	1.8	-3.0
	FILTER ELEMENT KIT	C2945005-0102	0.3	-3.0
A33-R	PROPELLER, MCCAULEY C2A34C204/90DC8-8	C1610309-0105	51.4	-41.6
A37-R	GOVERNOR, PROPELLER (MCCAULEY C290-D3/T14)	C1610311-0107	3.0	-32.5
A41-R	SPINNER INSTALLATION, PROPELLER	0752637	3.0*	-42.0*
	SPINNER DOME	0752637-11	1.7	-44.2
	FORWARD SPINNER SUPPORT	1250412-3	0.2	-46.5
	AFT SPINNER BULKHEAD	0752637-1	1.1	-37.8
A61-S	VACUUM SYSTEM, ENGINE DRIVEN	0706003-1	3.1*	-1.4*
	VACUUM PUMP	C431003-0102	1.8	-3.1
A70-A	PRIMING SYSTEM, SIX CYLINDER	0750125	1.0	-15.0
A73-A	OIL QUICK DRAIN VALVE (NET CHANGE)	1701015-4	NEGL	-1.-
	B. LANDING GEAR & ACCESSORIES			
B01-R-1	WHEEL, BRAKE & TIRE ASSY, 6.00X6 MAIN (2)	1241156-138	39.0	58.6*
	WHEEL ASSY, CLEVELAND 40-113 (LEFT)	C163001-0104	7.4	58.9
	BRAKE ASSY, CLEVELAND 30-75 (RIGHT)	C163030-0113	1.9	55.5
	BRAKE ASSY, CLEVELAND 30-75 (LEFT)	C163030-0114	1.9	55.5
	TIRE, 6-PLY RATED BLACKWALL (EACH)	- -	8.4	58.9
	TUBE (EACH)	C262023-0102	1.9	58.9
B01-R-2	WHEEL & BRAKE ASSY, 6.00X6 MAIN (2)	0741625	39.0*	58.6*
	WHEEL ASSY, MCCAULEY (EACH)	C163006-0101	7.6	58.9

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
	BRAKE ASSY, MCCAULEY C-30018 (LEFT)	C163032-0111	1.8	55.5
	BRAKE ASSY, MCCAULEY C-30018 (RIGHT)	C163032-0112	1.8	55.5
	TIRE, 6-PLY RATED BLACKWALL (EACH)	—	8.4	58.9
	TUBE (EACH)	C262026-0102	1.9	58.9
B04-R-1	WHEEL & TIRE ASSY, 5.00X5 NOSE	1241156-104	9.7*	-7.1*
	WHEEL ASSY, CLEVELAND 40-77	1241156-12	2.8	-7.1
	TIRE, 6-PLY RATED BLACKWALL	—	5.0	-7.1
	TUBE	C262023-0101	1.2	-7.1
B04-R-2	WHEEL & TIRE ASSY, 5.00X5 NOSE	0743621	8.6*	-7.1*
	WHEEL ASSY, MCCAULEY C-30053	C163005-0201	2.4	-7.1
	TIRE, 6-PLY RATED BLACKWALL	—	5.0	-7.1
	TUBE	C262023-0101	1.2	-7.1
B10-S	FAIRING INSTALLATION, WHEEL (SET OF 3)	0741638	18.4*	45.9*
	NOSE WHEEL FAIRING	0543079	3.9	-6.0
	MAIN WHEEL FAIRING (EACH)	0541223	5.7	60.2
	BRAKE DISC FAIRING (EACH)	0741641	0.6	58.9
B16-R	AXLE, STANDARD DUTY MAIN GEAR (SET OF 2)	0541124-1	2.6	58.9
B16-O	AXLE, HEAVY DUTY MAIN GEAR (SET OF 2)	1441003-1	4.5	58.9
	C. ELECTRICAL SYSTEMS			
C01-R-1	BATTERY, 24 VOLT, STANDARD DUTY	C614001-0105	22.8	130.0
C01-R-2	BATTERY, 24 VOLT, MANIFOLD, STANDARD DUTY	C614002-0101	23.2	130.0
C01-O	BATTERY, 24 VOLT, HEAVY DUTY	C614001-0106	24.8	130.0
C04-R	ALTERNATOR CONTROL UNIT, 28 VOLT WITH HIGH AND LOW VOLTAGE SENSING	C611005-0101	0.4	-0.3
C07-A	GROUND SERVICE PLUG RECEPTACLE	0701019-2	3.2	-2.6
C10-A	ELECTRIC ELEVATOR TRIM INSTL	2270007-2	3.8*	217.7*
	ELECTRIC DRIVE ASSEMBLY		3.3	221.0
C19-O	HEATING SYSTEM, PITOT & STALL WARNING SWITCH	0770724-2	0.5	26.5
C22-A	LIGHTS, INSTRUMENT POST	2201003-2	0.5	17.5
C23-A	PANEL LIGHTS, ELECTRO-LUMINESCENT INSTL.	0770419	2.1	16.5
C25-A	MAP LIGHT, CONTROL WHEEL MOUNTED (REQUIRES E89-O CHANGING CONTROL WHEEL FROM 1260243-2 TO 1260243-9)	1260243-9	0.1	27.0
C31-A	LIGHTS, COURTESY (NEI CHANGE)	0700615-11	0.5	61.7
C40-A	DETECTORS, NAVIGATION LIGHT (SET OF 2)	0701013	VEGL	—
C43-A	UNI FLASHING BEACON LIGHT	0701042-2	1.8*	208.6*
	LIGHT ASSY (IN FIN TIP)	C621001-0102	0.7	253.0

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
	FLASHER ASSY (IN FIN TIP)	C594502-0102	0.4	253.0
	LOADING RESISTOR	OR 95-6	0.2	212.0
C46-A	STROBE LIGHTS, WHITE (EACH WING TIP)	0701018-4	2.6*	44.4*
	POWER SUPPLY (AEROFLASH 152-0009)	C622008-0102	2.3	46.7
	LIGHT ASSY. (AERO-FLASH 73-145)(2)	C622006-0107	0.3	42.0
C49-S	LIGHT INSTL, COWL MOUNTED LANDING & TAXI	0770417	1.6*	-25.3*
	LIGHT BULBS (SET OF 2)	4591	1.0	-32.5
	D. INSTRUMENTS			
D01-R	INDICATOR, AIRSPEED	C661064-0212	0.6	16.0
D01-D	INDICATOR, TRUE AIRSPEED (NET CHANGE)	1201108-7	0.2	16.5
D04-A	STATIC ALTERNATE AIR SOURCE	0701028-1	0.3	14.4
D07-R	ALTIMETER, SENSITIVE	C661071-0101	1.0	15.3
D07-D-1	ALTIMETER, SENSITIVE (FEET & MILLIBARS)	C661071-0102	1.0	15.3
D07-D-2	ALTIMETER, SENSITIVE (20 FT. MARKINGS)	C661025-0102	1.0	15.3
D10-A	ALTIMETER INSTALLATION (2ND UNIT)	1213681	1.0	16.0
D16-A-1	ENCODING ALTIMETER (REQUIRES RELOCATING STANDARD TYPE ALTIMETER)	1213732	3.0	14.0
D16-A-2	ENCODING ALTIMETER, FEET AND MILLIBARS (REQUIRES RELOCATING STANDARD TYPE ALTIMETER)	1213732	3.0	14.0
D16-A-3	ALTITUDE ENCODER, BLIND (INSTRUMENT PANEL INSTALLATION NOT REQUIRED)	0701099-1	1.5*	13.6*
D22-A	GAGE, CARBURETOR AIR TEMPERATURE	0750610-2	1.0	5.5
D25-S	CLOCK, ELETRIC (0770417)	C664508-0102	0.4	16.6
D25-D	CLOCK, ELECTRIC, DIGITAL READOUT	C664511-0101	0.4	16.6
D28-R	COMPASS, MAGNETIC & MOUNT	1213679-3	1.1	20.5
D34-R	INSTRUMENT CLUSTER, ENGINE & FUEL	C669545-0103	1.3	16.5
D49-A	INDICATOR INSTALLATION, ECONOMY MIXTURE EGT INDICATOR	0750609-2	0.7*	8.2*
		C668501-0211	0.4	17.1
	THERMOCOUPLE PROBE	C668501-0204	0.1	-20.5
	THERMOCOUPLE LEAD WIRE (IC)	C668501-0206	0.1	-0.3
D64-S	GYRO SYSTEM	0701030-2	6.4*	13.7*
	DIRECTIONAL INDICATOR	C661075-0101	2.9	14.0
	ATTITUDE INDICATOR	C661076-0102	2.2	14.6
	HOSES, FITTINGS, SCREWS, CLAMPS ETC.		1.3	11.5
D64-D-1	GYRO SYSTEM INSTL. FOR NAV-O-MATIC 300A AUTOPILOT (ITEM H31-A-2)	0701038-1	6.7*	13.4*
	DIRECTIONAL INDICATOR	40760-0104	3.2	13.4

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
	ATTITUDE INDICATOR	C6611076-0102	2.2	14.6
D64-0-2	GYRUS FOR NON SLAVED HSI INSTL RQS H09-A	0701107	3.5*	13.4*
	ATTITUDE INDICATOR	C6611076-0102	2.2	14.6
D67-A	HOURMETER, INSTALLATION	1200744	0.5*	7.6*
	RECORDING INDICATOR	C6644503-0101	0.1	17.5
	OIL PRESSURE SWITCH	S1711-1	3.2	-1.0
D73-R	GAGE, MANIFOLD PRESSURE	C6622035-0101	0.9	15.8
D82-S	TACHOMETER, INSTALLATION, ENGINE	C6685107-0101	0.1	28.5
D85-R	RECORDING TACH INDICATOR	0706006	0.9*	13.8*
	INDICATOR, TURN COORDINATOR (28 VOLT ONLY)	C6680220-0117	0.7	16.9
D88-S-1	INDICATOR, TURN COORDINATOR (110/30 VOLT)	C6611003-0505	1.3	16.0
D88-S-2	INDICATOR, TURN COORDINATOR (FOR NOM'S)	C6611003-0506	1.3	16.0
D88-0-1	INDICATOR, TURN & BANK	42320-0028	1.3	16.0
D88-0-2	INDICATOR, RATE OF CLIMB	S-1303N2	2.0	15.5
D91-S		C6611080-0101	1.0	15.4
	E. CABIN ACCOMMODATIONS			
	SEAT, ADJUSTABLE FORE & AFT - PILOT	0714048-1	13.0	44.0
E05-R	SEAT, ARTICULATING VERT. ADJ. - PILOT	0714049-1	24.0	41.5
E05-0	SEAT, ADJUSTABLE FORE & AFT - CO-PILOT	0714048-1	13.0	44.0
E07-S	SEAT, ARTICULATING VERT. ADJ. - CO-PILOT	0714049-2	24.0	41.5
E07-0	SEAT, 2ND ROW BENCH	0714047-1	23.0	80.5*
E09-S	SEAT INSTALLATION, AUXILIARY (CHILDS)	0501009-5	8.2*	104.2*
E11-A	SEAT ASSY, FOLDAWAY (120 LB MAX CAP.)	0714050-1	6.9	104.4
	BELT ASSY, LAP	S1746-5	0.9	101.1
E15-R	BELT ASSY, LAP (PILOT SEAT)	S2275-103	1.0	37.0
E15-S	SHOULDER HARNESS ASSY, PILOT	S2275-201	0.6	37.0
E19-0	PILOT & CO-PILOT INERTIA REEL INSTL. (NET CHANGE)	0701377	3.6	92.0
E23-S	BELT & SHOULDER HARNESS ASSY, CO-PILOT	S2275-3	1.6	37.0
E27-S	BELT ASSY, 2ND ROW OCCUPANTS, (SET OF 2)	S-1746-1	1.6	74.5
E27-0	BELT & SHOULDER HARNESS ASSY, 2ND ROW	S-2275-7	3.2	74.5
E35-A-1	INTERIOR, VINYL SEAT COVERS, (NET CHANGE)	CES-1154	0.0	
E35-A-2	INTERIOR, LEATHER SEAT COVERS (NET CHANGE)	CES-1154	2.0	62.3
E37-0	OPENABLE RH CABIN DOOR WINDOW (NET CHANGE)	0701065-8	2.3	47.0
E39-A	WINDOWS, OVERHEAD CABIN TOP (NET CHANGE)	0701017-1	0.6	45.3
E43-A	VENTILATION SYSTEM, 2ND ROW SEATING	0701084-1	3.6	62.3
E45-S	CURTAIN, REAR WINDOW	0700707-12	1.5	112.0
E47-A	OXYGEN SYSTEM, 4 PORT	0701091-1	34.0*	125.2*

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
	OXYGEN CYLINDER-EMPTY	C166001-0601	25.0	128.3
	OXYGEN - 48 CU FT @ 1800 PSI		4.0	128.3
	OXYGEN MASKS, PILOT & 3 PASSENGER	C166005	1.5	55.0
E49-A	CUP HOLDER, RETRACTABLE (SET OF 2)	1201124	0.1	16.0
E50-A	HEADREST, 1ST ROW (INSTALLED ARM) (EACH)	1215073-1	0.9	47.0
E51-A	HEADREST, 2ND ROW (INSTALLED ARM) (EACH)	1215073-1	0.9	87.0
E55-S	SUN VISORS (SET OF 2)	0701024-1	1.0	33.0
E59-A	APPROACH PLATE HOLDER	0715046-1	0.1	27.5
E65-S	BAGGAGE TIE DOWN NET	1215042-1	0.5	108.0
E71-A	CARGO TIE DOWN LATCHES & SEAT RAIL CLAMPS (USE INSTALLED CARGO ARM) (STOWED) (NOT FACTORY INSTALLED)	0701029-1	1.2	
E85-A	DUAL CONTROLS WHEEL, PEDALS & TOE BRAKES	0760101-2 0760650-3	6.7	14.1
E89-S	CONTROL WHEEL, PILOT ALL-PURPOSE INCLUDES MIC SWITCH AND PANEL MOUNTED AUXILLARY MIC JACK)	1260243-2	- -	- -
E93-R	HEATING SYSTEM, CABIN & CARBURETOR AIR (INCLUDES EXHAUST SYSTEM)	0750201	18.0	-16.0
	F. PLACARDS, WARNINGS & MANUALS			
F01-R	PLACARD, OPERATIONAL LIMITATIONS-VFR DAY	0705186	NEGL	- -
F01-0-1	PLACARD, OPERATIONAL LIMITATIONS-VFR DAY-NIGHT	0705186	NEGL	- -
F01-0-2	PLACARD, OPERATIONAL LIMITATIONS-IFR DAY-NIGHT	0705186	NEGL	- -
F04-R	INDICATOR, STALL WARNING HORN-AUDIBLE	S-2077-8	1.0	17.5
F16-R	PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL, STOWED	D1141-13PH	1.3	- -
	G. AUXILIARY EQUIPMENT			
G01-A	TAILCONE LIFT HANDLES (SET OF 2)	2201009-1	1.0	186.5
G07-A	HOISTING RINGS, AIRPLANE (NOT FACTORY INSTALLED)	0700612-1	1.5	45.6
G13-A	CORROSION PROOFING, INTERNAL	0760007-1	7.0	70.0
G16-A	STATIC DISCHARGERS (SET OF 10)	1201131-2	0.4	130.5

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
G19-A	STABILIZER ABRASION BOOTS	0500041-2	2.7	206.0
G22-S	TOWBAR, AIRCRAFT (STOWED ARM SHOWN)	0501019-1	1.6	97.0
G22-O	TOW BAR & TELESCOPING HANDLE (STOWED)		2.0	97.0
G25-S	PAINT, OVERALL EXTERIOR, MODIFIED POLY-URETHANE WHITE BASE	0704039	12.7*	91.9*
	OVERALL COLORED STRIPE		11.9	92.2
G31-A	CABLES, CORROSION RESISTANT (NET CHARGE)	0760007-1	0.4	82.3
G55-A-1	FIRE EXTINGUISHER, HAND TYPE (FOR USE WITH STANDARD PILOT SEAT)	0701014-1	0.0	--
			3.0	35.0
G55-A-2	FIRE EXTINGUISHER, HAND TYPE (FOR USE WITH VERTICAL ADJUSTING PILOT SEAT)	0701014-2	3.0	29.0
G67-A	PEDAL EXTENSIONS, RUDDER, REMOVABLE - SET OF 2 (STOWABLE - INSTALLED ARM SHOWN)	0701048	2.3	8.0
G89-A	WINTERIZATION KIT, ENGINE	0752647-2	1.1*	-29.9*
	WINTER FRONT INSTALLED ARM SHOWN		0.5	-34.3
	H. AVIONICS & AUTOPILOTS			
H01-A-1	CESSNA 300 ADF WITH BFO (R-546E)	3910159-1	8.5*	22.1*
	RECEIVER WITH BFO (R-546E)	41240-0101	3.5	13.0
	CONTOMETER INDICATOR (IN-346A)	40980-1001	0.9	16.0
	ADF LOOP ANTENNA & ASSOC. WIRING	3960104-1	2.1	33.4
	ADF SENSE ANTENNA	0770750-608	0.3	96.2
	MOUNTING BOX & MISC ITEMS		1.7	17.0
H01-A-2	CESSNA 400 ADF (W/BFO)	3910160-1	8.5*	22.1*
	ADF RECEIVER WITH BFO (R-446A)	43090-1114	3.5	13.0
	CONTOMETER INDICATOR (IN-346A)	40980-1001	0.9	16.0
	ADF LOOP ANTENNA & ASSOC. WIRING	3960104-1	2.1	33.4
	ADF SENSE ANTENNA	0770750-608	0.3	96.2
	MOUNTING BOX & MISC ITEMS		1.7	17.0
H04-A-1	DME INSTALLATION, NARCO	3910166-6	7.4*	13.8*
	TRANSCEIVER (DME 190)	--	6.3	11.0
	MOUNT ASSY		0.6	11.0
	ANTENNA	--	0.2	88.4
H04-A-2	CESSNA 400 DME INSTALLATION	3910167-16	13.9*	101.9*
	RECEIVER-TRANSMITTER	44000	8.5	133.7
	INDICATOR	44020-1100	1.6	14.0
	ANTENNA	42940	0.2	88.4
H05-A-1	CESSNA 400 R-NAV SYSTEM (REQUIRES NAV/COM	3910168-18	4.7*	12.0*

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
	(-DME)(INDICATOR NET CHANGE)	44100-1100	3.8	12.5
	R-NAV COMPUTER (IR-478A)	43910-1000	1.0	155.5
	INDICATOR ADDED, IN-442AR		-1.6	155.5
	INDICATOR DELETED, IN-385A	3913203	-3.4*	112.0*
H05-A-2	FOSTER R-NAV 511		2.4	82.5
H07-A-1	CESSNA 400 GLIDESLOPE (INCLUDES VOR/ILS	3910157	4.0*	100.0*
	INDICATOR--EXCHANGE FOR VOR/LOC)			
	RECEIVER- 40 CHANNEL (IR-443B)	42100-0000	2.1	130.1
	RECEIVER MOUNTED ON UPPER WINDSHIELD)	36450-0000	0.3	130.1
	ANTENNA (MOUNTED ON VOR/ILS INDICATOR (IN-386A)(INDICATOR	12700098-1	0.2	129.9
	ACTUAL WT IS 1.7 LBS)	46860-2000	0.1	15.5
H07-A-2	CESSNA 400 GLIDESLOPE WITH 300 ILS INDICA-	3910157	0.2	15.5
	TOR AUTOCOURSE, IN-386AC INDICATOR			
	EXCHANGE FOR IN-386A			
H09-A	HSI, NON-SLAVED INSTALLATION (REQUIRES	3910195-4	7.3*	45.2*
	L64-0-3 GYRO INSTALLATION),			
	HSI GYRO INDICATOR (IG-832C)	44690-2000	4.4	15.0
	HSI CONVERTER (IB-445A)	47240-0000	0.9	132.1
H11-A-1	PANTRONICS HF TRANSCEIVER 2ND UNIT	3910193	19.8*	98.0*
	PT10-A TRANSCEIVER (HIGH FREQUENCY	C5822103-0102	3.6	110.1
	PT-10PS-28 REMOTE POWER SUPPLY	C5822103-0301	8.6	110.1
	CX-10RL-28 REMOTE ANTENNA LOAD BOX	C5895502-0201	4.2	110.1
	ANTENNA INSTL 351 INCHES LONG	3960117	0.3	152.1
H11-A-2	SUNAIRE SSB HF TRANSCEIVER 2ND UNIT	3910158	23.2*	196.1*
	RE-1000 SIDE BAND XCVR (ASB-125)	99681	25.3	211.0
	PA1010A REMOTE POWER AMPLIFIER	99683	13.3	137.0
	CU1110 ANTENNA COUPLER (LOAD BOX)	99816	5.2	137.0
	ANTENNA INSTL 351 INCHES LONG	3960117	2.3	152.1
H13-A	CESSNA 400 MARKER BEACON	3910164	2.5*	167.4*
	RECEIVER (IR-402A)	42410-5128	0.7	211.0
	ANTENNA, FLUSH MOUNTED IN TAILCONE	12700720-1	1.0	133.4
H16-A-1	CESSNA 300 TRANSPONDER	3910127	4.1*	133.4*
	RECEIVER-TRANSMITTER (RT-359A)	42420-1128	2.7	111.0
	ANTENNA	42940-0000	0.2	167.0
H16-A-2	CESSNA 400 TRANSPONDER	3910128-2	4.1*	131.8*
	RECEIVER-TRANSMITTER (RT-459A)	42470-1128	2.8	211.0
	ANTENNA	42940-0000	0.2	167.0
H22-A-1	CESSNA 300 NAV/COM 720 CH CON IST UNIT	3910183	8.3*	112.0*
	REQUIRES H34-A TO BE OPERATIVE			
	RECEIVER-TRANSCEIVER (RT-385A)	46660-1100	5.5	12.5

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
	VOR/LOC INDICATOR (IN-385A)	46860-1000	1.6	15.5
	MOUNT, WIRING & MISC HARDWARE		1.2	11.8
H22-A-2	CESSNA 300 NAV/COM 72C CH CCM WITH	3910183	0.2	15.5
	IN-385AC (AUTOMATIC RADIAL CENTERING			
	INDICATOR) EXCHANGE (INDICATOR WT IS 1.8 LBS), NET			
	CHANGE (INDICATOR WITH IN-385A (300			
H22-A-3	CESSNA 400 NAV/COM, WITH IN-385A (300	3910189	8.3*	12.9*
	SERIES INDICATOR 1ST UNIT			
	REQUIRES H34-A TO BE OPERATIONAL			
	RECEIVER-TRANSCEIVER (RT-485A)	47360-1100	5.5	12.5
	VOR/LOC INDICATOR (IN-385A)	46860-1000	1.6	15.5
	MOUNT, WIRING & MISC HARDWARE		1.2	11.8
H22-A-4	CESSNA 300 NAV/COM (FOR EXPORT) 1ST UNIT	3910202-5	17.7*	29.7*
	VOR/LOC OPERATING SYSTEM		6.9	11.0
	RECEIVER-TRANSCEIVER (RT-328T) 720 CH	43340-1124	0.6	16.3
	VOR/LOC INDICATOR (IN-514B)	45010-1000	7.8	54.4
	BASIC AVIONICS KIT, SIMILAR TO H34-A	3910200	1.2	1.0
	VOLTAGE CONVERTER (41C10)	3940257-3	18.1*	11.8
	MOUNT, WIRING & MISC HARDWARE			29.3*
H22-A-5	CESSNA 300 NAV/COM 1ST UNIT VCR/LOC	3910202-5	7.3	11.0
	OPERATING SYSTEM (FOR EXPORT ONLY)		0.6	16.3
	RECEIVER-TRANSCEIVER (RT-528E-1) 360 CH	42430-1124	7.8	54.4
	VOR/LOC INDICATOR (IN-514B)	45010-1000	1.2	1.0
	BASIC AVIONICS KIT SIMILAR TO H34-A	3910200	1.2	11.8
	VOLTAGE CONVERTER (41C10)	3940257-3	8.3*	13.0*
	MOUNT, WIRING & MISC ITEMS			
H25-A-1	CESSNA 300 NAV/COM 72C CH CCM 2ND UNIT	3910183	5.5	12.5
	REQUIRES H37-A TO BE OPERATIONAL		1.6	15.5
	RECEIVER-TRANSCEIVER (RT-385A)	46660-1100	1.2	11.8
	VOR/LOC INDICATOR (IN-385A)	46860-1000	8.3*	13.0*
	MOUNT, WIRING & MISC HARDWARE			
H25-A-2	CESSNA 400 NAV/COM 72C CH CCM, WITH 300	3910189		
	SERIES INDICATOR, 2ND UNIT		5.5	12.5
	REQUIRES H37-A TO BE OPERATIONAL		1.6	15.5
	RECEIVER-TRANSCEIVER (RT-485A)	47360-1100	1.2	11.8
	VOR/LOC INDICATOR (IN-385A)	46860-1000	10.9*	12.8*
	MOUNT, WIRING & MISC HARDWARE			
H25-A-3	CESSNA 300 NAV/COM 2ND UNIT VCR/LOC		6.9	11.0
	OPERATING SYSTEM (FOR EXPORT ONLY)	43340-1124	0.6	16.3
	RECEIVER-TRANSCEIVER (RT-328T) 720 CH	45010-1000	1.0	38.9
	VOR/LOC INDICATOR (IN-514B)	3910201-5		
	ANTENNA & COUPLER KIT SIMILAR TO H37-A			

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
	OMNI ANTENNA INSTALLATION	3960102-6	0.6	250.6
	COM ANTENNA, RH SPIKE ON CABIN TOP	3960113-2	0.5	63.4
	AUDIO CONTROL PANEL AND WIRING	3970131-1	1.9	12.5
	HEADSET INSTALLATION	3970137-2	0.3	14.6
	MICROPHONE INSTALLATION	3970139-1	0.3	18.6
H37-A	ANTENNA & COUPLER KIT (REQD & AVAILABLE WITH 2ND NAV/COM INSTL.)	3910185	1.0*	38.9*
	ANTENNA & CABLE, LH VHF COM		0.8	47.4
	ANTENNA COUPLER & CABLES (VOR OMNI)	S-2212-1	0.2	45.0
H46-A	ADF ANTI PRECIP SENSE ANTENNA	3910154-64	0.8	141.8
H52-A	FLUSH MOUNTED COM ANTENNA	3910154-63	1.4	184.6
	(FLUSH MTD IN LEADING EDGE VERTICAL FIN			
H55-A	MIC-HEADSET COMBINATION, LIGHT WT REQUIRES E89-0 INSTALLATION	C596530-0101	0.2	12.0
	HEADSET-MICROPHONE, PADDED (STOWED)			
H56-A	REQUIRES E89-0 INSTALLATION	C596531-0101	1.1	14.0
H70-A	REMOTE TRANSPONDER IDENT SWITCH	3910205	0.2	17.0
	J. SPECIAL OPTION PACKAGES			
J01-A	SKYLANE II KIT	--	53.8*	43.2*
	C07-A GROUND SERVICE RECEPTICLE	0701019-1	3.2	-2.6
	C19-0 HEATED PITOT & STALL WARNING	0770724-1	0.5	26.5
	C31-A COURTESY ENTRANCE LIGHTS (2)	0700613-9	0.5	61.7
	C40-A NAV LIGHT DETECTORS	0701013	NEGL	--
	C43-A FLASHING BEACON LIGHT	0701042-7	1.8	208.6
	C43-0 TRUE AIRSPEED IND. (NET CHANGE)	1201008-7	0.2	16.5
	C04-A STATIC ALTERNATE AIR SOURCE	0701028-1	0.3	14.4
	E85-A DUAL CONTROLS	0760101-2	6.7	14.1
	FC1-A-1 CESSNA ADF (R-546E)	3910159-6	8.5	22.8
	FC16-A-1 CESSNA 300 TRANSPONDER (RT359A)	3910127	4.1	31.8
	FC22-A-1 CESSNA NAV/COM (RT-385A)	3910183	8.3	12.9
	FC28-A-1 EMERGENCY LOCATOR TRANSMITTER	0470419	3.5	134.6
	FC31-A-1 CESSNA 2CA AUTOPILOT	--	8.4	60.6
	FC34-A BASIC AVIONICS KIT	3910186	7.8	54.6
J04-A	NAV-PAC (SKYLANE II CNLV) (NET CHANGE)	--	15.7*	45.5*
	FC07-A 400 GLIDESLOPE (R-443B)	3910157	3.9	102.2
	FC13-A 400 MARKER BEACON (R-402A)	3910164	2.5	67.0
	FC25-A-1 NAV/COM 35A VOR/LOC 2ND UNIT	3910183	8.3	13.0
	FC37-A ANTENNA & COUPLER KIT	3910185	1.0	38.9