

SECTION 6 WEIGHT & BALANCE/ EQUIPMENT LIST

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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.

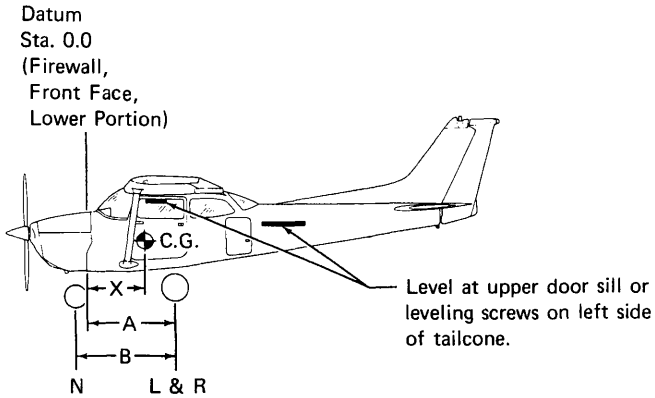
It should be noted that specific information regarding the weight, arm, moment and installed equipment list for this airplane can only be found in the appropriate weight and balance records carried in the airplane.

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, 500 pounds nose, 1000 pounds each main).
 - b. Deflate the nose tire and/or lower or raise the nose strut to properly center the bubble in the 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.

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CESSNA
MODEL 172N



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

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

Item	Weight (Lbs.)	X C.G. Arm (In.)	Moment/1000 (Lbs.-In.)
Airplane Weight (From Item 5, page 6-6)			
Add Oil:			
No Oil Filter (6 Qts at 7.5 Lbs/Gal)		-14.0	
With Oil Filter (7 Qts at 7.5 Lbs/Gal)		-14.0	
Add Unusable Fuel:			
Std. Tanks (3 Gal at 6 Lbs/Gal)		46.0	
L.R. Tanks (4 Gal at 6 Lbs/Gal)		46.0	
Equipment Changes			
Airplane Basic Empty Weight			

Figure 6-1. Sample Airplane Weighing

- (5) Using weights from (3) and measurements from (4) the airplane weight and C. G. can be determined.
- (6) Basic Empty Weight may be determined by completing Figure 6-1.

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

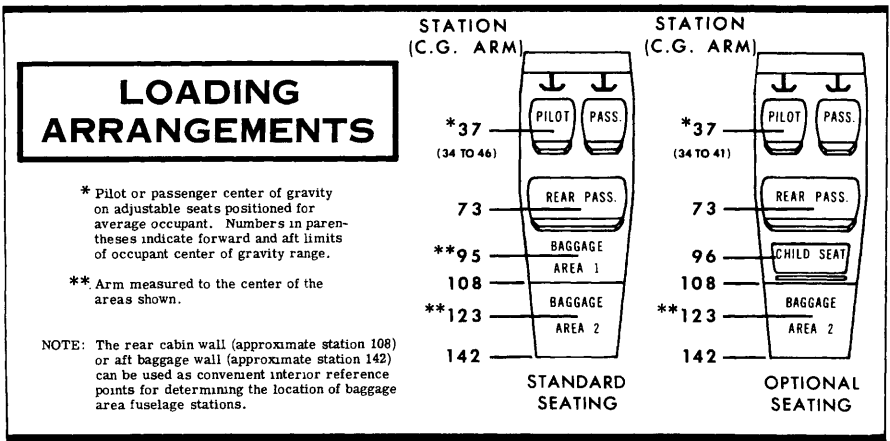
In addition to the basic empty weight and moment noted on these records, the c. g. arm (fuselage station) is also shown, but need not be used on the Sample Loading Problem. The moment which is shown must be divided by 1000 and this value used as the moment/1000 on the loading problem.

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

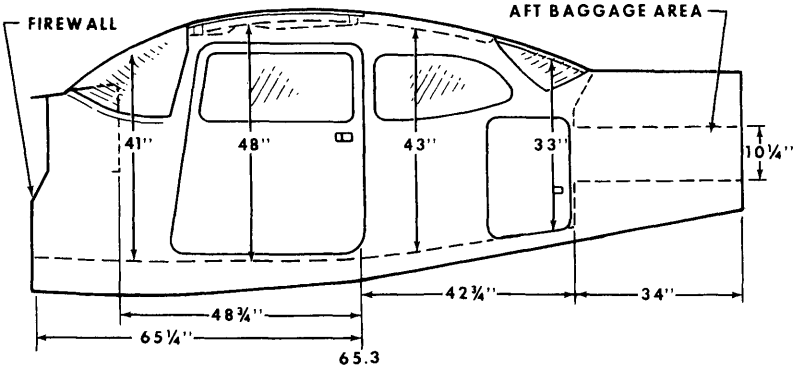
NOTE

Loading Graph information for the pilot, passengers, and baggage is based on seats positioned for average occupants and baggage loaded in the center of the baggage 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 limitations (seat travel and baggage 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.



CABIN HEIGHT MEASUREMENTS



DOOR OPENING DIMENSIONS

	WIDTH (TOP)	WIDTH (BOTTOM)	HEIGHT (FRONT)	HEIGHT (REAR)
CABIN DOOR	32"	37"	40"	41"
BAGGAGE DOOR	15 1/4"	15 1/4"	22"	21"

== WIDTH ==
● LWR WINDOW LINE
* CABIN FLOOR

CABIN WIDTH MEASUREMENTS

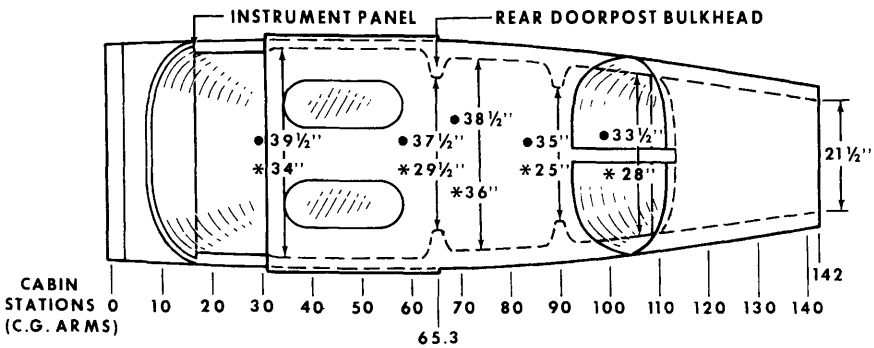


Figure 6-4. Internal Cabin Dimensions

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)	1454	57.6		
2. Usable Fuel (At 6 Lbs./Gal.) Standard Tanks (40 Gal. Maximum)	240	11.5		
Long Range Tanks (50 Gal. Maximum)				
3. Pilot and Front Passenger (Station 34 to 46)	340	12.6		
4. Rear Passengers	170	12.4		
5. *Baggage Area 1 or Passenger on Child's Seat (Station 82 to 108) 120 Lbs. Max.	96	9.1		
6. *Baggage Area 2 (Station 108 to 142) 50 Lbs. Max.				
7. TOTAL WEIGHT AND MOMENT	2300	103.2		
<p>8. Locate this point (2300 at 103.2) on the Center of Gravity Moment Envelope, and since this point falls within the envelope, the loading is acceptable.</p> <p style="text-align: center;">NOTE</p> <p>* The maximum allowable combined weight capacity for baggage areas 1 and 2 is 120 lbs.</p>				

Figure 6-5. Sample Loading Problem

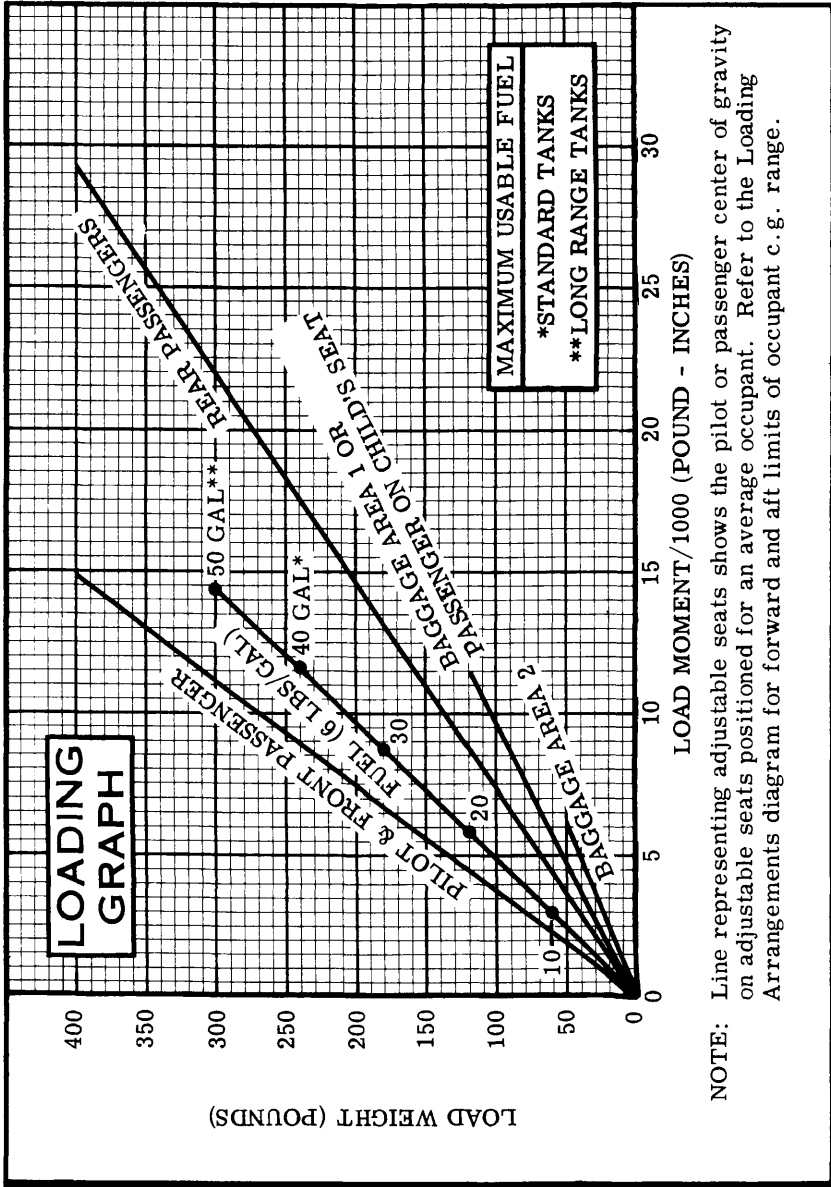


Figure 6-6. Loading Graph

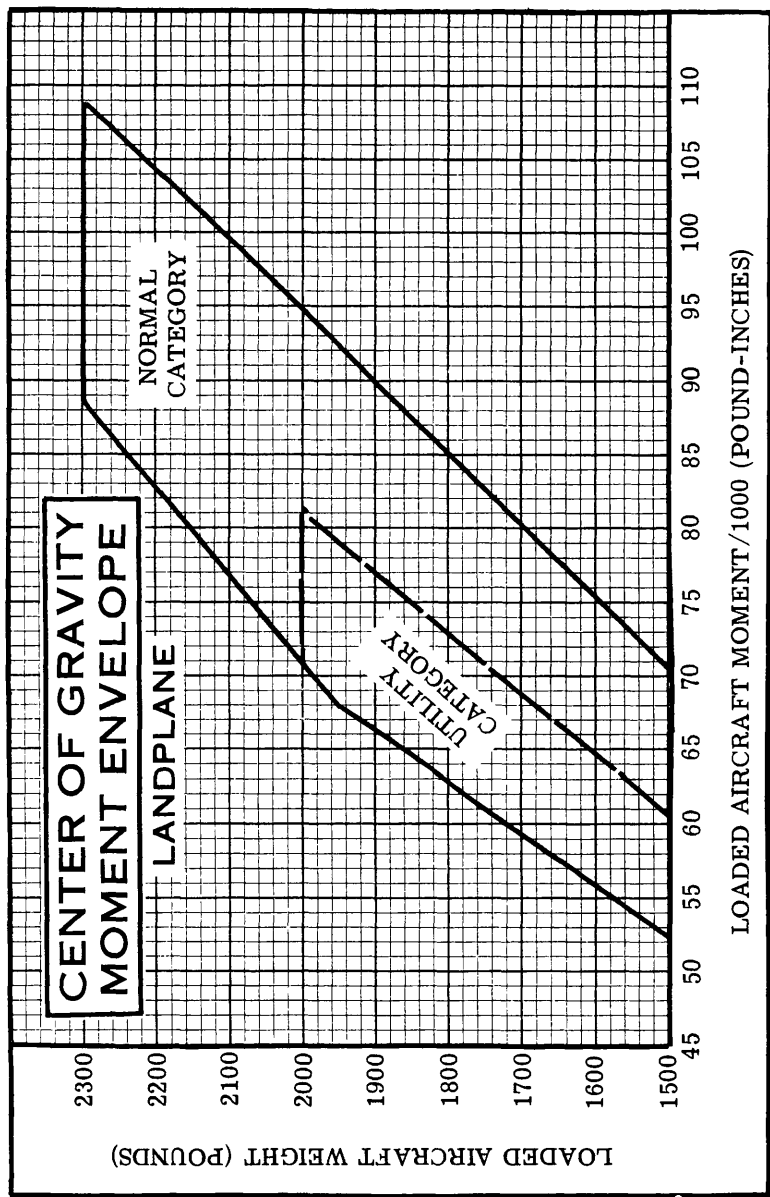


Figure 6-7. Center of Gravity Moment Envelope

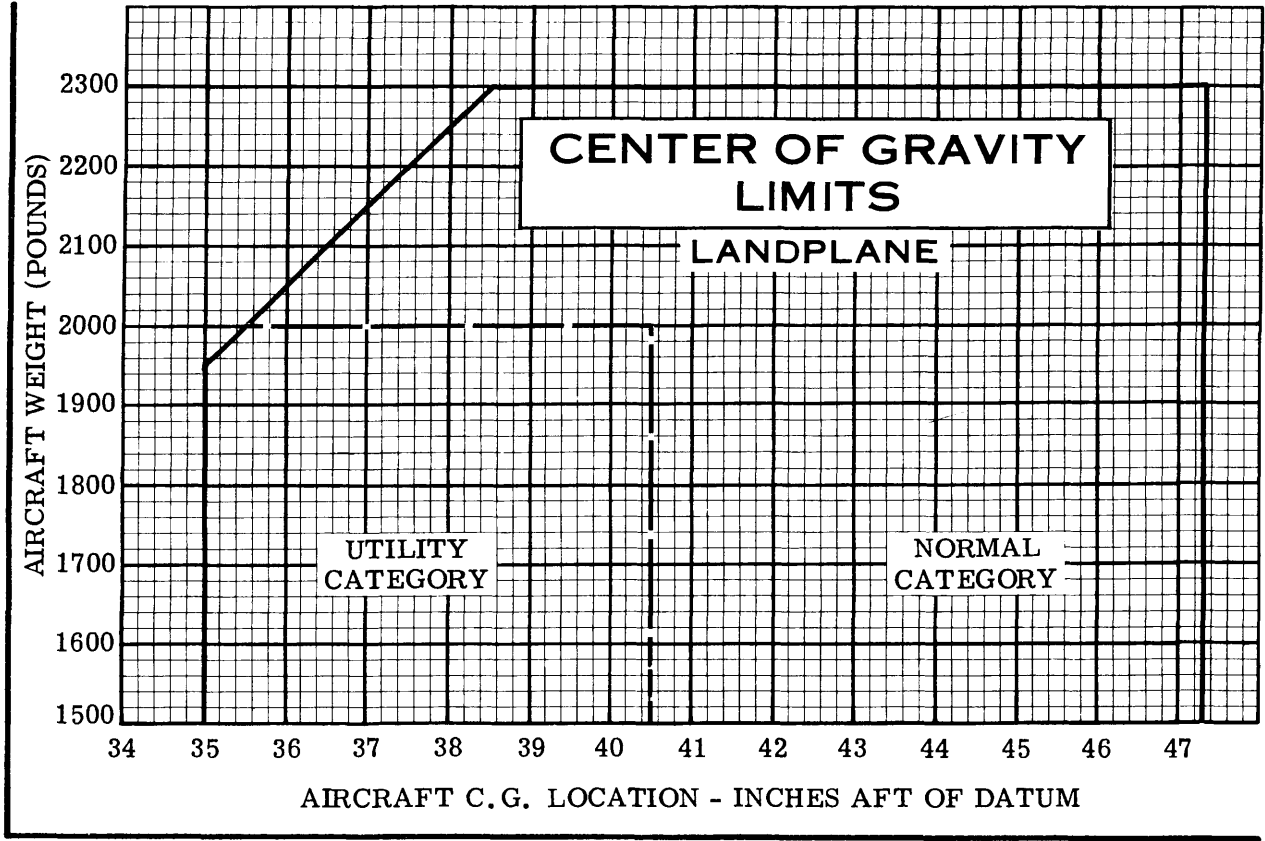


Figure 6-8. Center of Gravity Limits

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, LYCOMING O-320-H2AD (INCLUDES ELECTRIC STARTER, VACUUM PUMP PAD, SPARK PLUGS & CARBURETOR	0550333	269.5*	-19.7*
A05-R	FILTER, CARBURETOR AIR	C294510-0301	0.5	-26.0
A09-R	ALTERNATOR 14 VOLT, 60 AMP (BELT DRIVE)	C611501-0102	10.8	-29.0
A17-R	OIL COOLER INSTALLATION	0550333	2.5*	-2.5*
	OIL COOLER	10599A	2.1	-2.5
A21-A	OIL FILTER INSTALLATION (SPIN-ON ELEMENT) NET CHANGE	0501060	2.5	-6.5
A33-R	PROPELLER ASSY. (FIXED PITCH-LANDPLANE) PROPELLER (MCCAULEY)	C161001-0310 IC160/DTM7557	35.9* 30.1	-38.5* -39.1
	3.5 INCH PROP SPACER ADAPTOR (MCCAULEY)	C4516	3.6	-35.4
A33-O	PROPELLER ASSY. (FIXED PITCH-FLOATPLANE) PROPELLER (MCCAULEY)	C161001-0311 1A175/ETM8044	37.5* 31.8	-38.6* -39.1
	3.5 INCH PROP SPACER ADAPTOR (MCCAULEY)	C4516	3.6	-35.4
A41-R	SPINNER INSTALLATION, PROPELLER SPINNER DOME	0550320	2.0*	-41.4*
	FWD SPINNER BULKHEAD	0550236-8	1.2	-43.1
	AFT SPINNER BULKHEAD	0550321-4	0.3	-40.8
A61-S	VACUUM SYSTEM INSTALLATION DRY VACUUM PUMP (AV WT OF 4 TYPES)	0550321-10 0501054	0.4 4.3*	-37.3 -3.0*
	FILTER	C431003-	2.8	-6.3*
	VACUUM GAUGE	C294502-0201	0.2	4.7
	RELIEF VALVE-REGULATOR	C668509-0101	0.1	16.2
A70-A	PRIMER SYSTEM, ENGINE THREE CYLINDER	C482001-0401	0.5	4.5
A73-A	OIL QUICK DRAIN VALVE (NET CHANGE)	0501056-1 1701015	0.5 0.0	-12.0 -
B. LANDING GEAR & ACCESSORIES				
B01-R	WHEEL, BRAKE & TIRE ASSY, 6.00X6 MAIN (2)	C163015-0201	41.7*	57.8*
	WHEEL ASSY, MCCAULEY	C163003-0101	6.4	58.2
	BRAKE ASSY., MCCAULEY (LEFT)	C163032-0105	1.9	54.5
	BRAKE ASSY., MCCAULEY (RIGHT)	C163032-0106	1.9	54.5
	TIRE, 4-PLY BLACKWALL (EACH)	C262003-0101	8.5	58.2

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
B04-R	TUBE (EACH)	C262023-0102	1.8	58.2
	WHEEL & TIRE ASSY. 5.00X5 NOSE	C163018-0101	8.7*	-6.8*
	WHEEL ASSY., MCCAULEY	C163005-0201	2.4	-6.8
	TIRE, 4-PLY BLACKWALL	C262003-0102	4.7	-6.8
	TUBE	C262023-0101	1.2	-6.8
B10-S	FAIRING INSTALLATION, WHEEL (SET OF 3)	0541225-1	17.8*	47.1*
	NOSE WHEEL FAIRING		4.0	-4.9
	MAIN WHEEL FAIRING (EACH)		5.7	60.3
C. ELECTRICAL SYSTEM				
C01-R	BATTERY, 12 VOLT, 25 AMP HOUR	0511319	23.0	0.0
C04-R	REGULATOR, 14 VOLT, 60 AMP ALTERNATOR	C611001-0201	0.5	3.5
C07-A	GROUND SERVICE PLUG RECEPTACLE	0501053	2.7	-2.6
C16-D	HEATING SYSTEM, PITOT (NET CHANGE)	0422355	0.6	24.4
C22-A	LIGHTS, INSTRUMENT POST (REQUIRES INSTALL- ATION OF E34-D DELUXE GLARESHIELD)	0513094	0.5	16.5
	LIGHT, MAP (CONTROL WHEEL MOUNTED)	0570087	0.2	21.5
C25-A	LIGHT, MAP & INSTRUMENT PANEL FLOOD (DOORPOST MOUNTED)	0700149	0.3	32.0
C31-A	LIGHTS, COURTESY ENTRANCE (SET OF 2)	0521101	0.5	61.0
C40-A	DETECTORS, NAVIGATION LIGHT (SET OF 2)	0701013-1, -2	NEGL	-
C43-A	LIGHT INSTALLATION, OMNIFLASH BEACON	0506003	2.1*	184.2*
	BEACON LIGHT ON FIN TIP	C621001-0106	0.4	243.0
	FLASHER POWER SUPPLY	C594502-0102	0.8	205.8
	RESISTOR (MEMCOR)	0R95-1.5	0.3	208.1
	LIGHT INSTALLATION, WING TIP STROBE	0501027	3.4*	43.3*
C46-A	FLASHER POWER SUPPLY (SET OF 2 IN WING)	C622007-0101	2.3	47.0
	STROBE LIGHT, WING TIP (SET OF 2)	C622006	0.2	43.5
C49-S	LIGHT INSTALLATION, COWL MOUNTED LANDING LAMP, 250 WATT (G.E.)	0570102	1.9*	-27.1*
		4522	0.8	-29.0
C49-D	LIGHTS, DUAL COWL MOUNTED LANDING LAMP, 250 WATT (G.E.) (EACH)	0552141	3.2*	-23.0*
		4509	0.5	-29.0

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
D. INSTRUMENTS				
D01-R	INDICATOR, AIRSPEED	C661064-0102	0.6	16.2
D01-O	INDICATOR, TRUE AIRSPEED	0513279	0.7	16.3
D04-A	STATIC AIR ALTERNATE SOURCE	0501017	0.2	15.5
D07-R	ALTIMETER (SENSITIVE	C661071-0101	1.0	14.0
D07-O-1	ALTIMETER, SENSITIVE (50 FT. MARKINGS) (FEET AND MILLIBARS)	C661071-0102	1.0	14.0
D07-O-2	ALTIMETER (SENSITIVE) 20FT. MARKINGS (FEET AND MILLIBARS)	C661025-0102	1.0	14.0
D10-A	ALTIMETER, 2ND UNIT INSTALLATION (DUAL)	2001015	1.0	14.5
D16-A-1	ENCODING ALTIMETER (REQUIRES RELOCATION OF REGULAR ALTIMETER)	0501049	3.0	14.0
D16-A-2	ENCODING ALTIMETER, FEET & MILLIBARS (RE- QUIRES RELOCATION OF REGULAR ALTIMETER)	0501049	3.0	14.0
D16-A-3	ENCODING ALTIMETER, USED WITH TRANSPONDER, (INSTRUMENT PANEL MOUNTING NOT REQUIRED BECAUSE OF NO VISUAL READ OUT)	0501059	1.5*	14.4*
D19-R	ENCODER AMMETER	C744001-0101	1.3	14.6
D22-A	GAGE, CARBURETOR AIR TEMPERATURE	S-1320-5	0.3	16.5
D25-S	CLOCK, ELECTRIC	0513339	1.0	14.0
D28-R	COMPASS, MAGNETIC-INSTALLATION	C664508-0101	0.4	16.3
D38-R	INSTRUMENT CLUSTER, LH & RH FUEL QUANTITY	0513262-1	0.5	14.0
D41-R	INSTRUMENT CLUSTER, OIL PRESS, OIL TEMP.	C669511-0102	0.5	16.5
D64-S	GYROS, ATTITUDE & DIRECTIONAL INDICATORS (NON-NAV-O-MATIC)	C669512-0102	0.5	16.5
	DIRECTIONAL INDICATOR (AV. OF 4)	0501054-1	5.8*	14.0*
	ATTITUDE INDICATOR (AV. OF 3)	C661075	2.7	13.2
D64-O-1	GYRO INSTALLATION (SIMILAR TO D64-S EXCEPT DIRECTIONAL INDICATOR HAS A MOVEABLE HEADING POINTER)(INDICATOR NET CHANGE)	C661076	2.2	13.4
		1201126-1	6.9*	13.9*
			0.5	13.2
D64-O-2	GYRO INSTALLATION FOR 300A NAV-O-MATIC DIRECTIONAL INDICATOR (ARC)	0501054-2	6.9*	13.4*
D67-A	RECORDER INSTALLATION, FLIGHT HOUR	40760	3.3	13.3
D82-S	GAGE, OUTSIDE AIR TEMPERATURE	0501052	0.8	12.3
D85-R	TACHOMETER INSTALLATION, ENGINE	C668507-0101	0.1	28.6
		0506004	1.0*	12.1*

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
D88-S	RECORDING TACH INDICATOR	C668020-0118	0.7	16.0
D88-0-1	FLEXIBLE TACH SHAFT INDICATOR, TURN COORDINATOR (FOR USE WITH INDICATOR, TURN COORDINATOR AND 300A)	S-1605-10 C661003-0504 42320-0014	0.3 1.3 1.9	3.0 15.8 14.6
D88-0-2	NAV-O-MATIC 200A (NOT COMPATIBLE WITH NAV-O-MATIC)	S-1413N2	2.0	14.5
D91-S	INDICATOR, RATE OF CLIMB	C661080-0101	1.0	14.9
E. CABIN ACCOMMODATIONS				
E02-S	ARM RESTS - 2ND ROW (SET OF 2)	0715039	1.5	72.0
E05-R	SEAT, ADJUSTABLE FORE & AFT - PILOT		12.6	44.5
E07-S	SEAT, INFINITE ADJUSTABLE - PILOT		23.0	41.5
E09-S	SEAT, INFINITE ADJUSTABLE - CO-PILOT		22.0	41.5
E09-S	SEAT, REAR (ONE PIECE BACK CUSHION)		22.0	79.5
E11-A	SEAT, REAR (TWO PIECE BACK CUSHION)		22.0	79.5
	SEAT INSTALLATION, CHILDS FOLD AWAY	0501009	8.4*	101.1*
	LAP BELT ASSY	S-1746-5	0.8	100.8
	SEAT ASSY	0714005-1	6.7	100.8
E15-R	PILOT LAP BELT ASSY	S-2275-103	1.0	37.0
E15-S	SHOULDER HARNESS ASSY, PILOT	S-2275-201	1.6	37.0
E19-0	SHOULDER HARNESS INERTIA REEL INSTALLATION PILOT & CO-PILOT - REPLACE	S-2275-201	0.6	37.0
	AND HARNESS (NET CHANGE)	0501046-1	2.0	82.0
E23-S	BELT ASSY, 2ND ROW (SET OF 2)	S-2275-3	1.6	37.0
E27-S	SEAT FOR 2ND ROW SEAT (NET CHANGE)	S-1746-13	3.2	70.0
E27-S	SEAT FOR 2ND ROW SEAT (NET CHANGE)	S-2275-8	3.2	70.0
E34-0	DELUXE GLASS SHIELD (NET CHANGE)	0515034	1.0	21.0
E35-A	LEATHER SEAT COVERING (NET CHANGE)	0511803	2.9	62.0
E37-A	WINDOWS, HINGED, RH DOOR (NET CHANGE)	0511800	0.3	47.9
E39-A	WINDOWS, OVERHEAD CABIN TOP (NET CHANGE)	0700322	1.5	60.0
E43-A	VENTILATION SYSTEM, REAR SEAT	0501023	0.1	15.0
E49-A	BEVERAGE CUP HOLDER	1215073-11	0.7	47.0
E50-A	HEADREST, 1ST ROW (WT EACH)	1215073-11	0.7	47.0
E51-A	HEADREST, 2ND ROW (WT EACH)	05000312	0.3	86.9
E53-A	MIRROR, REAR VIEW		0.3	15.9

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
E55-S	SUN VISORS (SET OF 2)	0500040	0.9	32.8
E57-A	WINDOWS, TINTED FRONT, SIDE & REAR (NET CHANGE)	0500267	0.0	- -
E65-S	BAGGAGE NET	2015009	0.5	95.0
E71-A	RINGS, CARGO TIE-DOWN (STOWED)(USE ARM AS INSTALLED WITH CARGO)	0500042	1.0	- -
E75-A	STRETCHER INSTALLATION - BOXED (USE ACTUAL WEIGHT AND ARM CHANGE)	0700164-4	- -	- -
E85-A	CONTROLS INSTALLATION, DUAL	0513335	4.9	12.4
E87-A	RUDDER TRIM SYSTEM	0513290-1	1.9	9.4
E93-R	HEATING SYSTEM, CABIN & CARBURETOR AIR (INCLUDES EXHAUST SYSTEM)	0550333 0506004	17.5	-21.0
F. PLACARDS & WARNING				
F01-R	PLACARD, OPERATIONAL LIMITATIONS-DAY VFR	0505053-1	NEGL	- -
F01-O-1	PLACARD, OPERATIONAL LIMITATIONS-DAY NIGHT VFR	0505053-2	NEGL	- -
F01-O-2	PLACARD, OPERATIONAL LIMITATIONS-DAY NIGHT VFR IFR	0505053-3	NEGL	- -
F01-O-3	PLACARD, OPERATIONAL LIMITATIONS-DAY VFR FLOATPLANE	0505053-16	NEGL	- -
F01-O-4	PLACARD, OPERATIONAL LIMITATIONS-DAY NIGHT VFR FLOATPLANE	0505053-17	NEGL	- -
F01-O-5	PLACARD, OPERATIONAL LIMITATIONS-DAY NIGHT VFR IFR FLOATPLANE	0505053-18	NEGL	- -
F04-R	NOTE THE ABOVE PLACARDS ARE INSTALLED ACCORDING TO AIRCRAFT EQUIPMENT			
F13-S	INDICATOR, AUDIBLE PNEUMATIC STALL WARNING OVERVOLT WARNING LIGHT, ALTERNATOR	0523112	0.2 NEGL	28.5 - -
G. AUXILIARY EQUIPMENT				
G04-A	TOW HOOK (INSTALLED) (STOWED)	0500228	0.5 0.5	229.0 95.0
G07-A	RINGS, AIRPLANE HOISTING (CABIN TOP)	0541115	1.1	49.1
G13-A	CORROSION PROOFING, INTERNAL	0500036	10.0	77.0

SECTION 6
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EQUIPMENT LISTCESSNA
MODEL 172N

CESSNA
MODEL 172N

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
G16-A	STATIC DISCHARGERS	0501048	0.4	143.2
G19-A	STABILIZER ABRASION BOOTS	0500041	2.7	206.0
G22-S	TOW BAR (STOWED)	0501019	1.6	95.0
G25-S	PAINT, OVERALL EXTERIOR COVER OVERALL WHITE BASE COLOR STRIPE	0504032	11.6*	91.6*
G25-O	PAINT SCHEME - SKYHAWK II	0504032	10.8	90.5
G31-A	CABLES, CORROSION RESISTANT CONTROL (NET CHANGE)	0500036	0.3	136.3
G55-A	FIRE EXTINGUISHER INSTALLATION FIRE EXTINGUISHER	0501011	11.1	91.6
G58-A	FIRE EXTINGUISHER MOUNTING BRACKET STEPS & HANDLES, REFUELING ASSISTING	C421001-0101 C421001-0102	3.0*	43.8*
G88-A-1	WINTERIZATION KIT INSTALLATION, ENGINE BREATHER TUBE INSULATION	0513415 0501008	2.6	44.0
G88-A-2	WINTERIZATION KIT INSTL., FLOATPLANE ONLY BREATHER TUBE INSULATION COWL OUTLET COVER (1) (INSTALLED) (STOWED)	0552011 0552132-1, -2 0552132-1, -2 0552011	0.9	42.2
G92-O	FUEL SYSTEM, LONG RANGE WING TANKS (NET CHANGE)	0520013	1.7*	17.8
			0.8*	-22.7*
			0.4	-13.8
			0.3	-32.0
			1.0*	95.0
			0.4	-7.2*
			0.6	-12.0
			0.6	-4.0
			9.5	95.0
				48.0
H. AVIONICS & AUTOPILOTS				
H01-A	CESSNA 300 ADF INSTALLATION CONSISTS OF RECEIVER WITH BFO (R-546E) INDICATOR (IN-346A) SENSE ANTENNA INSTALLATION LOOP ANTENNA INSTALLATION RECEIVER MOUNT, WIRES AND MISC ITEMS	3910159-2 41240-0101 40980-1001 0570400-632 3960104-1	7.0*	21.0*
H04-A	DME INSTALLATION, NARCO RECEIVER (DME-190) MOUNTING BOX ANTENNA,	3910166-1 UDA-3	2.3	12.1
H07-A	CESSNA 400 GLIDESLOPE RECEIVER (R-443B)	3910157-2 42100-0000	0.9	14.0
			0.2	108.6
			1.4	39.3
			2.2	13.7
			7.5*	18.5*
			4.9	11.3
			0.6	11.3
			0.6	86.1
			4.3*	82.6*
			2.1	117.3

SECTION 6
WEIGHT & BALANCE/
EQUIPMENT LIST

SECTION 6
WEIGHT & BALANCE/
EQUIPMENT LIST

CESSNA
MODEL 172N

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
H10-A	ANTENNA (LOCATED--UPPER WINDSHIELD) PANTRONICS PT-10A HF TRANSCEIVER 1ST UNIT TRANSCEIVER (PANEL MOUNTED) ANTENNA LOAD BOX HF POWER SUPPLY NOTE--1ST UNIT INSTL. COMPONENTS CONSIST ARE AS LISTED ANTENNA INSTALLATION, 351 INCHES LONG CABLE ASSEMBLIES HEADSET INSTALLATION MICROPHONE INSTALLATION AUDIO SWITCHING CONTROL NOISE FILTER NOISE SPEAKER ASSEMBLY CABIN COOLING RADIO ANTENNA PANTRONICS PT-10A HF TRANSCEIVER 2ND UNIT TRANSCEIVER (PANEL MOUNTED) ANTENNA LOAD BOX HF POWER SUPPLY (REMOTE) POWER FILTER, HIGH FREQ. POWER & SIGNAL CABLES ANTENNA INSTALLATION 351 IN. LONG SUNAIR ASB-125 HF TRANSCEIVER, 2ND UNIT ANTENNA LOAD BOX POWER SUPPLY (REMOTE) TRANSCEIVER (PANEL MOUNTED) ANTENNA INSTALLATION, 351 IN. LONG MISC SWITCHES, WIRES, AND ETC. PANTRONICS PT-10A HF TRANSCEIVER 3RD UNIT SAME AS 2ND UNIT (ITEM H-11-A-1) SUNAIR ASB-125 HF TRANSCEIVER 3RD UNIT SAME AS 2ND UNIT (ITEM H-11-A-2) CESSNA 400 MARKER BEACON RECEIVER (R-402A) ANTENNA, L SHAPED ROD ANTENNA MARKER BEACON (USED IN EXPORT A/C) BENDIX MOWER, GM-247A RECEIVER, L SHAPED ROD ANTENNA, L SHAPED ROD CESSNA 300 TRANSPONDER TRANSCEIVER (RT-359A) ANTENNA (A-109A)	1200098-2 3910156-8 3921032-0102 C589502-0101 C582103-0201 0570400-616 3950122-15 3970125-4 3970124-1 3970121-1 3940148-1 C596504-0201 3930122-1 3930122-6 3910156-9 C582103-0102 C589502-0101 C582103-0201 0570400-715 0570400-616 3910158-1 99816 99682 99680 0570400-616 3910156-11 3910158-5 3910156-11 4241051-14 0770681-1 3910174-2 3940185-1 0770681-1 3910127-17 41420-1114 415330-0001	0.2 4.8* 24.2 4.2 4.5 8.5 0.3 0.5 2.0 0.3 1.0 1.1 1.1 1.1 1.1 1.2* 20.2 4.2 8.5 0.1 0.5 2.0 0.3 24.9 8.5 4.6 0.3 3.7 22.0* 2.3* 0.7 0.9 3.1* 1.5 0.4 0.0* 2.7 0.3	30.0 70.7* 10.4 112.5 114.4 144.4 41.0 14.2 17.2 17.5 12.5 1 -37.9 2 10.8* 88.2 10.5 112.4 114.4 -0.5 41.0 144.4 82.8* 112.0 114.0 144.4 57.5 82.8* 34.5* 31.8 136.0 100.8* 100.9 136.0 125.8* 111.1 126.0
H11-A-1				
H11-A-2				
H11-A-3				
H11-A-4				
H13-A-1				
H13-A-2				
H16-A-1				

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
H16-A-2	CESSNA 400 TRANSPONDER (USED FOR EXPORT) TRANSCEIVER (RT-459A) ANTENNA (A-109A)	3910128-21 41470-1114 41530-0001	4.2* 2.9 0.3	25.1* 11.1 126.0
H19-A	CESSNA 300 VHF TRANSCEIVER, 1ST UNIT TRANSCEIVER (RT-524A) 1ST UNIT INSTALLATION ITEMS (AS LISTED BELOW)--	391055-7 31390-1114	11.9* 5.7 6.2	16.3* 11.0 21.2
	RADIO COOLING	3930152-1	1.1	11.4
	ANTENNA, L.H. VHF COM.	3960113-1	0.4	62.4
	AUDIO CONTROL PANEL, SWITCHES & WIRING	3970121-1	1.9	12.5
	CABIN SPEAKER	3970123-5	1.1	37.9
	MICROPHONE INSTALLATION	3970124-1	0.3	17.8
	HEAD SET INSTALLATION	3970125-4	0.2	14.2
H20-A	CESSNA 300 VHF COM TRANSCEIVER- 2ND UNIT TRANSCEIVER (RT-524A)	3910155-8 31390-1114	7.6* 5.7	14.9* 11.0
	RH COM ANTENNA CABLE	3950122-2	0.4	27.8
	ANTENNA, R.H. VHF COM.	3960113-2	0.4	62.4
	MISC ITEMS & WIRING		1.1	11.9
H22-A-1	CESSNA 300 NAV/COM, 160 CH, FIRST UNIT WITH VOR/LOC RECEIVER-TRANSMITTER (RT-308C) VOR/LOC INDICATOR (IN-514B) NOTE--1ST UNIT INSTALLATION COMPONENTS ARE AS LISTED	3910151-7 42450-1114 45010-1000	14.0* 6.4 0.6	32.0* 11.5 16.3
	AUDIO CONTROL SYSTEM	3970121	1.9	12.5
	HEADPHONE INSTALLATION	3970125-4	0.2	14.2
	MICROPHONE INSTALLATION (HAND-HELD)	3970124-1	0.3	17.2
	NOISE FILTER (AUDIO)(ON ALTERNATOR)	3940148-1	0.1	26.1
	RADIO COOLING	3930152-1	1.1	10.2
	SPEAKER INSTALLATION	3970123-2	1.2	37.9
	COMMUNICATION ANTENNA CABLE (CO-AX)	3950122-3	0.4	27.8
	OMNI ANTENNA CABLE	3950122-4	0.6	116.0
	OMNI ANTENNA INSTALLATION	3960102-10	0.8	220.8
	COMMUNICATIONS SPIKE ANTENNA INSTL.	3960113-1	0.4	62.4
H22-A-2	CESSNA 300 NAV/COM, 720 CH, FIRST UNIT WITH VOR/LOC RECEIVER-TRANSMITTER (RT-328T) VOR/LOC INDICATOR (IN-514B) INSTL. COMPONENTS SIMILAR TO H22-A-1	3910150-20 43340-1124 45010-1000	14.5* 6.9 0.6	31.3* 11.5 16.3
H22-A-3	CESSNA 300 NAV/COM, 720 CH, FIRST UNIT WITH VOR/ILS	3910152-20	14.6*	31.2*

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
H25-A-1	RECEIVER-TRANSMITTER (RT-328T)	43340-1124	6.9	11.5
	VOR/ILS INDICATOR (IN-5258)	45010-2000	0.7	16.3
	INSTL. COMPONENTS SIMILAR TO H22-A-1			
	CESSNA 300 NAV/COM, 160 CH, SECOND UNIT	3910151-8	9.5*	14.4*
H25-A-2	WITH VOR/LOC			
	RECEIVER-TRANSMITTER (RT-308C)	42450-1114	6.4	11.5
	VOR/LOC INDICATOR (IN-514B)	45010-1000	0.6	16.3
	NOTE-2ND UNIT INSTALLATION COMPONENTS ARE AS LISTED			
	COMMUNICATION ANTENNA CABLE- RH SIDE	3950122-2	0.4	27.8
	OMNI ANTENNA COUPLER (SIGNAL SPLITTER)	3960111-1	0.2	7.0
	COMMUNICATION ANTENNA, RIGHT SIDE	3960113-2	0.4	62.4
	MISC. NAV/COM INSTL ITEMS-INCL MOUNT.		1.5	10.7
	CESSNA 300 NAV/COM, 720 CH, SECOND UNIT	3910150-21	10.0*	14.3*
	WITH VOR/LOC			
H25-A-1	RECEIVER-TRANSMITTER (RT-328T)	43340-1124	6.9	11.5
	VOR/LOC INDICATOR (IN-514B)	45010-1000	0.6	16.3
H28-A-1	INSTL. COMPONENTS SIMILAR TO H25-A-1			
	EMERGENCY LOCATOR TRANSMITTER	0401008-2	2.0*	116.6*
H28-A-2	TRANSMITTER (LEIGH SHARC 7)	C589510-0209	1.8	116.4
	ANTENNA	C589510-0203	0.1	122.0
H28-A-2	EMERGENCY LOCATOR TRANSMITTER (USED IN CANADA)	0401008-5	1.8*	116.6*
	TRANSMITTER	C589510-0212	1.6	116.4
H31-A-1	ANTENNA	C589510-0107	0.1	122.0
	NAV-O-MATIC 200A	3910162-1	11.7*	51.9*
H31-A-2	D88-O-1 TURN COORDINATOR (NET CHANGE)	3930144-6	1.6	13.1
	TURN COORDINATOR (NET CHNG) (G-300A)	42320-0014	0.6	12.0
	WING INSTALLATION	0522632-1	8.0*	68.3*
	SERVO UNIT (PA-295B)	42330	5.8	68.9
	NAV-O-MATIC 300A (AF395)	3910163-1	13.4*	46.5*
	CONTROLLER-AMPLIFIER & MOUNT	CA-395A	1.8	13.1
H43-A	D64-A-2 GYRO INSTALLATION (NET CHANGE)	0513398	1.1	10.2
	D88-O-1 TURN COORDINATOR (NET CHANGE)	42320-0014	0.6	12.0
	WING INSTALLATION	0522632-1	8.0*	68.3*
	SERVO UNIT (PA-295B)	42330	5.8	68.9
	RELAY INSTALLATION	3940151-1	0.4	4.0
	AVIONICS OPTION D NAV-O-MATIC WING PROV.	0522632-2	1.7	68.2
H55-A	MIKE-HEADSET COMBO. INSTL (HEADSET STOWED) (STOWED ARM SHOWN)(INCLUDES ALL PURPOSE CONTROL WHEEL)	3970112-1	0.3	13.0

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
J. SPECIAL OPTION PACKAGES				
J01-A	SKYHAWK II EQUIPMENT CONSISTS OF ITEMS D01-0 TRUE AIRSPEED IND.(NET CHANGE) C16-0 HEATED PITOT SYSTEM E85-A DUAL CONTROLS C40-A NAV LIGHT DETECTORS C31-A COURTESY LIGHTS C43-A FLASHING BEACON LIGHT D04-A STATIC ALTERNATE AIR SOURCE H28-A EMERGENCY LOCATOR XMTR (ELT) G25-0 SKYHAWK II PAINT (NET CHANGE) H22-A-1 NAV/COM 308C VOR/LOC	0500510 0513279 0422355 0513335 0701013 0521101 0506003 0501017 0401008 0504032 3910151-7	24.4* 0.1 0.6 4.9 NEGL 0.5 2.1 0.2 2.0 0.0 14.0	48.3* 16.7 24.4 12.4 - 61.0 184.2 15.5 116.6 - 32.0
J04-A	NAV-PAC INSTALLATION (SKYHAWK II ONLY) H22-A-2 328T NAV/COM VOR/LOC 1ST UNIT H22-A-1 308C NAV/COM 1ST UNIT DELETED H25-A-1 308C NAV/COM VOR/LOC ADDED H01-A 300 ADF (546E) H16-A-1 300 TRANSPONDER (RT-359)	3910161	21.0* 14.5 -14.0 9.5 7.0 4.0	18.7* 31.3 32.0 14.4 21.0 26.1
J10-A	FLOATPLANE FUSELAGE STRUCTURAL MODIFICA- TIONS & FITTINGS (OPTION C)	0500083	6.1	45.5
J13-A	FLOATPLANE COWLDECK V BRACE (INSTALLED) (STOWED)	0513003	1.1 1.1	26.2 95.0
J15-A	FLOATPLANE AILERON-RUDDER INTERCONNECT FLOATPLANE ONLY (INSTALLED) (STOWED)	0560012	0.4 0.4	69.6 95.0
J27-A	ITEMS J10-A & J13-A ARE ALSO APPROVED FOR LANDPLANE OPERATIONS. MODEL 89A2000 FLOATS & 502 ATTACHMENTS NET CHANGE BETWEEN STANDARD LANDING GEAR (ITEM NOS. B01-R, B04-R, B10-S AND BRAKE & NOSE WHEEL STEERING SYSTEMS) AND FLOATPLANE KIT (ITEM NO. J30-A-1) IS APPROXIMATELY 155 LBS. AT 58.3 IN. THE CORRECT VALUES OF WT & ARM CHANGE FOR WT & BALANCE CALCULATIONS SHOULD BE DETERMINED FROM THE ACTUAL INSTALLATION.	EDO-36335	-	-

SECTION 6
WEIGHT & BALANCE/
EQUIPMENT LIST

CESSNA
MODEL 172N

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS
J30-A-1	FLOATPLANE EQUIPMENT KIT, COMPLETE, OPTION A CONSISTS OF ITEMS A33-0 PROPPELLER, FLOATPLANE, EXCHANGE F01-0 PLACARD, FLOATPLANE OPERATION G31-A CABLES, CORROSION RESIST, EXCH. G13-A CORROSION PROOFING, INTERNAL G07-A RINGS, AIRPLANE HOISTING G58-A STEP & HANDLE REFUELING J10-A FUSELAGE MODIFICATION (OPT C) J12-A COMB DECK V-BRACE (INSTALLED) J13-A INTERCONNECT SYSTEM, INSTALLED COML ASSY, FLOATPLANE (NET CHG) EQUIPMENT KIT, PARTIAL OPTION B	0500083 0550320 0505053 0500036 0541115 0513415 0500083 0513003 0510012 0552162 0500083	21.7* 1.3 0.0 10.0 1.1 1.7 6.1 1.1 0.4 NEGL 20.4*	52.3* -41.4 - 77.0 49.1 17.8 45.5 26.2 69.6 62.5*
J30-A-2	FLOATPLANE EQUIPMENT KIT B WITH INTERNAL CORROSION PROOFING) F01-0 PLACARD, CORROSION RESIST, EXCH G31-A CABLES, CORROSION RESIST, INTERNAL G13-A RINGS, AIRPLANE HOISTING G07-A RINGS, AIRPLANE HOISTING G58-A STEP & HANDLE REFUELING J10-A FUSELAGE MODIFICATION (STOWED) J13-A COMB DECK V-BRACE (STOWED) INTERCONNECT SYSTEM (NET CHG) COML ASSY, NO INTERNAL CORROSION PROOFING)	0505053 0500036 0541115 0513415 0500083 0513003 0560012 0552162 0500083-17	0.0 0.0 10.0 1.1 1.7 6.1 1.1 0.4 NEGL 10.4*	- - 77.0 49.1 17.8 45.5 26.2 95.0 - 41.2*
J30-A-3	FLOATPLANE EQUIPMENT KIT B WITH INTERNAL CORROSION PROOFING) G07-A RINGS, AIRPLANE HOISTING G58-A STEP & HANDLE REFUELING J10-A FUSELAGE MODIFICATION (INSTALLED) J13-A COMB DECK V-BRACE (INSTALLED) INTERCONNECT SYSTEM (NET CHG) COML ASSY, FLOATPLANE (NET CHG)	0541115 0513415 0500083 0513003 0560012 0552162	1.1 1.7 6.1 1.1 0.4 NEGL	49.1 17.8 45.5 26.2 95.0 -