SECTION 6 WEIGHT & BALANCE/ EQUIPMENT LIST

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. . (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.
- 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.

(CONTINUOUS HISTORY OF CHANGES IN STRUCTURE OR EQUIPMENT AFFECTING WEIGHT AND BALANCE) SAMPLE WEIGHT AND BALANCE RECORD

				Ý	1/8	_	 _	_		 		 ,	,
A /	RUNNING PASIC EMPTY	WEIGHT	MOMENT /1000	事	1/17								
MBE	RUN	MEI	WT. (LB.)	1600	654								
JE NU			MOMENT /1000										
PAG	E	/ED (-)	ARM (IN.)										
SERIAL NO.80047 PAGE NUMBER /	WEIGHT CHANGE	REMOVED (-)	WT. (LB.)										
NO.8	VEIGHT		MOMENT /1000										
FRIAL	>	(+)	ARM (IN.)										
SE		(+) GEGGY	WT. (LB.)										
AIRPLANE MODEL $\mathcal{AP2}S$		DESCRIPTION OF ARTICLE OR	MODIFICATION	AS DELIVERED	Gewosen 24.06.2010								
IE MC	ITEM NO.		OUT		ι								
[AN	ITEN		Z		1								
AIRF		T V C	<u> </u>		0//0								

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Figure 6-2. Sample Weight and Balance Record

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 for this airplane as delivered from the factory can only be found in the plastic envelope carried in the back of this handbook.

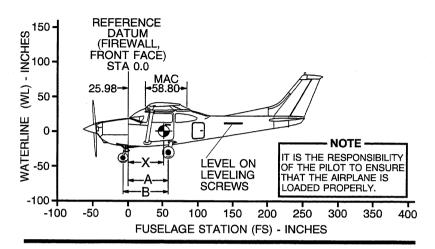
A WARNING

IT IS THE RESPONSIBILITY OF THE PILOT TO ENSURE THE AIRPLANE IS LOADED PROPERLY. OPERATION OUTSIDE OF PRESCRIBED WEIGHT AND BALANCE LIMITATIONS COULD RESULT IN AN ACCIDENT AND SERIOUS OR FATAL INJURY.

AIRPLANE WEIGHING PROCEDURES

- 1. Preparation:
 - a. Inflate tires to recommended operating pressures.
 - b. Defuel airplane. Refer to Model 182S Maintenance Manual.
 - c. Service engine oil as required to obtain a normal full indication. (9 quarts on dip stick.)
 - 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.
 - g. Remove all non-required items from airplane.
- 2. Leveling:
 - a. Place scales under each wheel (minimum scale capacity, 1000 pounds).
 - b. Deflate the nose tire and/or lower or raise the nose strut to properly center the bubble in the level (Refer to Figure 6-1).

AIRPLANE WEIGHING FORM



LEVELING PROVISIONS

LONGITUDINAL — LEFT SIDE OF TAILCONE AT FS 139.65 & 171.65

MEASURING A AND B

MEASURE A AND B PER PILOT'S OPERAT-ING HANDBOOK INSTRUCTIONS TO AS-SIST IN LOCATING CG WITH AIRPLANE WEIGHED ON LANDING GEAR

LOCATING CG WITH AIRPLANE ON LANDING GEAR

FORMULA for Longitudinal CG

(X) = (A) - $\frac{\text{(Nose Gear Net Weight)()} \times \text{(B)}}{\text{Nose and Main Landing Gear Weight Totaled ()}}$ = (

Inches) Aft of Datum

LOCATING PERCENT MAC

FORMULA for Percent MAC

CG Percent MAC = (CG Arm of Airplane) - 25.98

0.5880

AIRPLANE AS WEIGHED TABLE

POSITION	SCALE READIN	GSCALE DRIFT	TARE	NET WEIGHT
LEFT SIDE				
			Ī	
AIRPL	ANE TOTAL AS	WEIGHED		

BASIC EMPTY WEIGHT AND CENTER-OF-GRAVITY TABLE

BAOTO ENTITY WEIGHT AND	OLIVI LI I OI		IADEE
ITEM	WEIGHT (POUNDS)	CG ARM (INCHES)	MOMENT (INCH-POUNDS/1000)
AIRPLANE (CALCULATED OR AS WEIGHED) (INCLUDES ALL UNDRAINABLE FLUIDS AND FULL OIL)			
DRAINABLE UNUSABLE FUEL AT 6.0 POUNDS PER GALLON	24.0	48.1	1.2
BASIC EMPTY WEIGHT			

Figure 6-1. Airplane Weighing Form

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.

BAGGAGE TIE-DOWN

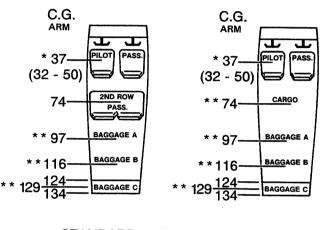
A nylon baggage net having tie-down straps is provided as standard equipment to secure baggage in the area aft of the rear seat (baggage areas A, B and C). Eight eyebolts serve as attaching points for the net. A placard on the baggage door defines the weight limitations in the baggage areas.

When baggage area A is utilized for baggage only, the four forward eyebolts should be used. When only baggage area B is used, the eyebolts just aft of the baggage door and the eyebolts above or below the shelf area may be used. When only baggage area C is utilized, the eyebolts above and below the shelf area should be used. When the cabin floor (baggage areas A and B) is utilized for baggage, the four forward eyebolts and the eyebolts mounted above or below the shelf area should be used. When there is baggage in areas B and C, the eyebolts just aft of the baggage door and the eyebolts above and below the shelf area should be used. When baggage is contained in all three areas, the two forward eyebolts on the cabin floor, the eyebolts just aft of the baggage door or the eyebolts at the bottom of the forward portion of the shelf area and the eyebolts near the upper forward surface of the shelf area should be used.

The rear bench seat can be removed to access the floorboard area of the rear cabin. Baggage may then be tied down using ten tiedown eyebolts to standard attach points located in the interior area of the airplane (shown in Figure 6-4, Sheet 2). 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 ten tiedowns is 140 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 items in the area of the rear seat and baggage area can be figured on the Loading Graph using the lines labeled 2nd Row Passengers or cargo.

LOADING ARRANGEMENTS



STANDARD SEATING 2ND ROW SEAT REMOVED

NOTES:

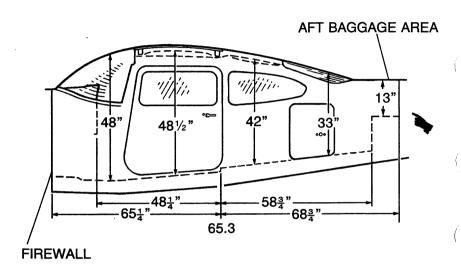
- 1. The usable fuel C.G. arm is located at station 46.5
- The aft baggage wall (approximate station 134) can be used as a convenenient interior reference point for determining the location of baggage area fuselage stations.

Figure 6-3. 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.

CABIN HEIGHT MEASUREMENTS



DOOR OPENING DIMENSIONS

	WIDTH (TOP)	WIDTH (BOTTOM)	HEIGHT (FRONT)	HEIGHT (REAR)
CABIN DOOR	32"	36 <u>1</u> "	41"	38 <u>1</u> "
BAGGAGE DOOR	15 <u>¾</u> "	15 <u>3</u> "	22"	20 <u>1</u> "

Figure 6-4. Internal Cabin Dimensions (Sheet 1 of 2)

CABIN WIDTH MEASUREMENTS

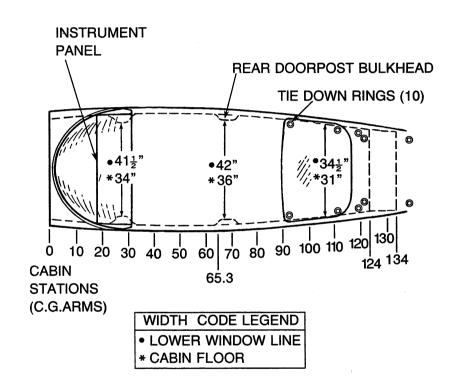


Figure 6-4. Internal Cabin Dimensions (Sheet 2 of 2)

		w	EIGHT AN TABUL	D MOMI	ENT	
	ITEM DESCRIPTION		/IPLE PLANE	YOUR AIRPLANE		
	·	Weight (lbs.)	Moment (Lb-ins. /1000)	Weight (lbs.)	Moment (Lb-ins. /1000)	
ı	 Basic Empty Weight (Use the data pertaining to your airplane as it is presently equipped. Includes unusable fuel and full oil) 	1927	71.9			
	2. Usable Fuel (At 6 Lbs./Gal.)					
	88 Gallons Maximum	528	24.6			
	Reduced Fuel (65 Gallons)					
I	3. Pilot and Front Passenger (Station 32 to 50)	340	12.6			
I	4. Second Row Passengers	200	14.8			
	Cargo Replacing Second Row Seats (Sta. 65 to 82)					
ŀ	5. *Baggage Area A (Station 82 to 109; 120 Lbs. Max.)	100	9.7			
I	6. *Baggage Area B (Station 109 to 124; 80 Lbs. Max.)	15	1.7			
	7. *Baggage Area C (Station 124 to 134; 80 Lbs. Max.)					
I	8. RAMP WEIGHT AND MOMENT	3110	135.3			
I	Fuel allowance for engine start, taxi and runup	-10	-0.5			
	10. TAKEOFF WEIGHT AND MOMENT (Subtract Step 9 from Step 8)	3100	134.8			

11. Locate this point (3100 at 134.8) on the Center of Gravity Moment Envelope, and since this point falls within the envelope, the loading is acceptable, providing that flight time is allowed for fuel burn-off to a maximum of 2950 pounds before landing.
 The maximum allowable combined weight capacity for baggage in

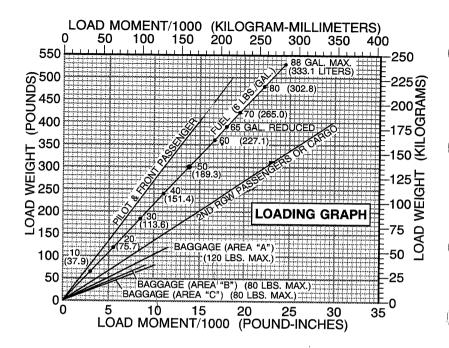
The maximum allowable combined weight capacity for baggage in areas A, B and C is 200 pounds. The maximum allowable combined weight capacity in areas B and C is 80 pounds.

Figure 6-5. Sample Loading Problem (Sheet 1 of 2)

	YOUR AIRPLANE						YOUR AIRPLANE		
Weight (lbs.)	Moment (Lb-ins, /1000)		Weight (lbs.)	Moment (Lb-ins, /1000)	Weight (lbs.)	Moment (Lb-ins, /1000)			
					·				
y **									

When several loading configurations are representative of your operations, it may be useful to fill out one or more of the above columns so that specific loadings are available at a glance.

Figure 6-5. Sample Loading Problem (Sheet 2 of 2)



NOTE: 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.

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Figure 6-6. Loading Graph

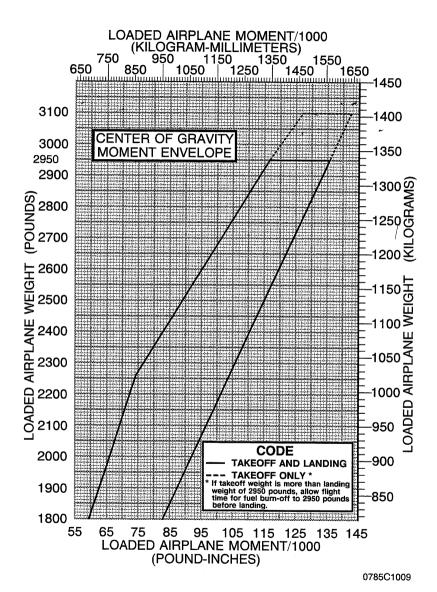


Figure 6-7. Center of Gravity Moment Envelope

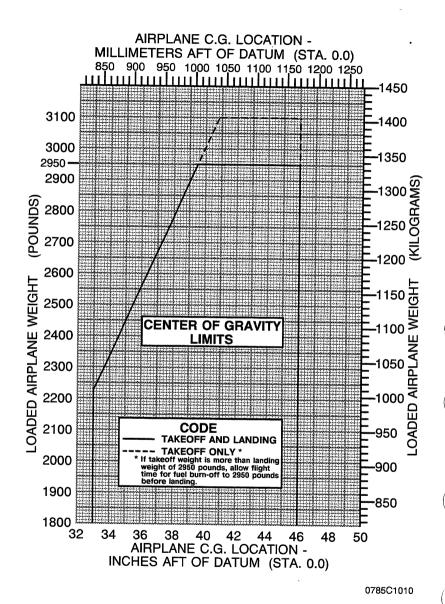


Figure 6-8. Center of Gravity Limits

COMPREHENSIVE EQUIPMENT LIST

The following figure (Figure 6-9) is a comprehensive list of all Cessna equipment which is available for the Model 182S airplane. This comprehensive equipment list provides the following information in column form:

In the ITEM NO column, each item is assigned a coded number. The first two digits of the code represent the assignment of the item within the Air Transport Association Specification 100 breakdown (11 for Paint and Placards; 24 for Electrical Power; 77 for Engine Indicating, etc...). These assignments also correspond to the Maintenance Manual chapter breakdown for the airplane. After the first two digits (and hyphen), items receive a unique sequence number (01, 02, 03, etc...). After the sequence number (and hyphen), a suffix letter is assigned to identify equipment as a required item, a standard item or an optional item. Suffix letters are as follows:

R = required items or 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

In the EQUIPMENT LIST DESCRIPTION column, each item is assigned a descriptive name to help identify its function.

In the REF DRAWING column, a Cessna drawing number is provided which corresponds to the item.

NOTE

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

In the WT LBS and ARM INS columns, information is provided on the weight (in pounds) and arm (in inches) of the equipment item.

NOTES

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.

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

Dec 1/97 6-17

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS.
	11 - PAINT and PLACARDS			İ
11-01-S	CORROSION PROOFING, INTERNAL		20.1	70.0
11-02-S	PAINT, OVERALL EXTERIOR		19.6*	92.9*
	-OVERALL WHITE		18.8	91.5
	-COLORED STRIPE DECALS		0.8	135.9
11-03-S	IFR DAY & NIGHT LIMITATIONS PLACARD	0505087-9	0.0	17.3
11-04-O	IFR DAY & NIGHT LIMITATIONS PLACARD, BRAZILIAN	1205085	0.0	17.3
11-05-O	IFR DAY & NIGHT LIMITATIONS PLACARD, GERMAN		0.0	17.3
	22 - AUTO FLIGHT			
22-01-S	SINGLE AXIS AUTOPILOT, KAP 140	3900007	8.4*	50.3*
	- KC 140 SINGLE AXIS COMPUTER	065-00176-2501	2.0	12.4
	- KS 271C ROLL SERVO	065-00179-0100	2.4	52.0
	 CABLE ASSY, ROLL ACTUATOR 	3924110-1	0.4	66.0
	- CABLE ASSY, KC 140 AUTOPILOT	3924104-1	0.9	2.0
	- KMC 100 CONFIGURATION MODULE	071-00073-5000		12.0
	- ANNUNCIATOR	CSEWCA-01		12.0
22-02-O	DUAL AXIS AUTOPILOT, KAP 140	3900008	14.0*	
	 KC 140 DUAL AXIS COMPUTER WITH ELECTRIC ELEVATOR TRIM 	065-00176-5001	2.0	15.0
	- KS-270C PITCH SERVO	0701145-1	2.4	207.7
	- KS-270C PITCH TRIM SERVO	0701146-1	2.4	207.7
	- KS-271C ROLL SERVO	065-00179-0100	2.4	12.4
	 CABLE ASSY, ROLL ACTUATOR 	3924110-1	0.4	66.0
	 CABLE ASSY, KC 140 AUTOPILOT 	3924104-1	0.9	2.0
	 KMC 100 CONFIGURATION MODULE 	071-00073-5000		12.0
	- ANNUNCIATOR	CSEWCA-03		12.0
	23 - COMMUNICATIONS			
23-01-S	STATIC DISCHARGE WICKS, SET OF 10	1201131-2	0.3	152.9
23-02-S	NAV/COM #1 INSTALLATION	3900006-1	11.4*	37.3*
	- KX 155A NAV/COM with GS	066-01032-0101	5.7	12.4
	- KI 209A CDI INDICATOR	066-03056-0011	1.2	13.9
	 CI128A VHF COMM ANTENNA #1 	3960113-8	0.5	63.3
	 HARDWARE AND CABLE ASSEMBLY 	3921100-1	4.0	76.5
23-03-S	NAV/COM #2 INSTALLATION	3900006-1	8.9*	19.0*
	- KX 155A NAV/COM no GS	066-01032-0201	5.1	12.4
	- KI 208 CDI INDICATOR	066-03056-0002	1.0	13.9
	- CI128A VHF COMM ANTENNA #2	3960113-9	0.5	63.3
	- ANTENNA COUPLER	3940405-1	0.2	12.0
	- HARDWARE AND CABLE ASSEMBLY	3921101-1	2.0	29.0

Figure 6-9. Equipment List Description (Sheet 1 of 6)

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS.
23-04-S	AUDIO/INTERCOM/MARKER BEACON INSTL	3900006-1	6.5*	50.2*
	- KMA 26 AUDIO PANEL	066-01155-0101	1.8	14.4
	- MARKER BEACON ANTENNA	3960193-1	0.8	131.5
	 HARDWARE AND CABLE ASSEMBLY 	3921108-1	3.9	52.8
	24 - ELECTRICAL POWER			
24-01-R ·	ALTERNATOR, 28 VOLT, 60 AMP	9910591-5	10.0	-33.4
24-02-R	BATTERY, 24 VOLT, 12.75 A.H. MANIFOLD TYPE	C614002-0101	23.2	132.1
24-03-R	ALTERNATOR CONTROL UNIT, 28 VOLT WITH HIGH VOLTAGE PROTECTION & LOW VOLTAGE SENSE	S3302, S3303	0.2	-1.5
24-04-S	BASIC AVIONICS KIT INSTALLATION	3900006-1	4.3*	55.5*
	 SUPPORT STRAPS INSTALLATION 	1270101-1,-3	0.1	10.0
	 AVIONICS COOLING FAN INSTL 	3940406-1	1.6	3.0
	 AVIONICS GROUND INSTALLATIONS 	3940358-1	0.1	41.0
	- CIRCUIT BREAKER PANEL INSTL	3930299-1	1.5	16.5
	- MICROPHONE INSTL	3970139-2	0.2	18.5
	- OMNI ANTENNA INSTL	3960142-8	0.5	252.1
	- OMNI ANTENNA CABLE ASSY INSTL	3950162-1	0.3	248.0
	25 - EQUIPMENT/FURNISHINGS			
25-01-R	SEAT, PILOT, ADJUSTABLE	0514212-3	33 .8	41.5
25-02-S	SEAT, COPILOT, AJUSTMENT	0514212-4	33.8	41.5
25-03-S	SEAT, REAR, TWO PIECE BACK CUSHION	0714065-1	50.0	82.0
25-04 - R	SEAT BELT AND SHOULDER HARNESS, INERTIA REEL, PILOT AND COPILOT	0714070-1	5.2	50.3
25-05-S	SEAT BELT AND SHOULDER HARNESS, INERTIA REEL, REAR SEAT	0714070-1	5.2	87.8
25-06-S	SUN VISORS, SET OF 2	0514166-3	1.2	33.0
25-07-S	BAGGAGE RETAINING NET	1215171-1	0.5	108.0
25-08-S	CARGO TIE DOWN RINGS, SET 0F 10	1211203-1	0.4	108.0
25-09-S	PILOT'S OPERATING CHECKLIST (STOWED IN INSTRUMENT PANEL MAP CASE)	0700765-1	0.3	15.0
25-10-R	PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL (STOWED IN PILOT'S SEAT BACK)	0700765-1	1.2	61.5
25-11-S	FUEL SAMPLING CUP	S2107-1	0.1	14.3
25-12-S	TOW BAR, NOSE GEAR (STOWED)	0501019-1	1.7	108.0
25-13-S	EMERGENCY LOCATOR TRANSMITTER	3940409-1	2.2*	134.8*
43	INSTL A Law Mark of	1	2.1	135.0
24.5.1a AMONITEC CH.145.04	- ELT TRANSMITTER Artex ME406	3000-11	1.7	135.0
1. S. T.	- ANTENNA AND CABLE ASSY	3003-45	0.4	133.0
7,₹₽	- HARDWARE	9940409 1-	0.1	138.0

Figure 6-9. Equipment List Description (Sheet 2 of 6)

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS.
	26 - FIRE PROTECTION			
26-01-S	FIRE EXTINGUISHER INSTALLATION	0501011-2	5.3*	29.0*
	- FIRE EXTINGUISHER	C421001-0201	4.8	29.0
	- MOUNTING CLAMP & HARDWARE	C421001-0202	0.5	29.0
	27 - FLIGHT CONTROLS			
27-01-S	DUAL CONTROLS INSTL, RIGHT SEAT	0706010-1	6.3*	12.9*
İ	- CONTROL WHEEL, COPILOT	0713377-2	2.0	26.0
	- RUDDER & BRAKE PEDAL INSTL, COPILOT	0760650-3	4.3	6.8
	31 - INDICATING/RECORDING SYSTEM			
31-01-S	CLOCK and OAT INDICATOR INSTALLATION	M803B-2	0.3*	16.7*
i	-TEMPERATURE PROBE	-0/28UIB	0.1	49.0
31-02-S	FLIGHT HOUR RECORDER	C664503-0103	0.5	17.0
31-03-R	ANNUNCIATOR PANEL AND LIGHTS	90-44001-1	0.5	15.9
31-04-R	STALL WARNING INDICATOR	0718007-1	1.0	17.5
	32 - LANDING GEAR			
32-01-R	WHEEL BRAKE AND TIRE, 6.00 X 6 MAIN	0741625-12	37.8*	58.6*
	- WHEEL ASSY (EACH)	C163001-0301	7.8	58.9
	- BRAKE ASSY (EACH)	C163030-0303	1.8	55.5
	- TIRE (EACH)	C262003-0204	8.0	58.9
	- TUBE (EACH)	C262023-0102	1.7	58.9
32-02-R	WHEEL AND TIRE ASSY, 5.00 X 5 NOSE	0540000-2	8.8*	-7.1*
	- WHEEL ASSY	1241156-12	2.8	-7.1
	- TIRE	C262003-0202	4.6	-7.1
	- TUBE	C262023-0101	1.1	-7.1
32-03-A	WHEEL FAIRING AND INSTALLATION	0741638-1	18.3*	44.1*
	- NOSE WHEEL FAIRING	0543079-7	3.9	-6.0
	- MAIN WHEEL FAIRINGS, SET OF 2	0541223-22, -23	10.3	60.2
	- BRAKE FAIRINGS, SET OF 2	0741641-14,-15	1.5	58.0
	- MOUNTING PLATE, SET OF 2	1241141-1,-2	0.9	60.0

Figure 6-9. Equipment List Description (Sheet 3 of 6)

SECTION 6 WEIGHT & BALANCE / EQUIPMENT LIST

ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS.
	33 - LIGHTS			
33-01-S	MAP LIGHT IN CONTROL WHEEL	0706010-1	0.2	21.5
33-02-S	COURTESY LIGHTS UNDER WING	0700615-18	0.7	61.7
33-03-S	NAVIGATION LIGHT DETECTORS	1221201-3,-4	0.0	38.7
33-04-S	FLASHING BEACON ON VERTICAL FIN TIP	0701042-5	0.8	253.1
33-05-S	WING TIP STROBE LIGHT INSTALLATION	0501027-6	3.4	38.7
33-06-S	LANDING AND TAXI LIGHT INSTLALATION	1221059-7,-8	2.2	26.8
	34 - NAVIGATION			
34-01-R	INDICATOR, AIRSPEED	S3287-2	0.7	16.2
34-02-R	ALTERNATE STATIC AIR SOURCE	0701028-4	0.2	15.5
34-03-R	ALTIMETER, SENSITIVE WITH 20 FT. MARKINGS, INCHES OF MERCURY	S3285-1	0.9	15.3
34-04-S	BLIND ALTITUDE ENCODER INSTALLATION	3940408-1	0.8	15.0
34-05-R	COMPASS INSTL, MAGNETIC	1213679-3	0.5	18.0
34-06-S	GYRO, INSTALLATION	0706009-1	6.2*	13.0*
	- DIRECTIONAL GYRO INDICATOR	S3330-1	2.5	14.0
	- ATTITUDE GYRO INDICATOR	S3326-1	2.2	13.8
	- HOSE AND MISC HARDWARE	0706009-1	1.5	10.0
34-07-S	TURN COORDINATOR INDICATOR	S3291-1	1.2	15.5
34-08-S	VERTICAL SPEED INDICATOR	S3289-1	0.7	15.3
34-09-S	ADF INSTALLATION	3900006-1	6.4*	20.4*
	- KR-87 ADF RECEIVER	066-01072-0014	3.2	12.4
	- KI 227 ADF INDICATOR	066-03063-0000	0.7	13.9
	- ADF ANTENNA	3960192-1	1.5	39.6
	- ADF CABLE ASSEMBLY	3922101-1	1.0	22.0
34-10-S	GPS INSTALLATION	3900006-1	5.5*	18.8*
	- KLN 89B GPS RECEIVER	066-01148-1111	3.3	12.7
	- GPS ANTENNA	3960194-1	0.6	43.4
	- GPS CABLE ASSEMBLY	3928101-1	1.6	22.0
34-11-5	MODE C TRANSPONDER INSTL	3900006-1	5.3*	18.8*
3 2 3	-KT-76C TRANSPONDER	 066-01156-0101 	3.1	12.7
2 3 E	- TRANSPONDER ANTENNA	3960195-1	0.2	86.5
24.5.2010 NAONITEC AU CH.145.0183/A	- HARDWARE AND CABLE ASSEMBLY	3923102-1	2.0	21.4
530	- Garmin Hodes XPDR GTX 330		4.2	12.7

Figure 6-9. Equipment List Description (Sheet 4 of 6)

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ITEM NO	EQUIPMENT LIST DESCRIPTION	REF DRAWING	WT LBS	ARM INS.
	37 - VACUUM			
37-01-S	DUAL VACUUM SYSTEM, ENGINE DRIVEN	0706009-1	5.9*	-1.2*
H	- VACUUM PUMP, AIRBORNE 211CC	E211CC	1.9	-5.0
	- VACUUM PUMP, AIRBORNE 212CW	E212CW	1.9	-5.0
	- COOLING SHROUD, AIRBORNE 2CDH	2CDH-A	0.1	-4.5
	- FILTER INSTALLATION	1201075-2	0.3	6.0
	- VACUUM RELIEF VALVE	2H3-45	0.3	2.1
	- MANIFOLD	1H5-25	0.5	-2.8
	- SUCTION GAGE/AMMETER	S3280-1	0.8	14.5
	53 - FUSELAGE			
53-01-S	REFUELING STEPS AND HANDLE INSTL	0701127-1	1.8	15.3
	56 - WINDOWS			
56-01-S	WINDOW, HINGED RIGHT DOOR	0711050-48	5.8	47.8
56-02-S	WINDOW, HINGED LEFT DOOR	0711050-47	5.8	47.8
	61 - PROPELLER			
61-01-R	PROPELLER ASSYEMBLY, 2-BLADE MCCAULEY B2D34C235/90DKB-8	P2357299-01	59.6	-47.4
61-02-R	SPINNER INSTALLATION, 2-BLADE	D-7267-2	4.4	-49.9
61-03-R	GOVERNOR, PROPELLER	C161031-0119	2.7	-42.5
61-04-O	PROPELLER ASSEMBLY, 3-BLADE MCCAULEY B3D36C431/80VSA-1	P4317296-01	76.1	-47.5
61-05-O	SPINNER INSTALLATION, 3-BLADE	D-7261-2A	4.5	-49.9
	71 - POWERPLANT			
71-01-R	FILTER, AIR INTAKE	CA3717	0.5	-35.2
	72 - ENGINES			
72-01-R	ENGINE, LYCOMING IO-540 AB1A5	0750619-1	400.4*	-23.6*
	73 - ENGINE FUEL and CONTROL			
73-01-S	EGT and CYLINDER HEAD TEMP INDICATOR	S3305-1	8.0	14.5
	77 - ENGINE INDICATING			
77-01-R	TACHOMETER INSTALLATION, RECORDING	S3286-2	1.0	16.2
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Figure 6-9. Equipment List Description (Sheet 5 of 6)

98-01-A 98-02-S 98-03-A REFUELING STEPS AND HANDL RUDDER PEDAL EXTENSIONS, SE SET OF 2 (INSTALLED ARM SHO STABILIZER ABRAISION BOOTS, 98-05-S 98-06-A 98-07-A TAILCONE LIFT HANDLES, SET OF TOW HOOK, SCHWEIZER III -NYLON RELEASE CORD, 18		2254003-31,-32		
- LEFT EXHAUST SYSTEM - RIGHT EXHAUST SYSTEM 79-01-R OIL COOLER INSTALLATION, STEWARNER 79-02-R OIL PRESSURE and OIL TEMPER INDICATOR 98 - MISCELLANEOU 98-01-A AIRCRAFT HOISTING RINGS, SE 98-03-A REFUELING STEPS AND HANDL 98-04-A 98-04-A STABILIZER ABRAISION BOOTS, 98-06-A 98-07-A TOW HOOK KIT (INSTALLED ARI -TOW HOOK, SCHWEIZER III -NYLON RELEASE CORD, 18		1 ' 1		
- RIGHT EXHAUST SYSTEM 79 - OIL 79-01-R OIL COOLER INSTALLATION, STI WARNER 79-02-R OIL PRESSURE and OIL TEMPER INDICATOR 98 - MISCELLANEOU 98-01-A AIRCRAFT HOISTING RINGS, SE 98-03-A REFUELING STEPS AND HANDL RUDDER PEDAL EXTENSIONS, F SET OF 2 (INSTALLED ARM SHO 98-04-A 98-05-S 98-06-A 98-07-A TAILCONE LIFT HANDLES, SET OF TOW HOOK, SCHWEIZER III -NYLON RELEASE CORD, 18		0054000 04	16.8*	-24.2*
79-01-R 79-01-R 79-01-R OIL COOLER INSTALLATION, STI WARNER 79-02-R OIL PRESSURE and OIL TEMPER INDICATOR 98-MISCELLANEOU 98-01-A 98-03-A AIRCRAFT HOISTING RINGS, SE REFUELING STEPS AND HANDL RUDDER PEDAL EXTENSIONS, F SET OF 2 (INSTALLED ARM SHO 98-04-A 98-05-S 98-06-A 98-07-A TAILCONE LIFT HANDLES, SET OF TOW HOOK, SCHWEIZER III -NYLON RELEASE CORD, 18		2254003-31	8.4	-24.2
79-01-R OIL COOLER INSTALLATION, STI WARNER 79-02-R OIL PRESSURE and OIL TEMPER INDICATOR 98 - MISCELLANEOU 98-01-A AIRCRAFT HOISTING RINGS, SE 98-02-S REFUELING STEPS AND HANDL RUDDER PEDAL EXTENSIONS, F SET OF 2 (INSTALLED ARM SHO 98-04-A 98-05-S STAINLESS STEEL CONTROL CA 98-06-A 170W HOOK KIT (INSTALLED ARI -TOW HOOK, SCHWEIZER III -NYLON RELEASE CORD, 18		2254003-32	8.4	-24.2
79-02-R OIL PRESSURE and OIL TEMPER INDICATOR 98-01-A AIRCRAFT HOISTING RINGS, SE 98-02-S REFUELING STEPS AND HANDLE PEDAL EXTENSIONS, FOR SET OF 2 (INSTALLED ARM SHOUND SHOUND SHOUND STAILLES STEEL CONTROL				
98-01-A 98-03-A 98-04-A 98-05-S 98-06-A 98-07-A INDICATOR 98 - MISCELLANEOU 98 - MISCELLANEOU 98-01-A AIRCRAFT HOISTING RINGS, SE REFUELING STEPS AND HANDL STEPS AND HANDL STABILIZER ABRAISION BOOTS, STAINLESS STEEL CONTROL CA TAILCONE LIFT HANDLES, SET OF TOW HOOK KIT (INSTALLED ARI -TOW HOOK, SCHWEIZER III -NYLON RELEASE CORD, 18	EWART	10610R	5.5	-11.4
98-01-A 98-02-S 98-03-A REFUELING STEPS AND HANDL 98-03-A RUDDER PEDAL EXTENSIONS, SE SET OF 2 (INSTALLED ARM SHO 98-05-S 98-06-A 98-07-A TAILCONE LIFT HANDLES, SET OF TOW HOOK, SCHWEIZER III -NYLON RELEASE CORD, 18	RATURE	S3279-1	8.0	14.5
98-02-S 98-03-A REFUELING STEPS AND HANDL 98-04-A 98-05-S 98-06-A 98-07-A STABILIZER ABRAISION BOOTS, 98-06-A TAILCONE LIFT HANDLES, SET OF TOW HOOK, SCHWEIZER III -NYLON RELEASE CORD, 18	98 - MISCELLANEOUS			
98-03-A RUDDER PEDAL EXTENSIONS, F SET OF 2 (INSTALLED ARM SHO 98-05-S STAINLESS STEEL CONTROL CA 98-06-A TAILCONE LIFT HANDLES, SET OF TOW HOOK KIT (INSTALLED ARI -TOW HOOK, SCHWEIZER III -NYLON RELEASE CORD, 18	T OF 4	0700612-1	1.5	45.6
98-04-A STABILIZER ABRAISION BOOTS, 98-05-S STAINLESS STEEL CONTROL CA 98-07-A TAILCONE LIFT HANDLES, SET OF 2 (INSTALLED ARI) 100 HOOK KIT (INSTALLED ARI) 100 HOOK, SCHWEIZER III 100 HOOK, SCHWEIZER III 100 HOOK, RELEASE CORD, 18	ES,SET OF 2	0701127-1	1.8	15.3
98-05-S STAINLESS STEEL CONTROL CA 98-06-A TAILCONE LIFT HANDLES, SET OF 98-07-A TOW HOOK KIT (INSTALLED ARI -TOW HOOK, SCHWEIZER II -NYLON RELEASE CORD, 18		0501082-1	2.9	8.0
98-06-A TAILCONE LIFT HANDLES, SET (98-07-A TOW HOOK KIT (INSTALLED ARI -TOW HOOK, SCHWEIZER II -NYLON RELEASE CORD, 18		0500041-3	2.7	206.0
98-07-A TOW HOOK KIT (INSTALLED ARI -TOW HOOK, SCHWEIZER II -NYLON RELEASE CORD, 18	ABLES	0760007-1	0.0	0.0
-TOW HOOK, SCHWEIZER II -NYLON RELEASE CORD, 18		2201009-1	1.0	186.5
-NYLON RELEASE CORD, 18	,	0712643-1	0.6*	230.0*
1		0500228-2	0.5	232.0
	FEET LONG	0500228-3	0.0	160.0
AVIONICS PACKAGE OP	TIONS			
STANDARD AVIONICS PACKAGE	•	3900007	55.9*	22.1*
- KX 155A NAV/COM with GLI	DE SLOPE	3900006-1	11.4	37.3
- KX 155A NAV/COM		3900006-1	8.9	19.0
- KLN 89 GPS-VFR		3900006-1	5.5	18.8
- MD 41-230 GPS-NAV SELEC	CTOR			l l
- KMA 26 AUDIO/INTERCOM/ BEACON INSTLLATION	MARKER	3930404-1	3.6	41.0
- KT 76C MODE C TRANSPO	NDER	3930404-1	4.5	15.2
- KAP 140 SINGLE AXIS AUT	OPILOT	3900007	8.4	50.3
- BASIC AVIONICS KIT INSTL	•	3900006-1	4.3	55.5
OPTIONAL NAV I AVIONICS PACK (STANDARD AVIONICS PACKAGI FOLLOWING:) (NET CHANGE)		3900008	12.0*	80.4*
- KLN 98B GPS-IFR (EXCHAN -MD 41-228 GPS-NAV SELEC ANNUNCIATOR (EXCHANGE	CTOR,	3900006-1	0.0	18.8
- KR 87 ADF SYSTEM		1		i i
- KAP 140 TWO AXIS AUTOP ELECTRIC TRIM (EXCHANGE		3900006-1	6.4	20.4

Figure 6-9. Equipment List Description (Sheet 6 of 6)

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