$$C_T = \frac{1}{1/C_1 + 1/C_2 + 1/C_3...}$$

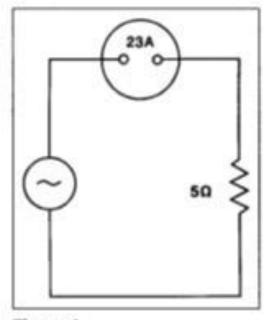
Figure 1. Equation

$$C_T = \frac{1}{1/C_1 + 1/C_2 + 1/C_3}$$

Figure 2. Equation

$$L_T = \frac{1}{1/L_1 \, + \, 1/L_2 \, + \, 1/L_3...}$$

Figure 3. Equation



$$Z = \sqrt{R^2 + (X_L - X_C)^2}$$

- Z =Impedance
- R =Resistance
- X_L Inductive Reactance X_C Capacitive Reactance

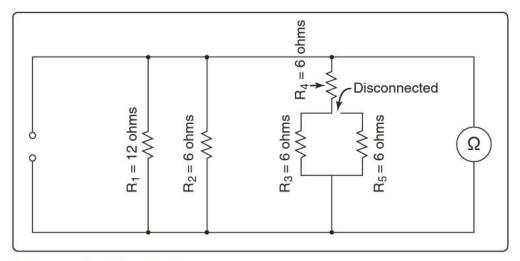


Figure 6. Circuit diagram

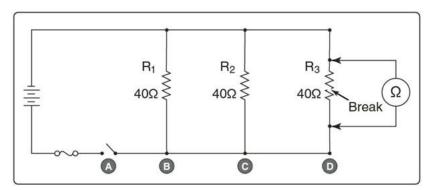


Figure 7. Circuit diagram

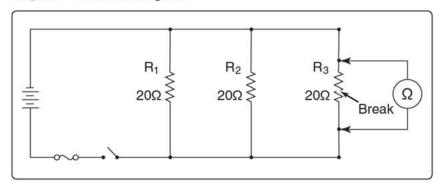


Figure 8. Circuit Diagram

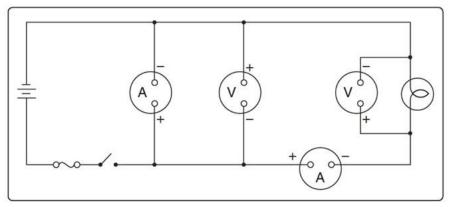


Figure 9. Circuit diagram

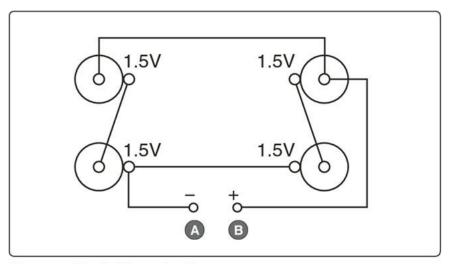


Figure 10. Battery circuit

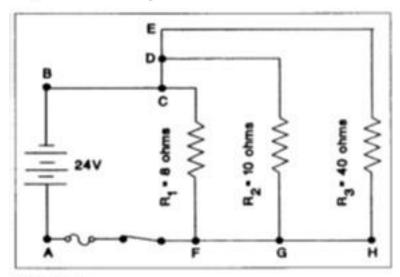


Figure 11

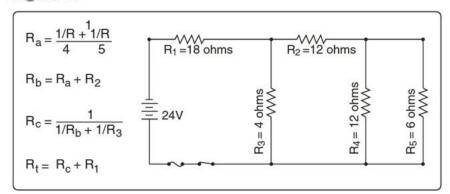


Figure 12. Circuit diagram

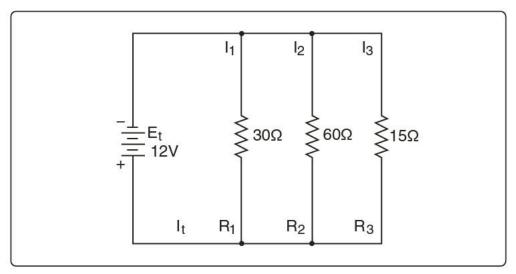


Figure 13. Circuit diagram

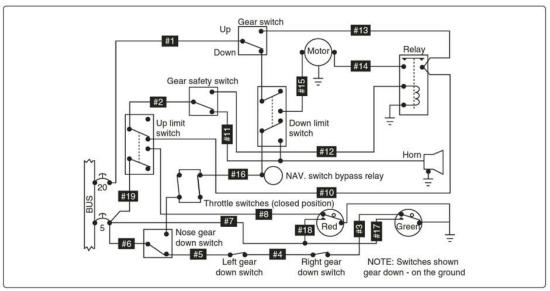


Figure 15. Landing gear circuit

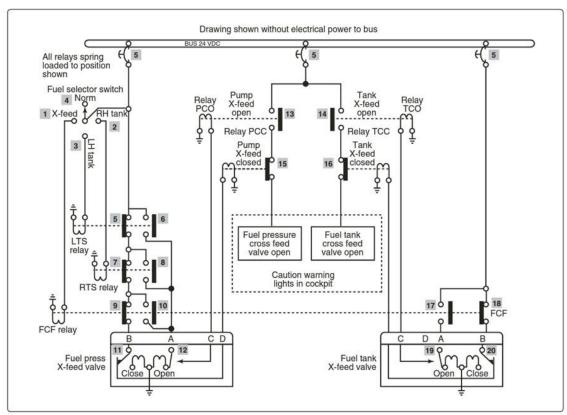


Figure 16. Fuel system circuit

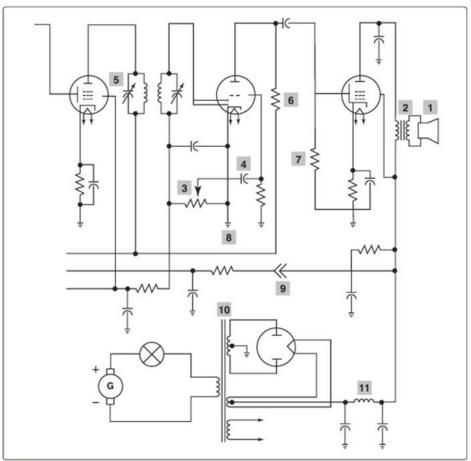


Figure 17. Electrical symbols

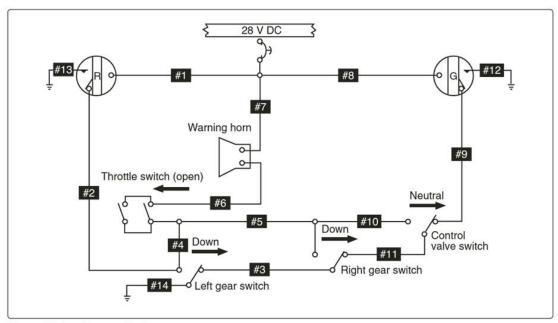


Figure 18. Landing gear circuit

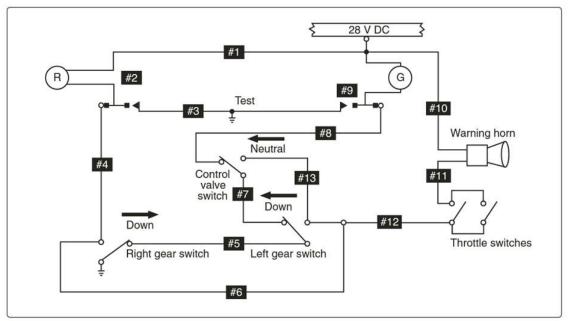


Figure 19. Landing gear circuit

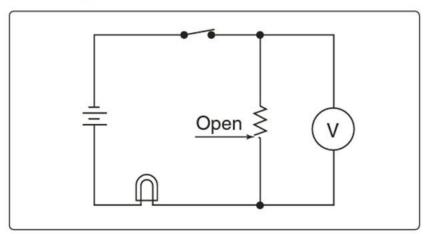


Figure 20. Circuit diagram

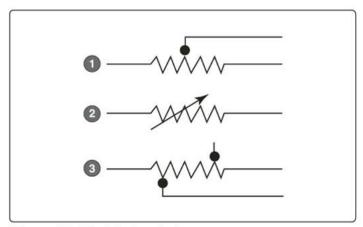


Figure 21. Electrical symbols

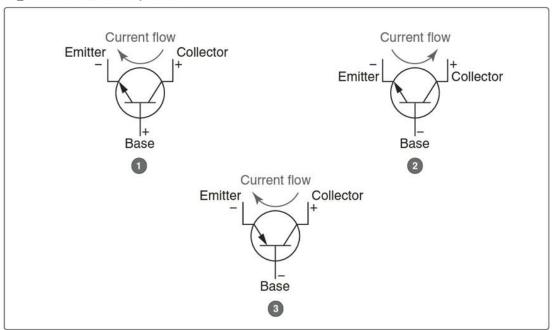


Figure 22. Transistors

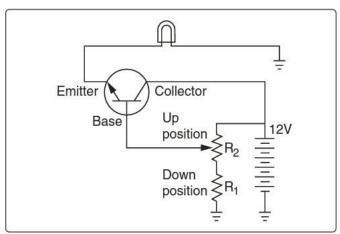


Figure 23. Transistorized circuit

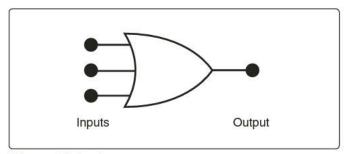


Figure 24. Logic gate

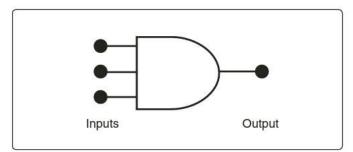


Figure 25. Logic gate

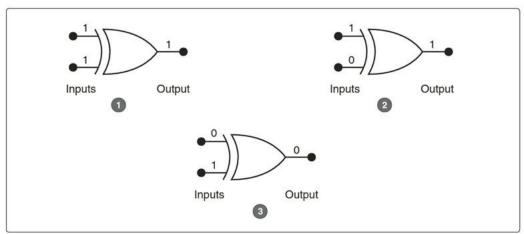


Figure 26. Logic gate

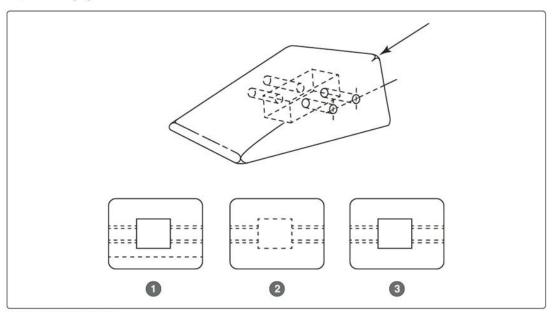


Figure 27. Object views

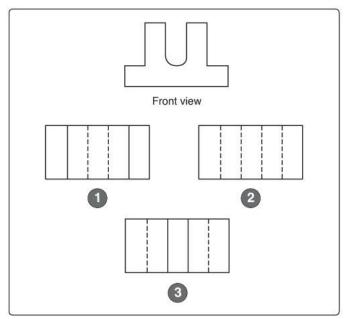


Figure 28. Object views

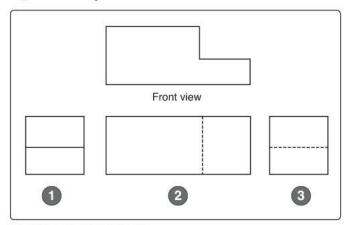


Figure 29. Object views

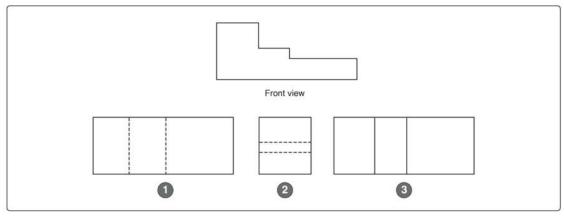


Figure 30. Object views

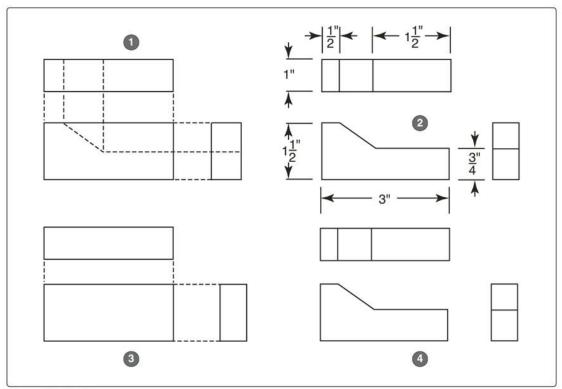


Figure 31. Sketches

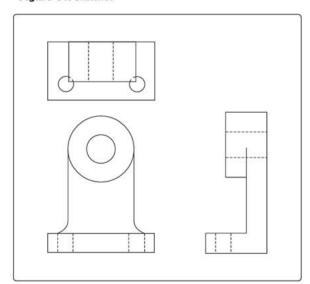


Figure 32. Sketches

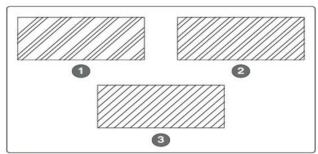


Figure 33. Material symbols

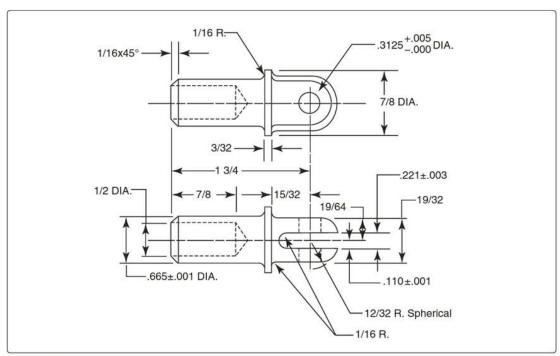


Figure 34. Aircraft drawing

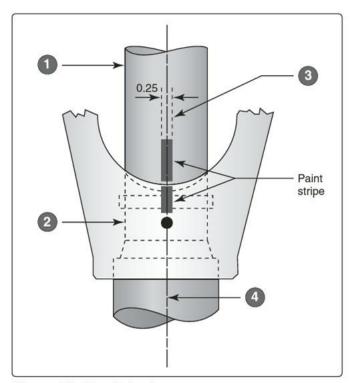


Figure 35. Aircraft drawing

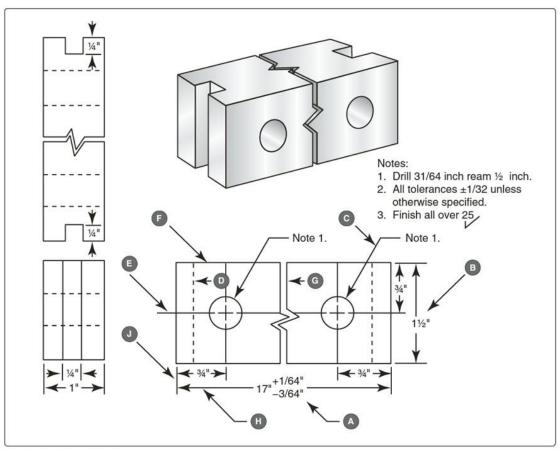


Figure 36. Aircraft drawing

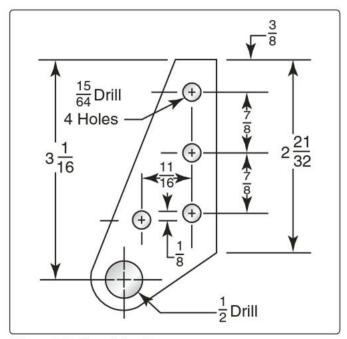


Figure 37. Aircraft drawing

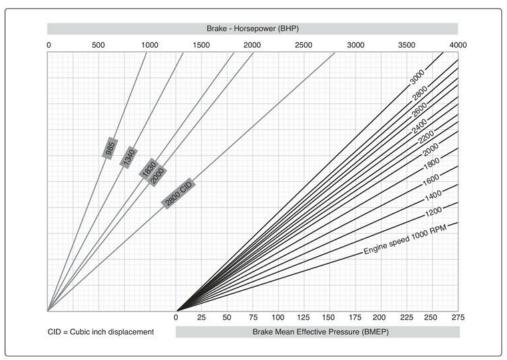


Figure 38. Performance chart

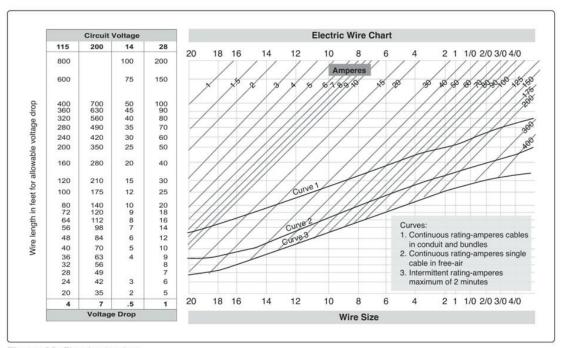


Figure 39. Electric wire chart

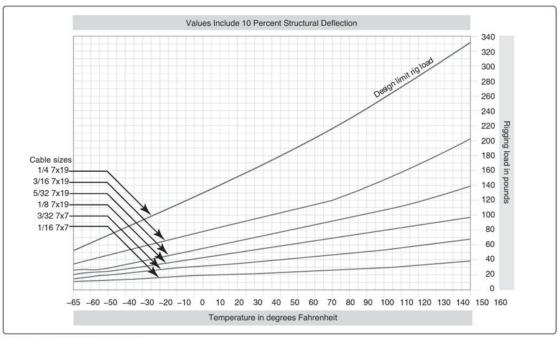


Figure 40. Cable tension chart

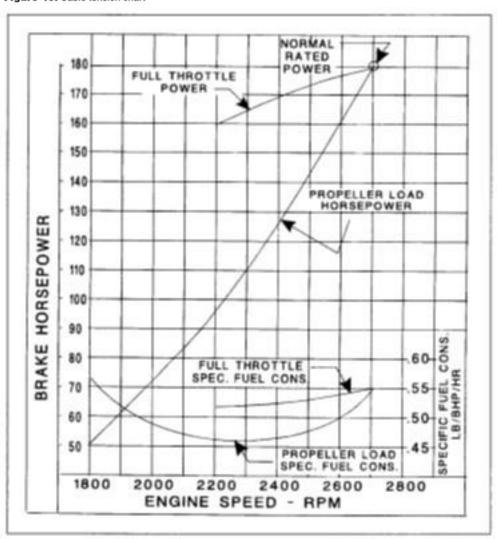


Figure 41

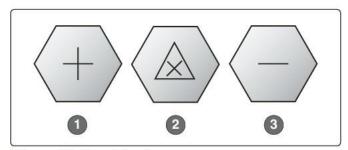


Figure 42. Aircraft hardware

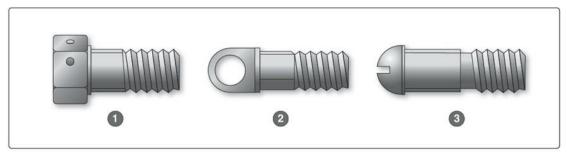


Figure 43. Aircraft hardware



Figure 44. Welds

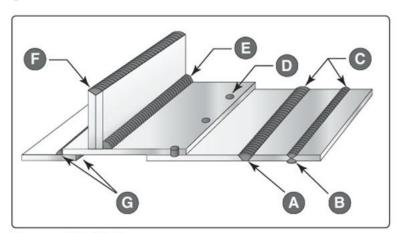


Figure 45. Welds

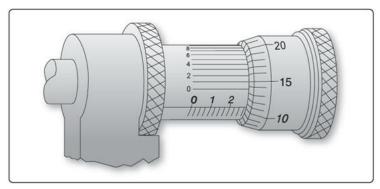


Figure 46. Precision measurement

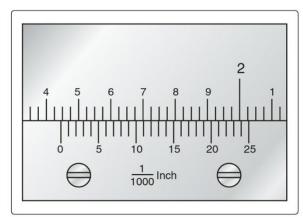


Figure 47. Precision measurement

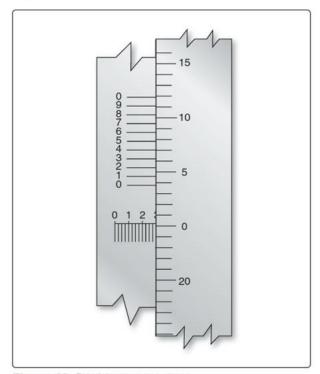


Figure 48. Precision measurement

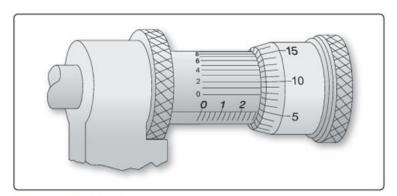


Figure 49. Precision measurement

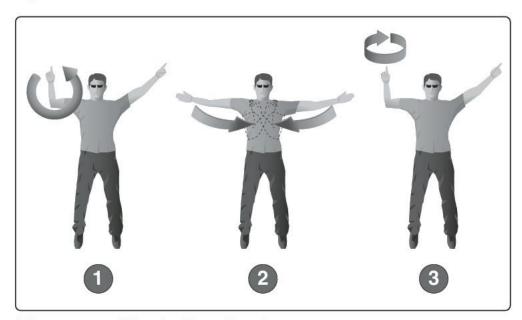


Figure 50. Marshalling signals

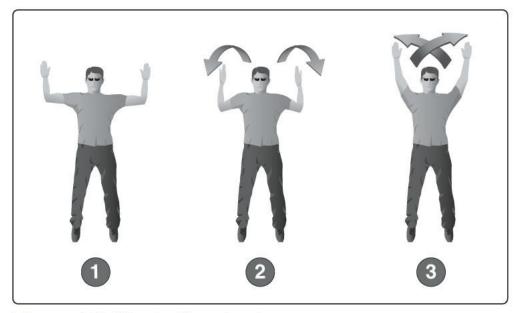


Figure 51. Marshalling signals

$$(\sqrt{(-4)^0+6+(\sqrt[4]{1296})(\sqrt{3})^2}=$$

Figure 52. Equation

$$\frac{\sqrt[2]{31} + \sqrt[2]{43}}{(17)^2} =$$

Figure 53. Equation

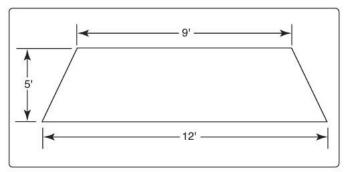


Figure 54. Trapezoid area

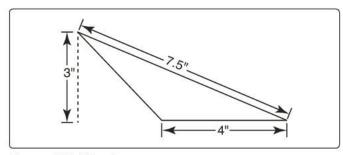


Figure 55. Triangle area

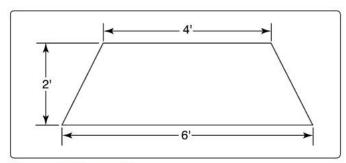


Figure 56. Trapezoid area

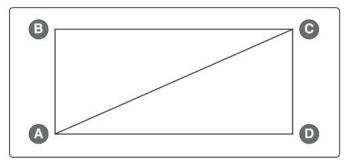


Figure 57. Triangle area

$$\frac{(-35+25)(-7)+(\pi)(16^{-2})}{\sqrt{25}} =$$

Figure 58. Equation

$$\frac{-4)125}{-6)-36} =$$

Figure 59. Equation

$$\frac{(-5+23)(-2)+(3^{-3})(\sqrt{64})}{-27\div9} =$$

Figure 60. Equation

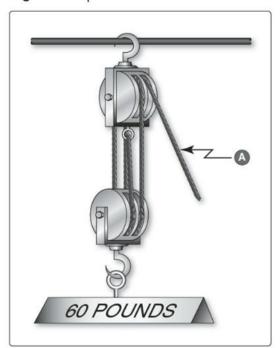


Figure 61. Physics

The use of this document shall be restricted to conveyance of information to customers of vendors only. Neither classified nor unclassified documents may be reproduced without the				custome nor uncle	ers of essiled		Speedwind aircraft engineering section last chance airport anytown				TAH		
LET.			BY		Appr.	992-148					DFTSMIN.	S. Linz	S. Line
Α	MAT'L THK	NESS				Scale full	No req per Airplane		A/C	EFF	DWG. Checker	I. Wright.	D Nong
В	ADD-200					Break all sharp edges	1 No req	-200 3	36P 36P	088-All 001-087	FAX D.E.A	G. Winn	9. 10im
							1	-200		001-All	DESIGN	100000000000000000000000000000000000000	R. Eam
											PROJECT	T. Smith	O. Smil
	REU'd. PE	H ASS	EM.										
_	REQ'd, PER ASSE			1.		Unless otherwise noted	For continuation see zone			zone			
			200	-100	All		N			FIRST	REL	EASE	
Т				0	0	DASH NUMBERS SHOW	N DASH	NUMB	ERS O	PPOSITE	UNIT W	-	3. AREA
						Part number		NAM	E	stock	MAT'L DESCR	MATL	Zon
Alea I					1	-101	Dou			.040 sheet	CLAD AL		
				1	-	-102	Dou	bler		Sheet .040 sheet	7075-0 AL		
				2	2	-103	Clip		.040	SSATA.	_	_	
Area 1				37	37	NAS1097-4-5 NAS1097-4-4	Rive			_		_	-
				5	5	NAS1473-3A Domed NAS1097-4-5 Rivet		Nutplate			-	-	
				8	8	NAS1097-3-4	Rivet			_		_	_
				4	4	MS20470AD-4-4	Rive	-				REV.	. B

Figure 62. Maintenance data - part 1 of 3

@ASA

AREA 2

GENERAL NOTES - 100

- 1. ALL BENDS +/- .5 deg.
- 2. All holes +/- .003.
- 3. Apply Alodine 1,000.
- 4. Prime with MIL-P-23377 or equivalent.
- 5. Trim S-1 C just aft of the clip at STA. 355.750 and forward of the front face of the STA. 370.25 frame and remove from the airplane.
- 6. Position the -101 doubler as shown. Install wet with NAS1097AD-4-4 and -4-5 rivets and a faying surface seal of PR 1,422. Pick up the rivet row that was in S-1 C and the aft rivets in sta. 370.25. Tie doubler into front frame with clips as shown using MS20470AD-4-4 rivets through the clips and the frame.
- 7. Install 4 NAS1473-3A nutplates with NAS1097-3-4 rivets through the skin and doubler to retain the antenna.
- 8. Strip paint and primer from under the antenna footprint.
- 9. Treat skin with Alodine 1,000.
- 10. Install antenna and apply weather seal fillet around antenna base.

AREA 3

GENERAL NOTES - 200

Note: P.S. = Process Specification IAW = in accordance with

- 1. ALL BENDS IAW P.S. 1,000.
- 2. All holes IAW P.S. 1,015.
- 3. Heat treat -102 to -T6 IAW P.S. 5,602.
- 4. Alodine IAW P.S. 10,000.
- 5. Prime IAW P.S. 10,125.
- 6. Trim S-1 C just aft of the clip at STA. 355.750 and forward of the front face of the STA. 370.25 frame and remove from airplane.
- 7. Position the -102 doubler as shown. Install wet with NAS1097AD-4-4 and -4-5 rivets, and a faying surface seal IAW RS. 41,255. Pick up the rivet row that was S-1 C and the aft rivets in STA, 370.25. Add two edge rows as shown. Tie doubler into front frame with clips as shown using MS20470AD-4-4 rivets through the clips and the frame.
- 8. Install 4 NAS1473-3A nutplates with NAS 1097-3-4 rivets through the skin and doubler to retain the antenna.
- 9. Strip paint and primer from under the antenna footprint.
- 10. Treat skin IAW P.S. 10,000.
- 11. Install antenna and apply weather seal fillet around antenna base.

Figure 62A. Maintenance data - part 2 of 3

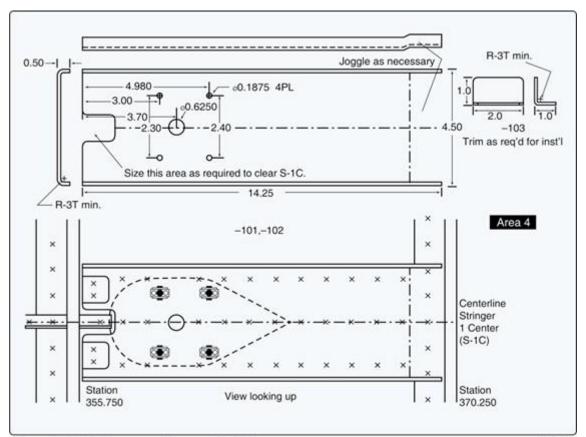


Figure 62B. Maintenance data - part 3 of 3

©ASA

The following is the compliance portion of an Airworthiness Directive.

"Compliance required as indicated, unless already accomplished:

- Aircraft with less than 500 hours total time in service: Inspect in accordance with instructions below at 500 hours total
 time, or within the next 50 hours time in service after the effective date of this AD, and repeat after each subsequent 200
 hours in service.
- II. Aircraft with 500 hours through 1,000 hours total time in service: Inspect in accordance with instructions below within the next 50 hours time in service after the effective date of this AD, and repeat after each subsequent 200 hours in service.
- III. Aircraft with more than 1,000 hours time in service: Inspect in accordance with instructions below within the next 25 hours time in service after the effective date of this AD, and repeat after each subsequent 200 hours in service."

Figure 63. Airworthiness directive excerpt

$$R_t = E^2/P$$

Figure 64. Resistance total

EASA

1.
$$3.47 \times 10^4 = 34,700$$
.

$$2. 2(4^{10}) = 2,097,152.$$

Figure 65. Scientific notation

$$-4 + 6 + 10^3 (\sqrt{1296}) =$$

Figure 66. Equation

$$\frac{\sqrt{31} + \sqrt{43}}{(17)^2} =$$

Figure 67. Equation

DASA

$$2.4.631 \times 10^{5}$$

Figure 68. Attendible acceler

EASA

$$(\sqrt{100} + \sqrt{36} - \sqrt{16}) =$$

Figure 69. Equation

1.
$$(\sqrt{31}) + (\sqrt{43}) \div 17^2$$

2.
$$(\sqrt{31}) + \sqrt{43}) \div 17^2$$

3.
$$(\sqrt{31}) + (\sqrt{43}) - 17^2$$

Figure 70. Alternative answer

$$V = 1/6\pi D^3$$

Figure 71. Volume of a sphere