

# WIRE BOOK FOR VAN'S RV 10

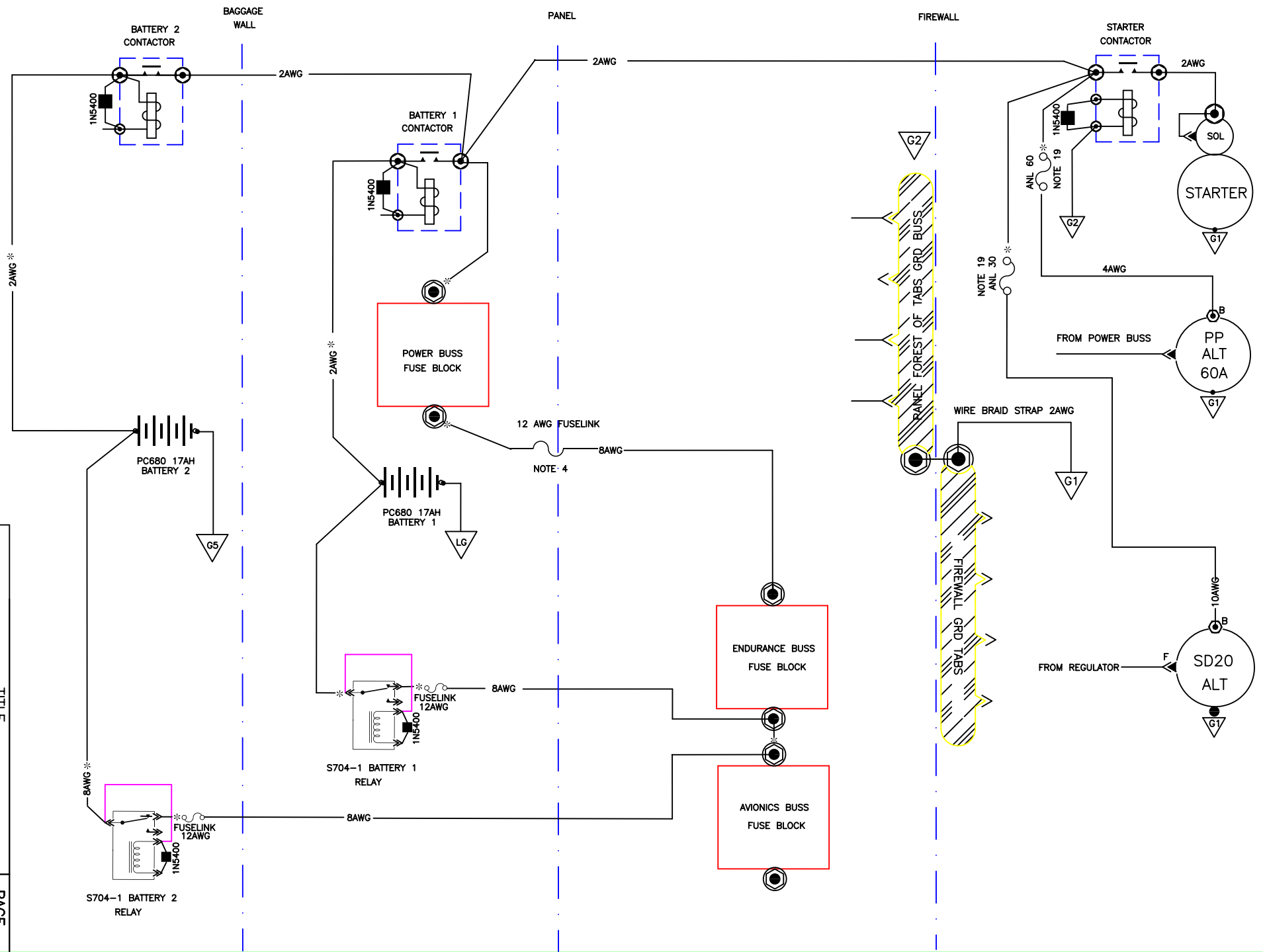
*VH-JPJ*

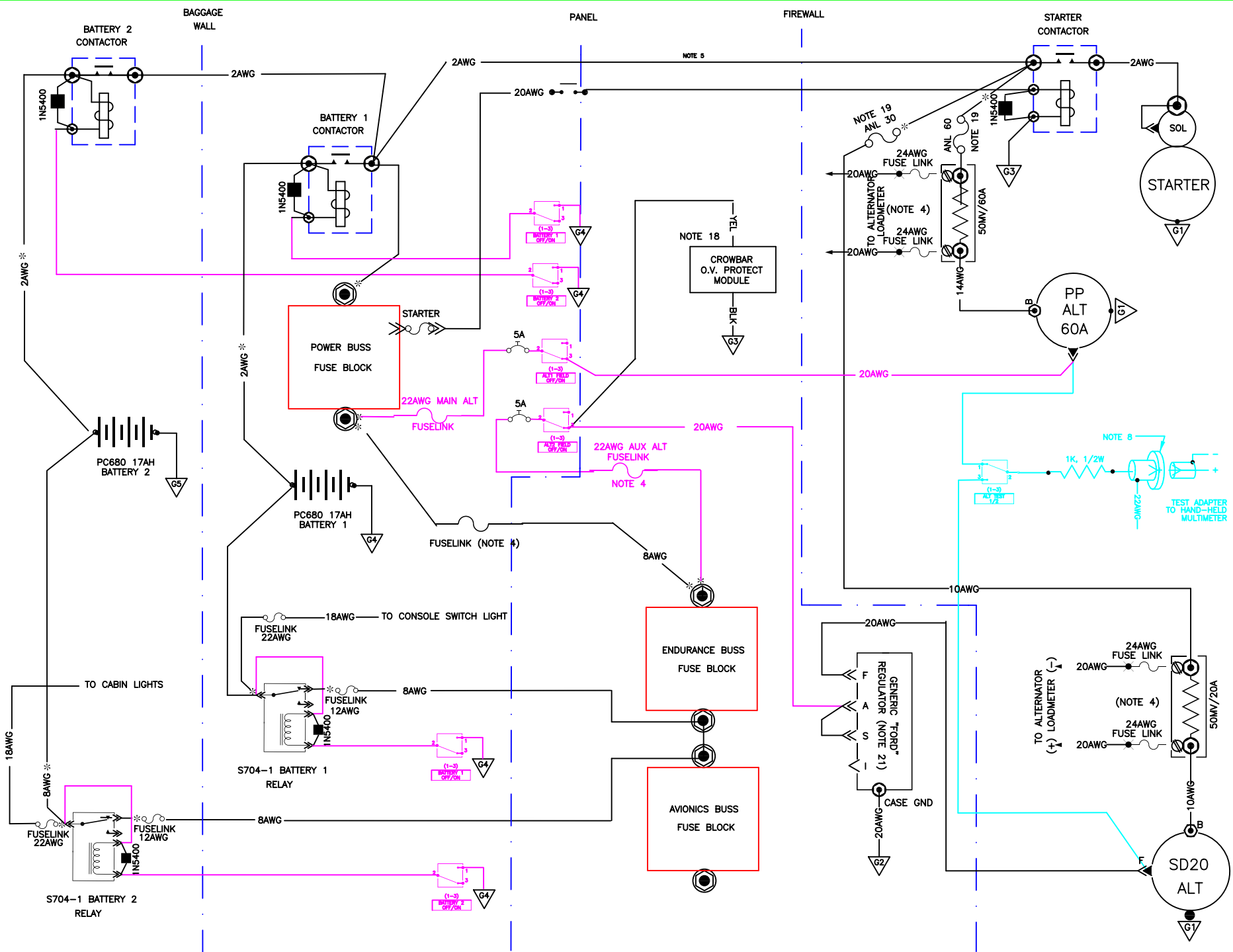
TITLE	PAGE
Version 7.06 – March 2008	1

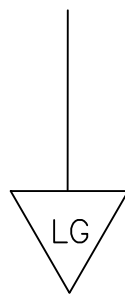
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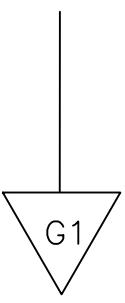
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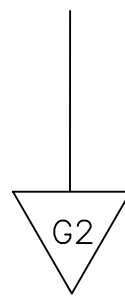




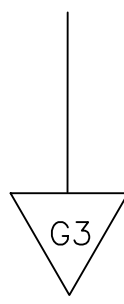
LOCAL GROUND



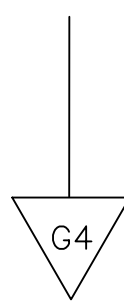
ENGINE GROUND



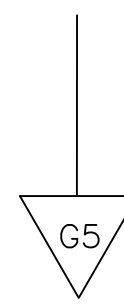
FIREWALL GROUND



PANEL GROUND



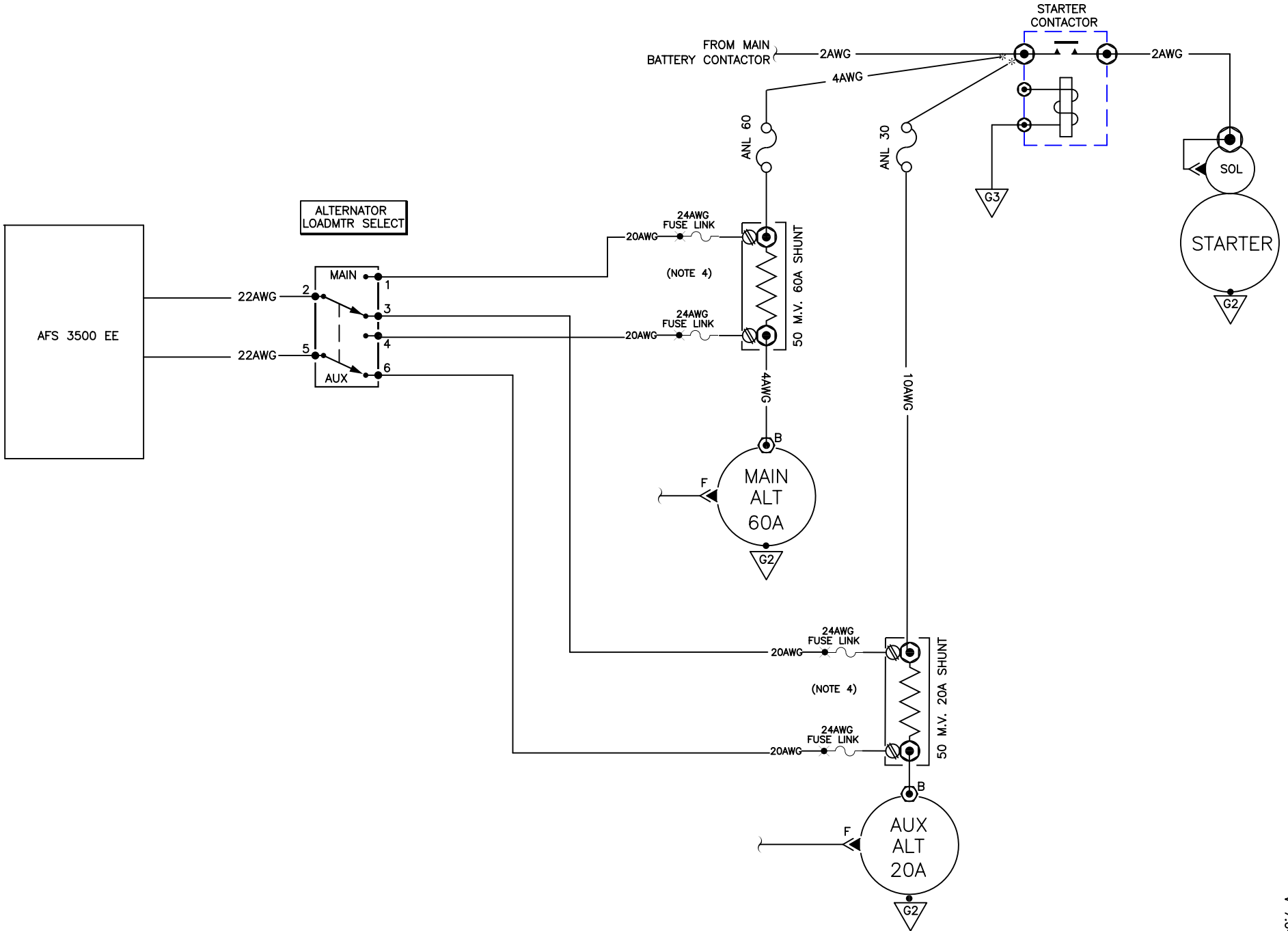
LOCAL GROUND  
FRONT BATTERY



LOCAL GROUND  
REAR BATTERY

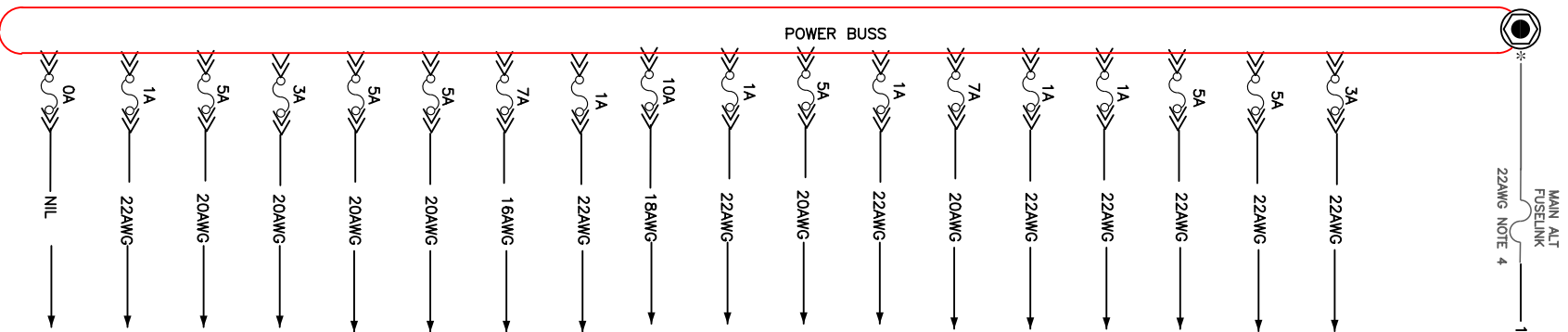
TITLE	PAGE
GROUND SYMBOLS	4.01





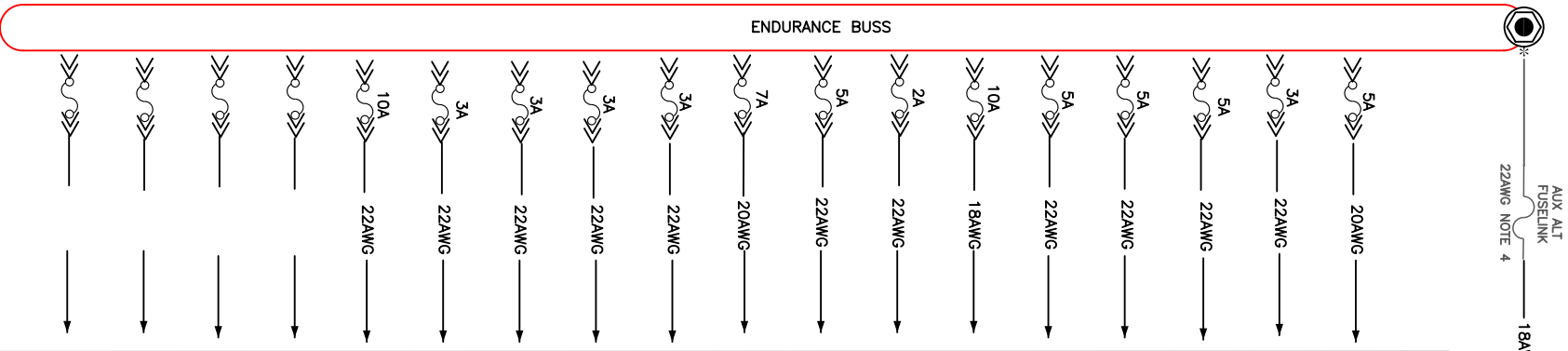
TITLE	ALTERNATOR LOADMETER
PAGE	4.02

# POWER BUSS



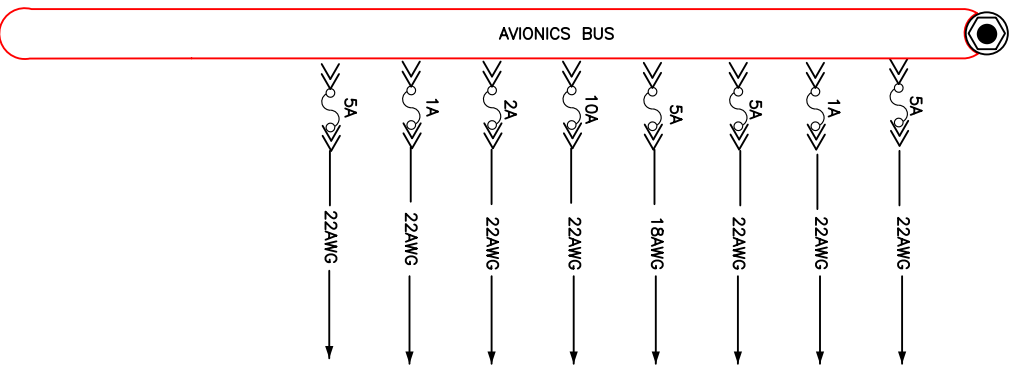
ACCESSORY	PAGE No	COMMENTS
STARTER CONTACTOR	7.401	
BATTERY 1 CONTACTOR	7.401	
BATTERY 2 CONTACTOR	7.401	
FUEL GAUGE LEFT	7.403	
FUEL GAUGE RIGHT	7.403	
FUEL BOOST PUMP	7.403	
FUEL FLOW TRANSDUCER	7.403	
FLAP MOTOR	7.404	
FLAP POSITIONING SYSTEM	7.404	
PILOT HEAT GRETZ	7.405	
ANGLE of ATTACK - SPORT	7.405	
STROBE LIGHTS CREATVAIR	7.406	
HID LANDING LIGHT LEFT	7.407	
HID LANDING LIGHT RIGHT	7.407	
NAVIGATION LIGHTS	7.408	
WX 500	7.409	
SWITCH FLOOD LIGHTING	7.410	
ELT		

# ENDURANCE BUSS

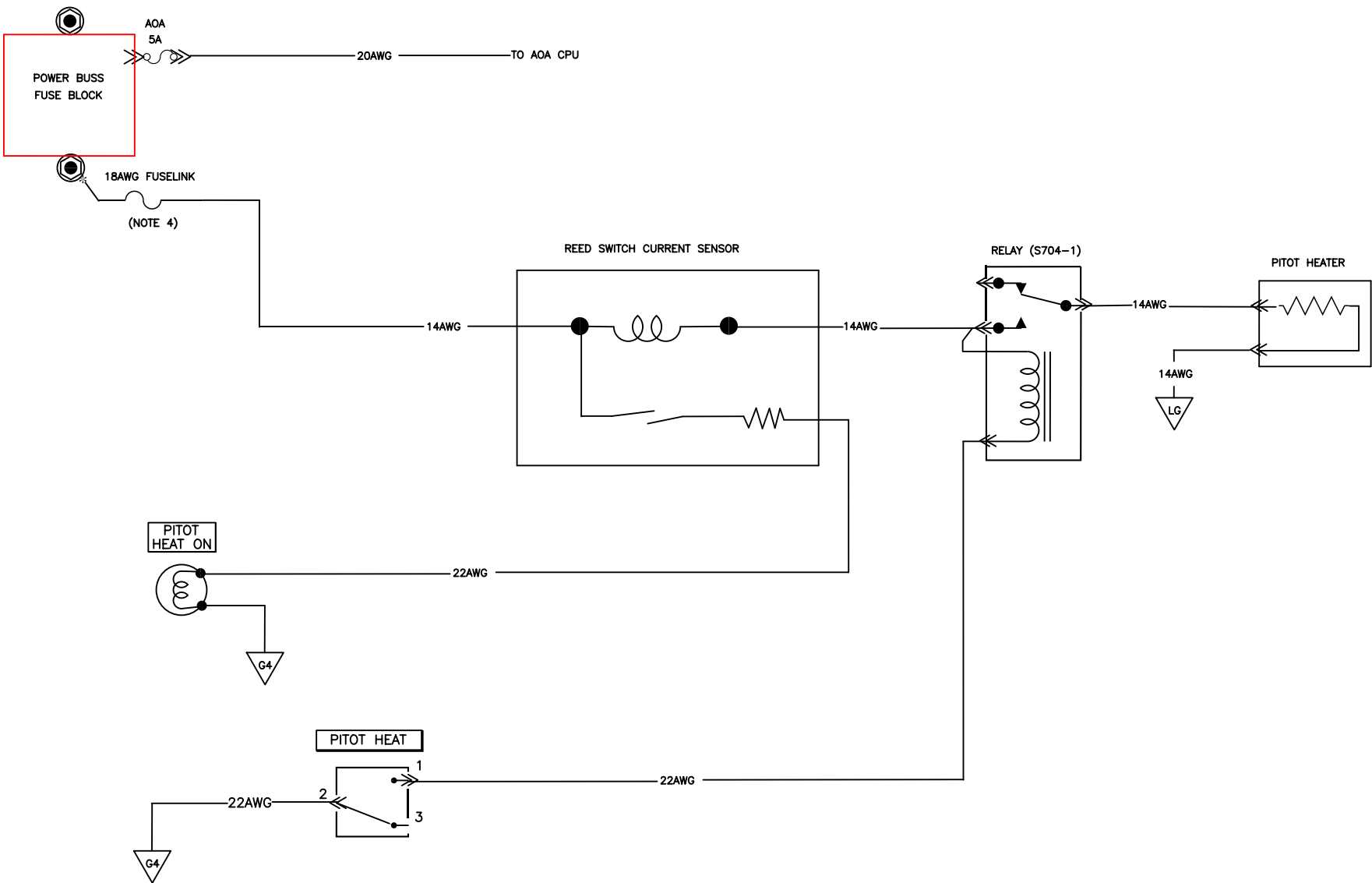


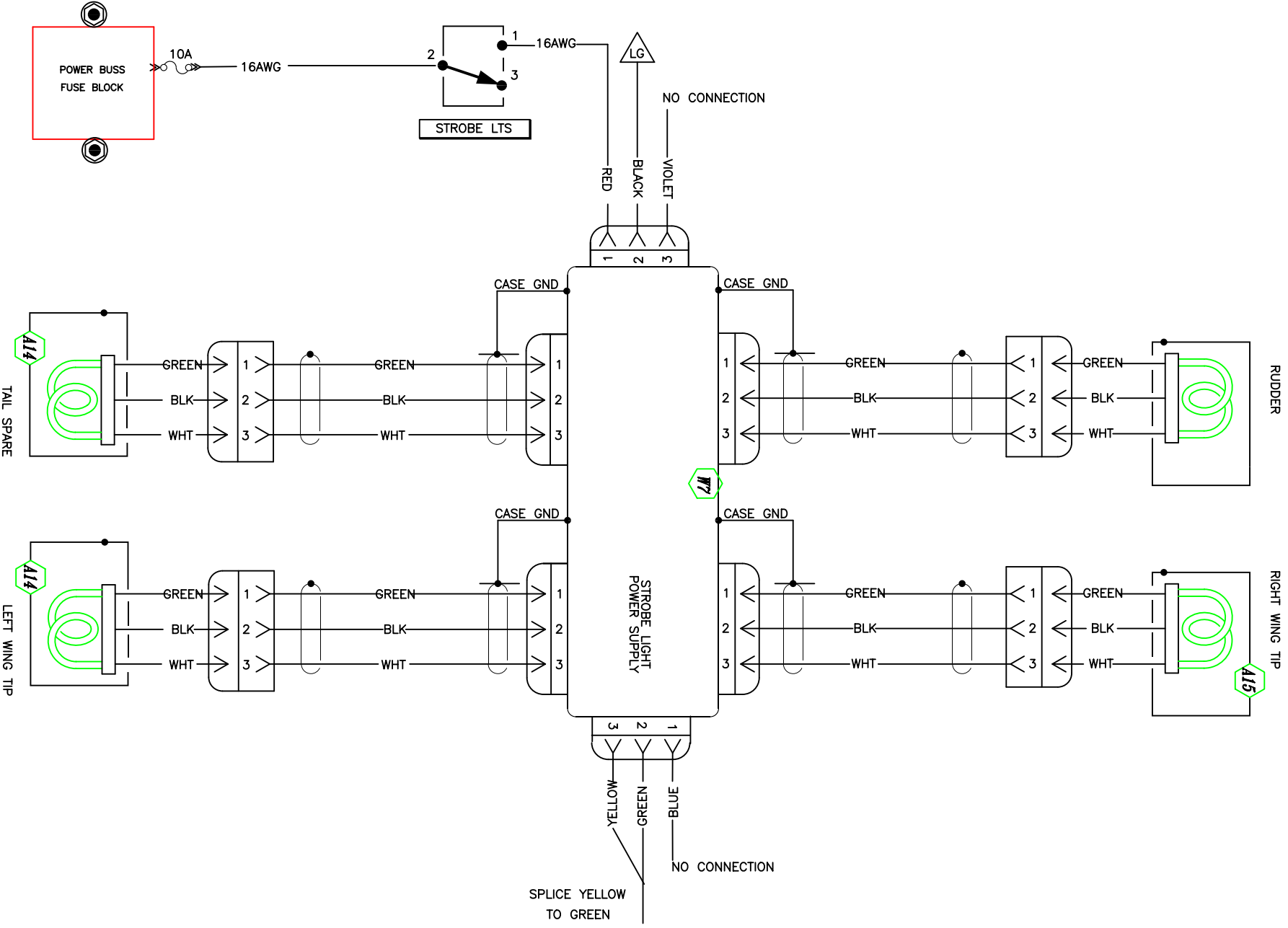
ACCESSORY	PAGE No	COMMENTS
AFS 3500 EF	7.501	
AFS 3500 EF ARINC POWER	7.501	
PSE PMA 8000B AUDIO PANEL	7.502	
GARMIN GNS 530W MAIN 1	7.503	
GARMIN GNS 530W MAIN 2	7.503	
GARMIN GNS 530W COMM	7.503	
GARMIN GNS 530W NAV FLAG	7.503	
GARMIN GTX 327 TRANSPONDER	7.504	
TT DIGIFLIGHT II VSGV	7.505	
AUTOPILOT PITCH SERVO	7.505	
AUTOPILOT ROLL SERVO	7.505	
PITCH SERVO	7.506	
ROLL SERVO		
INSTRUMENT LIGHTS		
SPARE		
SPARE		
SPARE		
SPARE		
TOTALS		

# AVIONICS BUSS

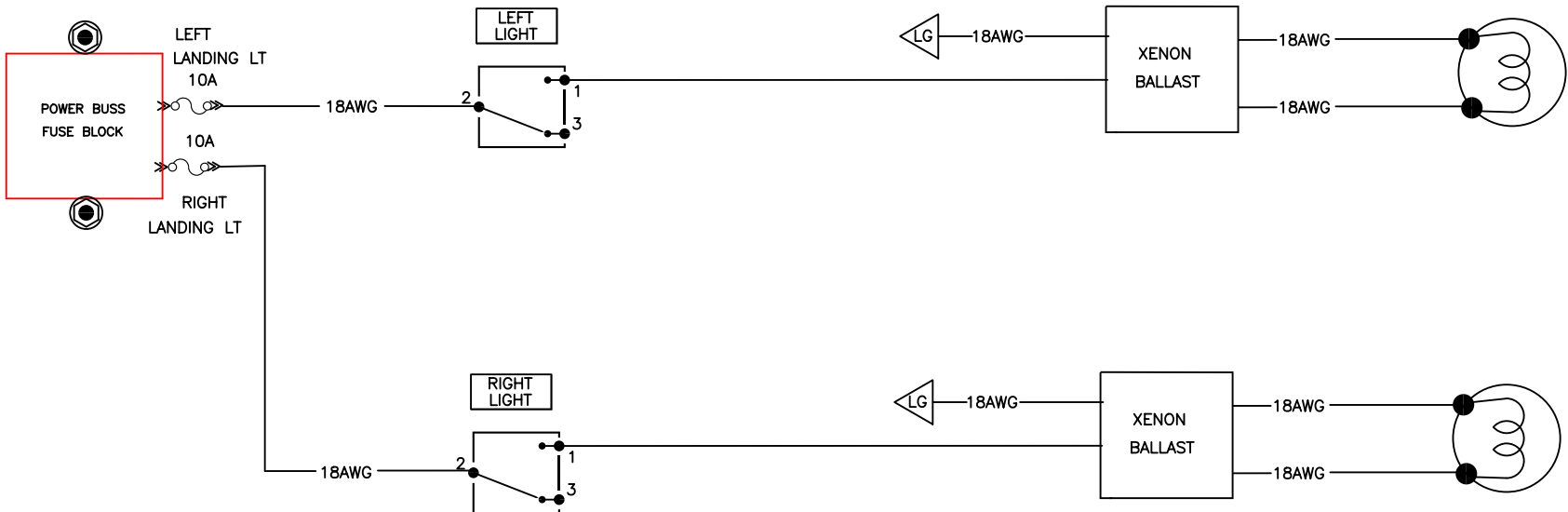


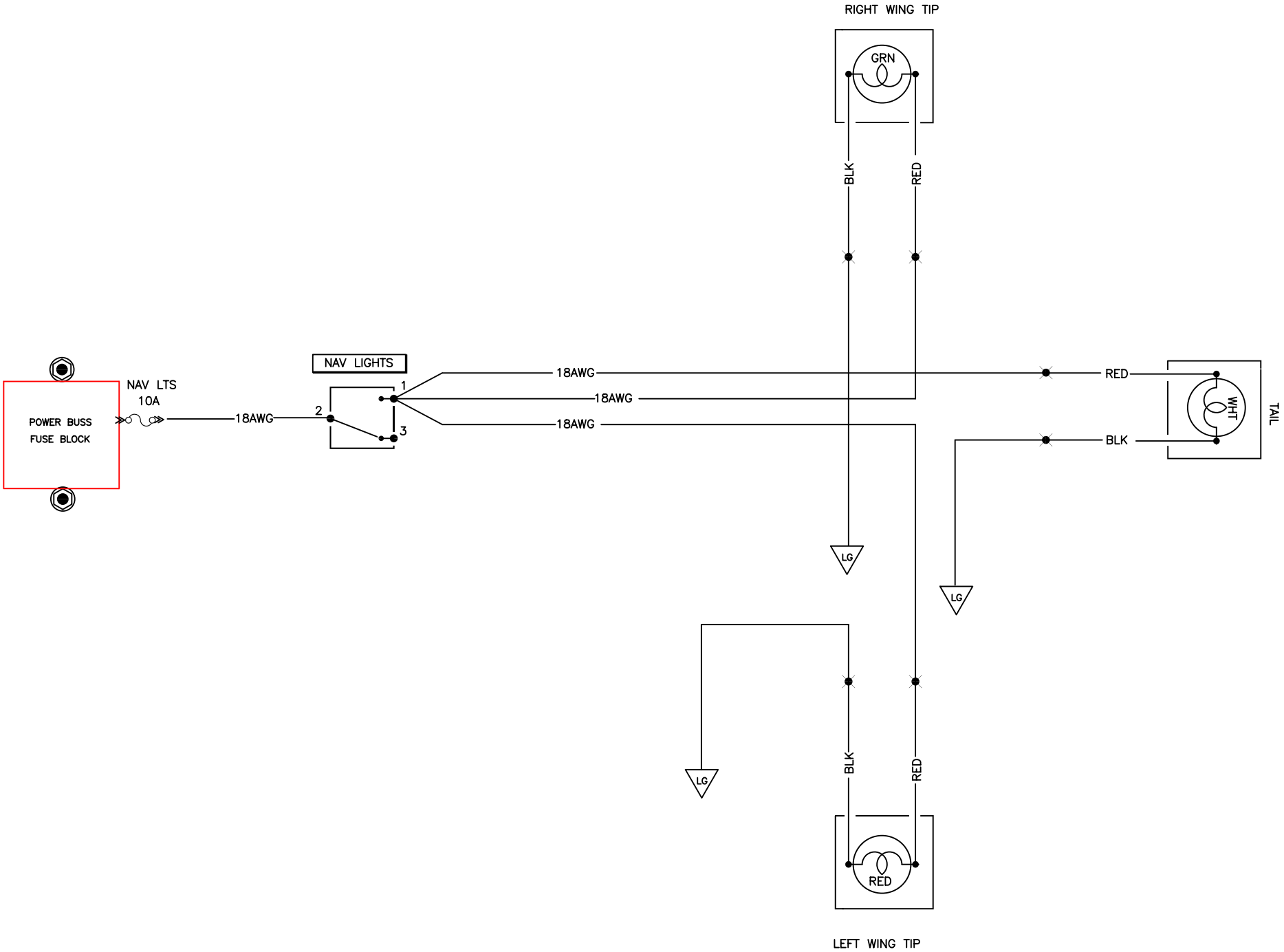
ACCESSORY	PAGE	COMMENT
AFS 3500 EE	7.601	FROM AFS WIRING DIAG
AFS 3500 EE ARINC	7.601	
GARMIN GNS 430W MAIN 1	7.602	FROM GARMIN WIRING DIAG
GARMIN GNS 430W MAIN 2	7.602	
GARMIN GNS 430W COMM	7.602	
GARMIN GNS 430W NAV FLAG	7.602	
GUARDIAN CO MONITOR	7.603	
LIGHTING	7.604	430W LIGHTING BUS HI AND LOW FEED
TOTALS		





QUAD FLASH - HIGH POWER - ALL OUTLETS ACTIVATED





ELECTRICAL LOAD ANALYSIS														
Page	ITEM	Fuse	Wire	Wire	Min Endur	VH-JPJ Endurance	Max Endur	RV-10 Intermit	Updated: Contin	7/02/2008 Night	Take Off	IFR	Night	7/02/2008 Source
	Power Buss	Size	Length	Gauge	Load	Load	Load	Load	Load	Flight	Landing		Landing	
	Alternator 1 field	5A CB			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	???
	Alternator 1 OV/LV light	2			0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	B&C
	Alternator 2 field	5A CB			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	???
	Alternator 2 OV/LV light	2			0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	B&C
	Battery 1 Contactor	NA			0.00	0.00	0.00	0.72	0.72	0.72	0.72	0.72	0.72	???
	Battery 2 Contactor	NA			0.00	0.00	0.00	0.72	0.72	0.72	0.72	0.72	0.72	???
	Starter contactor	7.5			0.00	0.00	0.00	3.17	0.00	0.00	0.00	0.00	0.00	Vert Pwr
	Fuel gauge left	1			0.00	0.00	0.00	0.36	0.36	0.36	0.36	0.36	0.36	???
	Fuel gauge right	1			0.00	0.00	0.00	0.36	0.36	0.36	0.36	0.36	0.36	???
	Fuel boost pump	10			0.00	0.00	0.00	3.77	0.00	0.00	3.77	0.00	3.77	Vert Pwr
	Fuel flow transducer	2			0.00	0.00	0.00	0.50	0.50	0.50	0.50	0.50	0.50	???
	Flap Motor	5			0	0.00	0.00	3.87	0.00	0.00	3.87	0.00	3.87	Vert Pwr
	Flap positioning system				0	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	???
	Pitot Heat Gretz	15 or 10?			0	0.00	0.00	8.00	0.00	0.00	0.00	8.00	0.00	???
	Angle of Attack sport	1			0	0.00	0.00	0.50	0.50	0.50	0.50	0.50	0.50	Vert Pwr
	Strobe Lights Creativair EX-AVI-	15			0	0.00	0.00	5.50	5.50	5.50	5.50	5.50	5.50	Creativair
	HID Landing Light left	10			0	0.00	0.00	3.00	0.00	0.00	3.00	0.00	3.00	Creativair
	HID Landing Light right	10			0	0.00	0.00	3.00		0.00	3.00	0.00	3.00	Creativair
	Navigation Lights	5			0	0.00	0.00	2.00	0.00	2.00	0.00	0.00	0.00	???
	WX500	5		20	0	0.00	0.00	0.82	0.82	0.82	0.82	0.82	0.00	L3 Comms
	ELT AK-450	0			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	ACK
	AFS Magnetometer	0			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	AFS
	<b>Power Buss Total</b>				<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>36.83</b>	<b>9.48</b>	<b>11.48</b>	<b>23.12</b>	<b>17.48</b>	<b>22.30</b>	

Battery Buss														
	Cabin Lights	3			0	0.00	0.83	0.83						???
	Map Lights	3			0	0.00	0.33	0.33	0.33	0.33	0.33	0.33	0.33	???
	Switch area light													
	<b>Battery Buss Total</b>				<b>0.00</b>	<b>0.00</b>	<b>1.17</b>	<b>1.17</b>	<b>0.33</b>	<b>0.33</b>	<b>0.33</b>	<b>0.33</b>	<b>0.33</b>	

Page	ITEM	Fuse	Wire	Wire	Min Endur	Endurance	Max Endur	Intermit	Contin	Night	Take Off	IFR	Night	Source
		Size	Length	Gauge	Load	Load	Load	Load	Load	Flight	Landing		Landing	
<b>Endurance Buss</b>														
	Battery 1 Relay (S704-1)	NA			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	???
	Battery 2 relay (S704-1)	NA			0.1	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	???
	AFS 3500 EF	5		20	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	AFS
	AFS 3500 EF ARINC	1			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	AFS
	PSE PMA8000 Audio Panel J2	5		22	0.00	1.00	2.50	2.50	1.00	1.00	1.50	1.00	1.50	???
	Garmin GNS 530W main 1	5			0.00	1.96	3.00	3.00	1.96	1.96	1.96	1.96	1.96	Garmin
	Garmin GNS 530W main 2	5			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Garmin
	Garmin GNS 530W com	10			0.00	0.02	6.00	6.00	0.02	0.02	0.02	0.02	0.02	Garmin
	Garmin GNS 530W nav flag	2			0.00	0.00	0.00	0.50	0.00	0.50	0.00	0.50	0.00	???
	Garmin GTX-327 Transponder	3		20	0.00	1.60	3.20	3.20	1.60	1.60	1.60	1.60	1.60	MFG
	TT Digiflight II VSGV Autopilot	7.5A CB			0.00	1.77	4.50	4.50	1.77	1.77	1.77	1.77	1.77	Vert Pwr
	Autopilot pitch servo				0			0.50	0.50	0.50	0.50	0.50	0.50	???
	Autopilot roll servo				0			0.50	0.50	0.50	0.50	0.50	0.50	???
	Pitch trim servo	1			0	0.00	0.60	0.60	0.00	0.00	0.00	0.00	0.00	Ray Allen
	Roll trim servo	1			0	0.00	0.60	0.60	0.00	0.00	0.00	0.00	0.00	Ray Allen
	Instrument Lights	2			1	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	???
	Turn and Bank indicator	2			0	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	???
	<b>Endurance Buss Total</b>				<b>3.35</b>	<b>9.95</b>	<b>24</b>	<b>25.5</b>	<b>10.95</b>	<b>11.45</b>	<b>11.45</b>	<b>11.45</b>	<b>11.45</b>	
<b>Avionics Buss</b>														
	AFS 3500 EE	5		20	0	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	AFS
	AFS 3500 EE ARINC	1			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	AFS
	Garmin 430W main 1	5			0.8	1.40	1.40	1.40	0.80	1.00	1.00	1.00	1.00	Garmin
	Garmin 430W main 2	5			0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Garmin
	Garmin 430W com	10			0.02	0.02	6.00	6.00	0.02	0.02	0.02	0.02	0.02	Garmin
	Garmin GNS 430W nav flag	2			0	0.00	0.00	0.50	0.00	0.50	0.00	0.50	0.00	???
	Guardian CO Monitor	1			0	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	???
	Ack A30.8 Encoder	1			0	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	???
	Glareshield Avionics Fan	2			0.00	0.00	0.00	0.50	0.50	0.50	0.50	0.50	0.50	???
	Ducted Avionics Fan	2			0.00	0.00	0.00	0.50	0.50	0.50	0.50	0.50	0.50	???
	<b>Avionics Buss Total</b>				<b>0.82</b>	<b>4.17</b>	<b>10.15</b>	<b>11.65</b>	<b>4.57</b>	<b>5.27</b>	<b>4.77</b>	<b>5.27</b>	<b>4.77</b>	
	<b>Grand Total</b>				<b>4.17</b>	<b>14.12</b>	<b>35.32</b>	<b>75.15</b>	<b>25.34</b>	<b>28.54</b>	<b>39.68</b>	<b>34.54</b>	<b>38.86</b>	

Alternator is 60 Amps X .80 = 48 Amps max continuous recommended electrical load.

Aux continuous = 20\*.8= 16

The Night Flight continuous electrical load does not exceed the recommended continuous rating.

Battery capacity is 34 Amp/Hrs.

Endurance battery capacity is 17 AH

Endurance alternator is 20\*.80=16Amps max continuous recommended electrical load