

Wings Avionics, Inc.
421 Ernest Lancaster Drive
Fayetteville, AR 72701 USA

INVOICE

3658

Work Order# : 4414
Page # : 1
Date : May-04-2009
Terms : COD
Account : VADE
Your PO# :
Our TEL : 479-587-0005
Your TEL : 521-5988
Tail# : N160RG
A/C Make : LONG-EZ
Model : LONG EZ
Serial : 88-1704

VAUGHN A DECASTER
1617 N APPLEBURY DR
FAYETTEVILLE, AR 72701-2418 USA

DETAILS

WO: 4414 TASK: 1 AF REMOVE EXISTING AVIONICS START: 03/02/2009 FINISH: 03/13/2009

PART#: N/A MODEL#: N/A SER#: N/A

DISCREPANCY: REMOVE THE EXISTING GNC300XL GLOBAL POSITIONING SYSTEM (GPS)/COMMUNICATION (COMM) TRANSCEIVER (XCVR), THE GA56 GPS ANTENNA (ANT), THE COMPLETE RADIO STACK WITH MOUNTING RACKS, AND ALL UNUSED WIRING AND CONNECTORS.

ACTION: REMOVED THE GARMIN GNC300XL, THE GA56 GPS ANT, THE GNC300XL MOUNTING TRAY, AND ALL ASSOCIATED WIRING INTERFACED TO THE AUDIO SWITCH SYSTEM, THE ALTITUDE ENCODER, AND THE REMAINING AVIONICS SYSTEMS. REMOVED THE ICOM A200 COMM XCVR RACK AND WIRING HARNESS; THE KT79 XPDR RACK AND HARNESS; AND THE DYNON EFIS D10A WIRING HARNESS. REMOVED ALL UNUSED WIRING HARNESSES AND CONNECTORS THAT WERE NO LONGER INTERFACED TO EXISTING A/C SYSTEMS.

HOURS: 7.17

LABOR: \$537.75

PARTS/EQUIP/OTHER: \$0.00

TASK TOTAL: \$537.75

WO: 4414 TASK: 2 AF INSTL GNS430W GLOBAL NAV SYSTE START: 03/02/2009 FINISH: 05/04/2009

PART#: 010-00412-01 MODEL#: GNS430W SER#: 23422778

DISCREPANCY: INSTALL CUSTOMER FURNISHED GNS430W GLOBAL NAVIGATION SYSTEM.

ACTION: THE GNS430W GLOBAL NAV SYSTEM, PART NUMBER (P/N) 010-00412-01, SERIAL NUMBER (S/N) 23422778, WAS INSTALLED AS THE PRIMARY NAVIGATION (NAV)/COMMUNICATION (COMM)/WIDE AREA AUGMENTATION SYSTEM (WAAS) GLOBAL POSITIONING SYSTEM (GPS). THE GNS430W WAS INTERFACED TO THE EXISTING DYNON D10A ELECTRONIC FLIGHT INSTRUMENT SYSTEM (EFIS) FOR NAVIGATIONAL DISPLAY OF GPS AND VOR/ILS OPERATIONS THROUGH A DYNON HS34 HORIZONTAL SITUATION INDICATOR (HSI) EXPANSION MODULE, (P/N) 100755-001, (S/N) 001641, VIA GPS429 DATA FROM THE GARMIN GNS430W, CONNECTOR P4001; AND VOR/LOC 429 DATA FROM THE GNS430W, CONNECTOR P4006. VOR/LOC COMPOSITE NAV DATA FROM THE GNS430W WAS INTERFACED TO A DAVTRON DVOR, MODEL 903, (S/N) 4126, TO PROVIDE DIGITAL VOR BEARING AND RADIAL OPERATIONS. ALTITUDE REPORTING TO THE GNS430W WAS SUPPLIED BY AN ACK ALTITUDE REPORTER, MODEL A30 (MOD3), (S/N) 57241. THE GNS430W SERIAL AVIATION DATA OUTPUT WAS INTERFACED TO A TRIO AVIONICS EZ PILOT AUTO PILOT, (S/N) 538LWS; A GARMIN GPSMAP296, (S/N) 67000844; AND A JP INSTRUMENTS MODEL FS-450 FUEL FLOW MONITOR VIA GARMIN AVIATION DATA OUTPUT. THE GNS430W COMM PHONE AUDIO OUTPUT AND NAV PHONE AUDIO OUTPUTS ARE ROUTED THROUGH AN AUDIO INPUT SWITCH LABELED "COMM1" THAT IS LOCATED TO THE RIGHT SIDE OF THE INSTRUMENT PANEL. ALL AUDIO CONTROLLER SWITCH OUTPUTS ARE ROUTED TO AUXILIARY MIC/PHONE JACKS LOCATED ON THE PILOT INSTRUMENT PANEL FOR FAIL-SAFE AUDIO OPERATIONS IN THE EVENT OF INTERCOMM FAILURE. THE AUDIO SELECTOR PHONE SWITCHES ARE ROUTED TO THE ITC-404SP INTERCOM INPUT FOR PILOT AND CO-PILOT PHONE AMPLIFICATION DURING INTERCOMM OPERATION. A/C POWER IS PROVIDED TO THE GNS430W GPS INPUT THROUGH A KLIXON 5 AMP CIRCUIT BREAKER, (P/N) 7277-2-5; AND THE GNS430W COMMUNICATIONS TRANSCEIVER INPUT THROUGH A KLIXON 10 AMP CIRCUIT BREAKER, (P/N) 7277-2-10, WHICH ARE POWERED THROUGH AN AVIONICS MASTER SWITCH. THE GA35 GPS/WAAS ANT, P/N 013-00235-00, S/N 49799, IS MOUNTED TO A REMOVABLE ACCESS PLATE LOCATED FORWARD OF THE INSTRUMENT PANEL, AND INTERFACED TO THE GNS430W GPS INPUT WITH A 6 FEET RG400 COAXIAL CABLE ASSEMBLY. A COMANT CI505 NAV ANT DIPLEXER, NO S/N, WAS INSTALLED ON THE BOTTOM OF THE RADIO STACK, AND INTERFACED TO THE GNS430W NAV AND GLIDE SLOPE RECEIVER INPUTS TO PROVIDE VOR AND ILS OPERATIONS. THE CI505 NAV ANT DIPLEXER INPUT WAS INTERFACED TO THE EXISTING NAV ANT ASSEMBLY LOCATED INSIDE THE CANARD ASSEMBLY VIA BNC CONNECTORS. THE GNS430W COMM ANT WAS INTERFACED TO THE EXISTING COMM ANT LOCATED IN THE RIGHT WING VERTICAL. THE GNS430W INSTALLATION WAS COMPLETED USING MANUFACTURER 400W SERIES INSTALLATION MANUAL, P/N 190-00356-02, REVISION (REV) G, DATED DEC, 2006; AND AC 43.13-1B, CHANGE 1, PARAGRAPHS 11-30, 11-31, 11-32, 11-47, 11-48, 11-66, 11-76, 11-77, 11-89, AND 11-96; AND MEETS THE REQUIREMENTS OF AC 20-138. THE GNS430W IS MANUFACTURED UNDER TSO-C146a, RTCAQ/DO-229C, CLASS 3, AND IS APPROVED FOR ENROUTE, TERMINAL, AND PRECISION GPS APPROACH OPERATIONS. VOR AND ILS OPERATIONS WERE RAMP TESTED AND FOUND IN IFR TOLERANCES.

HOURS: 20.80

LABOR: \$1,560.00

PARTS/EQUIP/OTHER: \$259.87

TASK TOTAL: \$1,819.87

WO: 4414 TASK: 3 AF INSTALL CIRCUIT BREAKER BUSS A START: 03/03/2009 FINISH: 04/03/2009

PART#: 7277-2-X MODEL#: 7277-2-X SER#: N/A

DISCREPANCY: INSTALL A DETACHABLE CIRCUIT BREAKER POWER DISTRIBUTION SUB-ASSEMBLY IN THE TOP PILOT INSTRUMENT PANEL LOCATION. INSTALL A POTTER & BROMFIELD RADIO MASTER SWITCH, FABRICATE AN AVIONICS COPPER BUSS BAR, AND INSTALL NEW KLIXON 7277-2-X SERIES CIRCUIT BREAKERS FOR THE PRIMARY AVIONICS SYSTEMS. CORRECT WIRING DEFICIENCIES WITH THE REMAINING SYSTEM BREAKER SWITCHES AND REMOUNT IN THE BREAKER PANEL SUB-ASSEMBLY.

ACTION: DISASSEMBLED AND REMOVED THE EXISTING CIRCUIT BREAKER ASSEMBLY LOCATED AT THE TOP OF THE PILOT INSTRUMENT PANEL. TAGGED/RETAINED ALL CIRCUIT BREAKER SWITCHES FOR PRIMARY A/C SYSTEMS AND REMOVED THE REMAINING

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THE RADIO STACK LOCATION. EFIS AUDIO ALERT FUNCTIONS FROM THE HS34 WAS INTERFACED TO THE AUX PHONE JACK AND INTERCOM SYSTEMS THROUGH AN ON/OFF SWITCH AND VOLUME CONTROL POT LOCATED ON THE HS34 WIRE HARNESS. INSTALLATION COMPLETED IN ACCORDANCE WITH THE DYNON EFIS D10A INSTALLATION MANUAL, P/N 100341-000, REV G, DATED NOVEMBER, 2008; AND AC 43.13-1B CHANGE 1, PARAGRAPHS 11-30, 11-31, 11-32, 11-47, 11-48, 11-66, 11-76, 11-77, 11-89, AND 11-96.

HOURS: 7.12 LABOR: \$534.00 PARTS/EQUIP/OTHER: \$66.65 TASK TOTAL: \$600.65

WO: 4414 TASK: 9 AF INSTALL CUST SUPPLIED INSTRUMENT PANEL START: 03/18/2009 FINISH: 04/03/2009

PART#: N/A MODEL#: N/A SER#: N/A

DISCREPANCY: REMOVE EXISTING INSTRUMENT PANEL AND INSTALL CUSTOMER SUPPLIED PILOT INSTRUMENT PANEL.
ACTION: REMOVED ALL SWITCHES AND ANNUNCIATORS FROM EXISTING PILOT INSTRUMENT PANEL. REMOVED REMAINING SECTIONS OF EXISTING INSTRUMENT PANEL AND MODIFIED CUSTOMER SUPPLIED INSTRUMENT PANEL FOR FIT INCLUDING THE FOLLOWING MODIFICATIONS: 1) SHAVED AND CUT EXISTING FIBERGLASS EDGES IN A/C TO ALLOW CUSTOMER SUPPLIED PANEL TO BE MOUNTED IN INSTRUMENT PANEL LOCATION. 2) INCREASED DIAMETER SIZE OF BREAKER AND SWITCH MOUNTING HOLES IN BREAKER SUB-ASSEMBLY TO ALLOW FOR SWITCH AND BREAKER INSTALLATION. 3) MEASURED AND DRILLED ADDITIONAL MOUNTING LOCATIONS FOR NEW SWITCHES, ANNUNCIATORS, AND LIGHTING CONTROLS. 4) MOUNTED CUSTOMER SUPPLIED INSTRUMENT PANEL IN A/C USING CUSTOMER SUPPLIED HARDWARE.

ASSEMBLED ALL EQUIPMENT, ANNUNCIATORS, SWITCHES, AND RADIO RACK MOUNTING IN THE PILOT INSTRUMENT PANEL AND VERIFIED INSTALLATION FIT IN A/C. MARKED EXISTING A/C WIRING THAT REQUIRED INCREASE IN WIRE LENGTH AND CABLE REROUTING TO ACCOMMODATE PANEL INSTALLATION. DISASSEMBLED EQUIPMENT FROM PANEL AND PREPARED INSTRUMENT PANEL FOR PAINTING WITH ALUMIPREP.

ALTERED A/C WIRING HARNESSES FOR NEW SWITCH LOCATIONS BY EXTENDING EXISTING WIRING WHERE REQUIRED, AND REROUTING OF WIRING FOR OPTIMUM SAFETY AND EASE OF MAINTENANCE. RECEIVED INSTRUMENT PANEL FROM PAINT SHOP AND INSTALLED IN A/C. INSTALLED EQUIPMENT IN PANEL AND CONNECTED WIRING AND MATING PLUGS.

HOURS: 28.90 LABOR: \$2,167.50 PARTS/EQUIP/OTHER: \$126.89 TASK TOTAL: \$2,294.39

WO: 4414 TASK: 10 AF REWIRE DYNON D10A EFIS START: 03/25/2009 FINISH: 04/09/2009

PART#: 100321 MODEL#: D10A SER#: 4579

DISCREPANCY: REWIRE DYNON D10A EFIS.

ACTION: PERFORMED A VISUAL INSPECTION OF THE EXISTING DYNON D10A EFIS, P/N 100321, S/N 004579, AND FOUND THE UNIT HAD BEEN PREVIOUSLY INSTALLED USING A RADIO SHACK PRINTER CABLE. REMOVED EXISTING WIRING HARNESS AND INSTALLED A NEW 25PIN DSUB FEMALE CONNECTOR INTERFACED TO THE REMOTE COMPASS, EDC10A, PRIMARY POWER BUSS THROUGH A KLIXON 7277-2-2 CIRCUIT BREAKER, AND EFIS BATTERY KEEP ALIVE POWER. REWIRED THE EXISTING 9 PIN FEMALE DSUB CONNECTOR FOR UPGRADING EFIS SOFTWARE AND SECURED CONNECTOR BEHIND THE RADIO STACK LOCATION. THE D10A EFIS WAS INTERFACED TO THE DYNON HS34 HSI EXPANSION MODULE VIA DYNON DSAB DATA BUSS. INSTALLATION COMPLETED IN ACCORDANCE WITH THE DYNON EFIS D10A INSTALLATION MANUAL, P/N 100341-000, REV G, DATED NOVEMBER, 2008; AND AC 43.13-1B CHANGE 1, PARAGRAPHS 11-30, 11-31, 11-32, 11-47, 11-48, 11-66, 11-76, 11-77, 11-89, AND 11-96.

HOURS: 2.17 LABOR: \$162.75 PARTS/EQUIP/OTHER: \$30.13 TASK TOTAL: \$192.88

WO: 4414 TASK: 11 AF ADD CO-PILOT PTT SWITCH FUNCTION START: 03/27/2009 FINISH: 03/27/2009

PART#: N/A MODEL#: N/A SER#: N/A

DISCREPANCY: ADD COPILOT PUSH TO TALK SWITCH TO EXISTING INTERCOMM SYSTEM.

ACTION: INTERFACED THE EXISTING CO-PILOT PTT SWITCH TO THE FLIGHTTECH INTERCOM, P/N ITC-404SP, AND ADDED CHAFFE PROTECTION TO WIRING ROUTED THROUGH BOTH PILOT AND CO-PILOT CONTROL YOKE TUBES. RAMP TESTED AND FOUND PTT SWITCH OPERATIONAL. WORK ACCOMPLISHED IN ACCORDANCE WITH THE FLIGHTTECH ITC-404SP INSTALLATION MANUAL, AND AC 43.13-1B, CHANGE 1.

HOURS: 1.03 LABOR: \$77.25 PARTS/EQUIP/OTHER: \$2.50 TASK TOTAL: \$79.75

WO: 4414 TASK: 12 AF REWIRE KT79 TRANSPONDER START: 03/27/2009 FINISH: 04/09/2009

PART#: 066-1053-00 MODEL#: KT79 SER#: 4451

DISCREPANCY: REWIRE EXISTING KT79 TRANSPONDER WIRING HARNESS AND REPLACE RF RACK CONNECTOR.

ACTION: FOUND DURING VISUAL INSPECTION OF XPDR WIRING HARNESS THAT NUMEROUS WIRES HAD BEEN SOLDER SPLICED AND DECISION MADE TO REWIRE HARNESS. REWIRED XPDR HARNESS TO INCLUDE INTERFACE TO EXISTING ACK A30 ALTITUDE ENCODER, (S/N) 57241, AND DAVTRON M655 DENSITY ALTITUDE DISPLAY, (S/N) 2718. XPDR POWER IS PROVIDED THROUGH A KLIXON 7277-2-5 CIRCUIT BREAKER VIA THE AVIONICS POWER BUSS. THE EXISTING RACK RF CONNECTOR WAS REMOVED FROM THE MOUNTING TRAY, AND A NEW COAX PIGTAIL ASSEMBLY WAS FABRICATED USING 1.5 FEET OF RG58 COAX, A 225395-1 MALE BNC, A 225396-1 FEMALE BNC, AND A TED 9-30-10 RF RACK CONNECTOR. THE XPDR WAS RAMP TESTED AND FOUND IN COMPLIANCE WITH FAR 91.413 REQUIREMENTS. WORK ACCOMPLISHED IN ACCORDANCE WITH THE BENDIX/KING KT79 TRANSPONDER INSTALLATION MANUAL, P/N 006-00534-0001, REVISION 1; AND AC 43.13-1B CHANGE 1, PARAGRAPHS 11-30, 11-31, 11-32, 11-47, 11-48, 11-66, 11-76, 11-77, AND 11-96.

HOURS: 1.66 LABOR: \$124.50 PARTS/EQUIP/OTHER: \$39.67 TASK TOTAL: \$164.17

WO: 4414 TASK: 13 AF INSTALL MAXDIM DIMMER SYSTEM START: 04/09/2009 FINISH: 04/16/2009

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GPS296 HANDHELD OPERATOR'S GUIDE, P/N 190-00337-00, REV D, DATED SEP, 2005.

HOURS: 1.02

LABOR: \$76.50

PARTS/EQUIP/OTHER: \$0.00

TASK TOTAL: \$76.50

WO: 4414 TASK: 19 AF INSTALL DYNON EFIS SOFTWARE START: 04/08/2009 FINISH: 04/08/2009

PART#: 100321

MODEL#: D10A

SER#: 4579

DISCREPANCY: INSTALL DYNON EFIS SOFTWARE UPGRADE. FOUND DURING RAMP TESTING THAT THE HS34 HSI MODULE WOULD NOT INTERFACE PROPERLY WITH THE DYNON D10A DUE TO SOFTWARE MISMATCH.

ACTION: RAMP TESTED D10A OPERATION AND FOUND GNS430W WOULD NOT DISPLAY GPS OR NAV DATA THROUGH HS34 HSI INTERFACE MODULE. MADE PHONE CONTACT WITH DYNON TECHNICAL SUPPORT AND WAS ADVISED THAT D10A OPERATING SOFTWARE WOULD REQUIRE UPGRADE TO CORRECT INTERFACE COMPATIBILITY PROBLEM. UPGRADED EFIS D10A OPERATING SOFTWARE FROM VERSION 3.3 TO VERSION 5.0. CONFIGURED UNIT, RETESTED, AND FOUND NORMAL EFIS D10A AND HS34 INTERFACE OPERATION.

HOURS: 3.69

LABOR: \$276.75

PARTS/EQUIP/OTHER: \$0.00

TASK TOTAL: \$276.75

WO: 4414 TASK: 20 AF FABRICATE FUSE HOLD BRACKET START: 03/25/2009 FINISH: 04/01/2009

PART#: 270-0364

MODEL#: 270-0364

SER#: N/A

DISCREPANCY: FABRICATE AND MOUNT A REMOTE FUSE HOLDER ASSEMBLY LOCATED BEHIND THE PILOT INSTRUMENT PANEL FOR THE REMAINING AVIONICS POWER SYSTEMS.

ACTION: LOCATED AND REMOVED 11 EACH INLINE FUSEHOLDER ASSEMBLIES LOCATED BEHIND THE PILOT INSTRUMENT PANEL, INCLUDING THE AUTOMOTIVE STYLE FUSE BLOCK ASSEMBLY AND ASSOCIATED WIRING. FABRICATED AND INSTALLED A FUSEHOLDER MOUNTING BRACKET ADJACENT TO THE RADIO MOUNTING RACKS AND INSTALLED 11 EACH PANEL MOUNTED FUSEHOLDER ASSEMBLIES FOR THE REMAINING AVIONICS SYSTEMS TO INCLUDE THE FOLLOWING: JP INSTRUMENTS DQT-4 TACHOMETER, S/N 010107; JP INSTRUMENTS FS450 FUEL FLOW INDICATOR; DAVTRON 903 DVOR, S/N 4126; FLIGHTTECH ITC-404SP INTERCOMM; ELECTRONICS INTERNATIONAL UBG-16 ENGINE MONITOR, S/N 076208; ICOM IC-A200 VHF COMM XCVR, S/N D109944; DAVTRON M655 VOLTAGE/OAT/ALTITUDE MONITOR, S/N 2718; ACK A30 ENCODER (MOD 3), S/N 57241; GPSMAP 296, S/N 67000844; SEATON ENGINEERING MAXDIM PANEL DIMMER; AND DYNON H34 HSI INTERFACE ADAPTER, S/N 1641. THE HOBBS AND CIGARETTE LIGHTER WIRING REMAINS INTERFACED TO THE PREVIOUSLY INSTALLED WIRING AND IS SECURED BEHIND THE PILOT RIGHT INSTRUMENT PANEL LOCATION. WORK ACCOMPLISHED IN ACCORDANCE WITH AC 43.13-18, CHANGE 1, PARAGRAPHS 11-30, 11-31, 11-32, 11-47, 11-48, 11-66, 11-76, 11-77, 11-89, AND 11-96. INSTALLED CORRECT AGC STYLE FUSES FOR AVIONICS EQUIPMENT AND PROVIDED IDENTIFICATION LABELS FOR FUSE HOLDERS.

HOURS: 5.76

LABOR: \$432.00

PARTS/EQUIP/OTHER: \$30.67

TASK TOTAL: \$462.67

WO: 4414 TASK: 21 AF CHECK COMM ANTENNA SYSTEMS START: 04/17/2009 FINISH: 04/17/2009

PART#: 9-30-10

MODEL#: 9-30-10

SER#: N/A

DISCREPANCY: CHECK COMM ANTENNA SYSTEMS-COMM 2 SYSTEM APPEARS NOISY WHEN MONITORING ATIS FREQUENCY, AND THE ICOM A200 COMM TRANSMITTER CAUSES GPS INTERFERENCE DURING XMITT.

ACTION: RAMP CHECKED BOTH COMM ANT SYSTEMS AND FOUND THE COMM ANT LOCATED IN THE RIGHT VERTICAL STABILIZER SECTION SHOWED THE LOWEST STANDING WAVE RATIO (SWR) OF BOTH COMM ANTENNAS. INTERFACED THE RIGHT VERTICAL STABILIZER COMM ANT TO THE GNS430W COMM XCVR AND RAMP TESTED OPERATIONAL. INTERFACED THE ICOM A200 TO THE BOTTOM MOUNTED BENT-WHIP COMM ANT, CHECKED THE SECONDARY COMM ANT SYSTEM, AND FOUND RECEIVER QUALITY POOR WITH EXCESSIVE NOISE. RAMP CHECKED SECONDARY COMM ANT SYSTEM AND FOUND ANT SWR WITHIN ACCEPTABLE LIMITS, BUT COMM2 RECEIVER SENSITIVITY TESTED WEAK USING DIRECT INJECTION METHOD FROM RAMP TEST EQUIPMENT. CHECKED CONTINUITY FROM COMM2 ANT COAX BNC CONNECTOR TO ICOM A200 RF RACK CONNECTOR AND FOUND NO DISCREPANCIES IN OHMAGE READINGS. INJECTED TEST SIGNAL DIRECTLY AT ICOM RF PIGTAIL ASSEMBLY LOCATED DIRECTLY AT RACK CONNECTOR AND FOUND EXCESSIVE SIGNAL LOSS. REMOVED EXISTING ICOM RF RACK CONNECTOR FROM MOUNTING TRAY, FABRICATED NEW COMM RF COAX PIGTAIL ASSEMBLY WITH NEW 9-30-10 RACK CONNECTOR, AND INSTALLED WITH NEW LOCK CLIP ASSEMBLY. RETESTED COMM OPERATION AND FOUND RECEIVER AUDIO QUALITY NORMAL. MONITORED GPS SATELLITE RECEIVER PAGE DURING ICOM A200 XMITTER OPERATION AND FOUND DEGRADATION OF GPS SIGNAL. INSTALLED GPS NOTCH FILTER LOCATED BEHIND INSTRUMENT PANEL AT PIGTAIL ASSEMBLY, RETESTED GPS PERFORMANCE, AND FOUND IMPROVEMENT IN GPS OPERATION, BUT PROBLEM NOT RESOLVED. INSTALLED SECONDARY GPS NOTCH FILTER AT BENT WHIP COMM ANT INPUT, RETESTED XMITTER PROCEDURE, AND FOUND LITTLE TO NO DEGRADATION IN GPS PERFORMANCE DURING COMM2 XMITT OPERATIONS.

HOURS: 2.02

LABOR: \$151.50

PARTS/EQUIP/OTHER: \$74.16

TASK TOTAL: \$225.66

WO: 4414 TASK: 22 AF INSTALL ICOM IC-ANT-SB SWITCHB START: 04/07/2009 FINISH: 04/07/2009

PART#: IC-ANT-SB

MODEL#: IC-ANT-SB

SER#: N/A

DISCREPANCY: INSTALL ICOM IC-ANT-SB SWITCHBOX INTERFACED TO SECONDARY COMM ANT SYSTEM.

ACTION: INSTALLED THE ICOM IC-ANT-SB SWITCHBOX ASSEMBLY IN THE PILOT INSTRUMENT PANEL, AND INTERFACED TO THE SECONDARY COMM ANT SYSTEM FOR EMERGENCY HAND HELD COMM OPERATIONS. INSTALLATION COMPLETED IN ACCORDANCE WITH THE ICOM IC-ANT-SB INSTALLATION INSTRUCTIONS. PROVIDED CUSTOMER WITH REQUIRED SMA TO FEMALE BNC RF ADAPTER REQUIRED FOR USE WITH COMM HAND-HELD XCVR.

HOURS: 1.75

LABOR: \$131.25

PARTS/EQUIP/OTHER: \$29.04

TASK TOTAL: \$160.29

WO: 4414 TASK: 23 AF SECURE A/C WIRING BUNDLES & RE START: 03/30/2009 FINISH: 04/17/2009

PART#: N/A

MODEL#: N/A

SER#: N/A

DISCREPANCY: SECURE AIRCRAFT WIRING BUNDLES AND REASSEMBLE A/C.

ACTION: REROUTED AND SECURED ELECTRONICS INTERNATIONAL UBG-16 ENGINE MONITOR WIRING LOCATED BEHIND PILOT LEFT

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6	2.00	L-C-3	ELECTRICAL: SOLDER SLEEVE 1/4"/.20	0.600	1.20
6	8.00	WMTG-241T14	WIRE 24 AWG 1 Conductor Tin Plated	0.260	2.08
7	6.00	M22759/16-20-2	WIRE 20 RED WIRE	0.120	0.72
7	4.00	M22759/16-22-0	WIRE 22 AWG Tin Platted Copper Tef	0.110	0.44
8	1.00	133-00564-0000	RESISTOR VAR 10K 20%	62.150	62.15
8	1.00	1571920-3	SWITCH SPDT MINI BAT TOGGLE	9.500	9.50
8	1.00	205206-9	CONNECTOR CRIMP MALE D SUB 15 PIN	2.173	2.17
8	5.00	L-C-2	ELECTRICAL: SOLDER SLEEVE 1/8"/.12	0.600	3.00
8	6.00	M22759/16-22-0	WIRE 22 AWG Tin Platted Copper Tef	0.110	0.66
8	4.00	M22759/16-22-3	WIRE 22 ORANGE WIRE	0.110	0.44
8	4.00	M22759/16-22-4	WIRE 22 AWG Tin Platted Copper Tef	0.110	0.44
9	1.00	11-00748	SWITCH P1 MOMENTARY	11.850	11.85
9	2.00	276-0084	RED 12VDC LED HOLDER	2.590	5.18
9	1.00	36160	ELECTRICAL: TERMINAL LUG #10 BLUE	1.000	1.00
9	1.00	5205980-1	SCREW MALE RETAINER FOR D CON	1.000	1.00
9	2.00	D-436-36	ELECTRICAL: SPLICE/RED	2.000	4.00
9	2.00	HIXR-1/16WH	SHRINK TUBE ROLL 1/16 WHITE	1.000	2.00
9	1.00	HIXR-1/16WH	SHRINK TUBE ROLL 1/16 WHITE	1.000	1.00
9	2.00	MISCALUMINUMANGLE #4	ANGLE ALUMINUM 3/4"x3/4"x1/16"	4.500	9.00
9	8.00	MS20426AD4-5	RIVIT 4-5	0.500	4.00
9	11.00	MS21044-N06	NUT: 6-32 TALL LOCKNUT	1.000	11.00
9	4.00	MS21083-N08	NUT: LOCKNUT 8-32 SHORT	1.000	4.00
9	12.00	MS24693-C28	SCREW 6-32 CS 1/2"	1.000	12.00
9	11.00	NAS1149C632R	WASHER 6 SS	1.000	11.00
9	4.00	NAS1149C832R	WASHER 8 SS	1.000	4.00
9	1.00	PAINT	INSTRUMENT PANEL PAINT	70.000	70.00
9	1.00	T18L	CABLE TIE 18# 8"	0.480	0.48
9	1.00	T18L	CABLE TIE 18# 8"	0.480	0.48
9	2.00	T50R	CABLE TIE 8" 50LB	1.300	2.60
10	6.00	320559	ELECTRICAL: SPLICE WIRE RED 22-16	1.000	6.00
10	1.00	328998	ELECTRICAL: TERMINAL 5/16" RINGBLU	1.000	1.00
10	1.00	5205207-1	25 PIN FEMALE D CONN CRIMP	1.650	1.65
10	1.00	5205718-1	CABLE CLAMP 25 PIN	4.260	4.26
10	1.00	7277-2-2	CIRCUIT BREAKER 2A KLIXON	22.880	22.88
10	5.00	M22759/16-22-4	WIRE 22 AWG Tin Platted Copper Tef	0.110	0.55
10	20.00	M22759/16-24-9	WIRE 24 AWG Tin Platted Copper Tef	0.090	1.80
11	1.00	SWP-1/2	SPIRAL WRAP	1.000	1.00
11	1.50	SWP-3/8	SPIRAL WRAP	1.000	1.50
12	8.00	320559	ELECTRICAL: SPLICE WIRE RED 22-16	1.000	8.00
12	1.00	7277-2-5	CIRCUIT BREAKER 5A KLIXON	22.880	22.88
12	1.00	9-30-10	CONNECTOR BNC RACK MOUNT RF ANTENN	13.949	13.95
12	12.00	M22759/16-22-9	WIRE 22 AWG Tin Platted Copper Tef	0.110	1.32
13	6.00	320559	ELECTRICAL: SPLICE WIRE RED 22-16	1.000	6.00
13	1.00	9100-001-A	MAXDIM	123.750	123.75
16	1.00	AN526C632R12	SCREW 6-32 TRUSS 3/4"	1.000	1.00
16	1.00	MS21044-N06	NUT: LOCKNUT FIBERLOCK 6-32 TALL	1.000	1.00
17	1.00	800-14/BAT	CLOCK M800 W/KEEP ALIVE BATTERY 14	167.520	167.52
20	10.00	270-0364	FUSE HOLDER PNL MOUNT	2.590	25.90
20	6.00	AGC-1	FUSE AGC 1A	1.360	8.16
20	1.00	AGC-3	FUSE AGC 3A	1.100	1.10
21	1.00	225395-1	BNC MALE DUAL CRIMP RG58	3.580	3.58
21	1.00	225396-1	BNC FEMALE DUAL CRIMP RG58	7.580	7.58
21	2.00	330-00067-00	GPS NOTCH FILTER	35.010	70.02
21	1.00	9-30-10	BNC CONNECTOR RACK MOUNT RF ANTENN	13.949	13.95
21	1.00	RG58C/U	COAX CABLE RG-58C/U COAX	0.470	0.47
22	2.00	225395-1	BNC MALE DUAL CRIMP RG58	3.580	7.16
22	1.00	225396-1	BNC FEMALE DUAL CRIMP RG58	7.580	7.58
22	1.00	46F2210	ADAPTER COAXIAL RF SMA TO BNC	15.400	15.40
22	6.00	RG58C/U	COAX CABLE RG-58C/U COAX	0.470	2.82
23	2.00	MS21919WDG-15	ADEL CLAMP #15	1.900	3.80
23	7.00	T18L	CABLE TIE 18# 8"	0.480	3.36
23	3.00	T50R	CABLE TIE 8" 50LB	1.300	3.90