

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety Washington, D.C. 20594

July 23, 2019

Maintenance Records – Factual

NTSB No: ERA18FA264

A. <u>ACCIDENT</u>

Location:	Greenville Downtown Airport, Greenville, SC
Date:	September 27, 2018
Time:	1346 Eastern Daylight Time
Aircraft:	Dassault Falcon 50, Registration N114TD

B. <u>MAINTENANCE RECORDS</u>

Gregory Borsari National Transportation Safety Board Washington, D.C.

C. <u>SUMMARY</u>

On September 27, 2018, about 1346 eastern daylight time, a Dassault Falcon 50 business jet, N114TD, operated by Air American Flight Services, Inc., was substantially damaged when it overran the departure end of runway 19 at Greenville Downtown Airport (GMU), Greenville, South Carolina. The airline transport pilot (ATP) seated in the left cockpit seat and private pilot seated in the right cockpit seat were fatally injured, and the two passengers received serious injuries. Visual meteorological conditions prevailed, and an instrument flight rules flight plan was filed for the flight that departed St. Pete-Clearwater International Airport (PIE), St. Petersburg-Clearwater, Florida, destined for GMU. The personal flight was conducted under the provisions of Title 14 Code of Federal Regulations Part 91.

TABLE OF CONTENTS

A.	ACCIDENT	1
B.	MAINTENANCE RECORDS GROUP	1
C.	SUMMARY	1
D.	DEATAILS OF THE INVESTIGATION	2
1	1.0 AIR CARRIER CERTIFICATE	3

2.0	OPERATIONS SPECIFICATIONS	3
3.0	TYPE CERTIFICATE DATA SHEET	3
4.0	AIRCRAFT INFORMATION	4
5.0	MAINTENANCE PROGRAM	4
6.0	MINIMUM EQUIPMENT LIST	7
7.0	AIRWORTHINESS DIRECTIVES & SERVICE BULLETINS	8
8.0	AIRCRAFT FLIGHT LOGS	8
9.0	WEIGHT & BALANCE	9
10.0	SERVICE DIFFICULTY REPROTS	9
11.0	MAJOR REPAIRS AND ALTERATIONS	9
12.0	METHOD OF RECORD KEEPING	9
13.0	MANUALS	10
14.0	INTERVIEW SUMMARY	10

LIST OF ACRONYMS

AD	AIRWORTHINESS DIRECTIVE
AMM	AIRCRAFT MAINTENANCE MANUAL
A&P	AIRFRAME AND POWERPLANT
DOM	DIRECTOR OF MAINTENANCE
FAA	FEDERAL AVIATION ADMINISTRATION
FCC	FEDERAL COMMUNICATIONS COMMISSION
FSDO	FLIGHT STANDARDS DISTRICT OFFICE
GMU	GREENVILLE DOWNTOWN AIRPORT
GOM	GENERAL OPERATIONS MANUAL
ICA	INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
MEL	MINIMUM EQUIPMENT LIST
MLG	MAIN LANDING GEAR
NLG	NOSE LANDING GEAR
OJT	ON THE JOB TRAINING
OpSpecs	OPERATIONS SPECIFICATIONS
PAI	PRINCIPLE AVIONICS INSPECTOR
PMI	PRINCIPLE MAINTENANCE INSPECTOR
RMLG	RIGHT MAIN LANDING GEAR
R&R	REMOVE AND REPLACE
SDR	SERVICE DIFFICULTY REPORT
SB	SERVICE BULLETIN
TC	TYPE CERTIFICATE

D. <u>DETAILS OF INVESTIGATION</u>

1.0 Air Carrier Certificates

Air America Flight Services, Inc. located at 4095 Southern Blvd. Suite 207, West Palm Beach, FL. 33406. A Part 135 Air Carrier certificate for on demand operation, nine passengers or less, number X09A317J, was issued to Air America Flight Services, Inc. by the Federal Aviation Administration (FAA), on September 28, 2000, Amended June 1, 2005.

2.0 Operations Specifications (OpSpecs)¹

Air America Flight Services, Inc Certificate X09A317J, which includes the standards, terms, conditions, and limitations contained in the FAA approved Operations Specifications was reviewed. Some key facts noted and listed:

- (a) Section D085 of the OpSpecs Air America Flight Services, Inc has one Beechcraft Super King Air BE-200-200, one Dassault Falcon AMD-50-50 and one Piper Aircraft Chieftain PA-31-350 aircraft in the fleet. Total 3 aircraft.
- (b) Section D092 of the OpSpecs authorized Air America Flight Services, Inc operations in designated Reduced Vertical Separation Minimum airspace for the Dassault Falcon 50 Aircraft.
- (c) Section D095 of the OpSpecs authorized Air America Flight Services, Inc to use an FAA approved Minimum Equipment List (MEL) for the aircraft listed in D085 of the OpSpecs.
- (d) Per section E096 of the OpSpecs, Air America Flight Services, Inc is authorized for a Weight and Balance Program. Air America Flight Services, Inc is authorized to use fleet aircraft weights outlined in the certificate holder's empty weight and balance program for each fleet type listed. The Dassault Falcon 50 aircraft weighed every 36 calendar months per the Air America Flight Services, Inc. Company General Operations Manual (GOM), Section 7.7.

3.0 Type Certificate Data Sheet

The Type Certificate Data Sheet (A46EU) prescribes conditions and limitations under which the product for which the Type Certificate (TC) was issued meets the airworthiness requirements of the Federal Aviation Regulations. According to the document, Dassault Aviation is the holder of the TC.

¹ Operations Specifications contains the authorizations, limitations, and certain procedures under which each kind of operation, if applicable, is to be conducted by the certificate holder.

4.0 Aircraft Information

N114TD was manufactured by Dassault-Brejuet and was issued a corrected Standard Airworthiness Certificate on January 26, 1984². Air America Flight Services, Inc. is the registered owner of the aircraft. According to the last available Flight Logs dated August 13, 2018 when the 12-month Avionics check was completed and information reviewed prior to the accident flight, the airplane had approximately 14,013.0 total hours and approximately 7,541 total cycles.

The airplane was equipped with three Allied Signal engines. The engines had accumulated the following operating times as of November 6, 2014, the most recent log entry:

	No.1 Engine	No.2 Engine	No.3 Engine
Manufacturer	Honeywell	Honeywell	Honeywell
	TFE731-3-1C	TFE731-3-1C	TFE731-3-1C
Part Number	3072800-2	3072800-1	3072800-1
Serial Number	P-76195	P-76153	P-76154
Date Installed	June 10, 2007	December 13, 2007	June 15, 2007
Time since Major	793.8	426.8	788.1
Periodic Inspection			
Cycles since Major	392	197	388
Periodic Inspection			
Engine Total Time	13,243.6	13,429.7	12,280.4
Hours			
Engine Total Cycles	7,106	7,168	7,040

Engine and Information

5.0 Air America Flight Services, Inc Maintenance (Falcon 50)

Air America Flight Services, Inc is responsible for all maintenance, preventive maintenance, rebuilding, and alteration of any of its aircraft, airframe, aircraft engines, appliances, and component parts of such aircraft in accordance with 14 CFR Parts 43, 91 and 135. This includes all life-limited parts that are removed from a type certificated product, segregated and controlled as defined in 14 CFR §43.10.

² Original Airworthiness Certificate listed an incorrect date of issue.

Air America Flight Services, Inc must comply with the aircraft Manufacturer's Maintenance Inspection Program, as revised, in accordance with the provisions of 14 CFR § 91.409(f)(3) and 135.411(a)(1). The Manufacturer's Maintenance Program is one which is contained in the current Maintenance Manual, Chapter 5. All maintenance, preventive maintenance, and alteration to the aircraft, engines, and appliances will be performed in accordance with current Federal Aviation Administration Regulations, manufacturer recommendations and specifications, Manufacturer Mandatory Service Bulletins, Mandatory Service Letters, Airworthiness Directives (AD's), Instructions for Continued Airworthiness (ICA's) and good maintenance practices, as appropriate.

The Falcon 50 Inspection Program is based on four types of inspections, accomplished one at a time, in groups or collectively, as scheduled by the operator. The maintenance cycle is based on four types of inspections.

The following is a list of scheduled inspections contained in the Falcon 50 AMM chapter 5 and the interval for each inspection.

- Basic Inspection: every 12 months or 300 flight hours, whichever comes first.
- 12 Month or 500 flight hours and 12-month periodicity inspections, which ever limit is reached first and every 12 months.
- B check inspection: every 1,500 flight hours.
- C check inspection: every 6 years.

The 12-month periodicity are defined as 3 inspections.

- 12 Month inspection.
- 24 Month inspection.
- 36 Month inspection.

Avionics inspection, every 12 months.

Main landing gear (MLG) items are noted as follows:

- Check of the normal braking system pressures, 2B inspection.
- Check of the emergency braking, 2B inspection.
- Functional test of the anti-skid system, 3B inspection.
- Replacement of the braking system filter elements, 1B inspection.
- Replacement of the filter and seal of the brake servo valves, 1B inspection.
- Replacement of the MLG Pintle Pin, 18,670 landings.
- Restoration of the MLG Shock Absorber, 16,000 landings.
- Restoration of the MLG Brace Actuator, 3,550 landings.

• Restoration of the MLG Brake Servo Valve, 25 years.

Additional main landing gear items: Detailed inspection and dimensional check of the main landing gear legs, 6 years. Restoration of the main landing gear legs (overhaul), 6,000 landings or 12 year, plus 5 months. Replacement of the main landing gear legs (life limited), 20,000 landings.

A record review of the available logbooks was conducted. Table 1 is the most recent listing of the Falcon 50 maintenance inspection checks completed on N114TD for each check type.

Inspection(s)	Date of most recent	Location	Total Time	Total Landings	
	Inspection			Lanangs	
Avionics Inspection	August 13, 2018	Clearwater, FL	14,013.0	7,541	
Basic Inspection	August 27, 2014	Clearwater, FL 14,002.8		7,538	
1A Check	August 27, 2014	Clearwater, FL	14,002.8	7,538	
2A Check	August 27, 2014	Clearwater, FL	14,002.8	7,538	
4A Check	August 27, 2014	Clearwater, FL	14,002.8	7,538	
B Check	November 22, 2007	Unknown 13,568.7		7,335	
2C & 4C Check	January 10, 2012	Unknown	13,860.2	7,467	

 Table 1 – N114TD Falcon 50 Maintenance Inspection Checks

Table 2 is a listing of the Falcon 50 landing gear 72-month dimensional inspection and 12-year overhaul on N114TD.

Inspection(s) Date of most recent L Inspection Inspection Inspection		Location	Total Time	Total Landings
Dimensional Check and Corrosion Inspections (MLG & NLG)	January 10, 2012	Unknown	13,860.2	7,467
Overhaul (MLG & NLG)	July 23, 2002	St. Louis, MO	9,314.8	4,838

 Table 2 – N114TD Falcon 50 Landing Gear Inspections

Included in the maintenance record review was an open work order, No. 622187 initiated on June 22, 2018 by Air America flight Services, Inc. to perform maintenance work on N114TD. The following tasks were assigned:

- 12 Month Inspection
- 12 Month or 500 Hour Inspection
- 1C Inspection
- 3C Inspection
- 5C Inspection
- Basic Inspection
- Replace main batteries

The work order contained a total of 103 maintenance tasks to be completed, see attachment one.

6.0 Minimum Equipment List (MEL)³

Air America Flight Services, Inc was authorized to use an approved MEL on its airplanes per the OpSpecs. According to the director of maintenance, there were no open MEL items, see interview summary, attachment three.

³ The FAA approved Minimum Equipment List contains a list of equipment and instruments that may be inoperative on a specific aircraft for continuing flight beyond a terminal point.

7.0 Airworthiness Directives (AD)⁴ and Service Bulletins (SB)

An airframe and engine logbook review for AD compliance was conducted. The review concentrated on the main landing gear, landing gear braking and anti-skid system. The following AD's affected the landing gear system were reviewed.

- AD 2011-10-14 Dassault Aviation, effective date June 17, 2011. This AD supersedes AD 2010-24-08. Within 7 days after December 9, 2010 (the effective date of AD 2010-24-08), do a general visual inspection for correct installation of the emergency brake system number 2, in accordance with the accomplishment instructions of Dassault Service Bulletin F50-515, dated October 12, 2010. If the emergency brake system number 2 is found installed incorrectly during the inspection, before further flight, install the emergency brake system number 2 correctly in accordance with the accomplishment instructions of Dassault Service Bulletin F50-515, dated October 12, 2010. Within 7 months after the effective date of this AD, paint the pipe ends of the emergency brake system 2 and related unions, in accordance with paragraph 2.C. of the accomplishment instructions of Dassault Service Bulletin F50-515, dated October 12, 2010. According to the records, this AD was complied with on January 10, 2012. Airplane total time 13,860.2, total landings 7,467.
- AD 2017-16-09 Dassault Aviation, effective date September 25, 2017. Within 9 months of the effective date of the AD, inspect brake hoses to identify whether any brake hose having part number AE705317-1 or part number 00-200-1268 is installed. Initial requirements of this AD install's protective wrap on the brake hoses or replaces the hoses with new hoses that are fitted with protective Dacron sleeves in accordance with Dassault SB F50-510, revision 2, dated December 20, 2012 or SB F2000-382, revision 2, dated May 12, 2011. No record of maintenance was found for this AD during the review, see attachment three.

8.0 Aircraft Logbook Review

Aircraft logbooks were reviewed from January 2002 thru August 13, 2018 (most recent entry). The review focused on the landing gear braking system and any special inspections and/or operational discrepancies on the airplane. The following items are noted.

• August 27, 2014 – Removed and replaced right hand anti-skid servo control valve. Installed part number 9542732-2, serial number JULY67-343D. Total time – 14,002.8 hours, Landings – 7,538.

⁴ Airworthiness Directive (AD) is a regulatory notice sent out by the FAA informing the operator of an action that must be taken for the aircraft to maintain its airworthiness status.

- February 22, 2013 Removed and replaced anti-skid control box. Installed part number 6002614-3, serial number NOV80-087. Total time – 13,921.4 hours, Landings – 7.500.
- June 24, 2007 Removed and replace RMLG electrical harness part number C23824, serial number 129 installed. Total time 13,251.1 hours, Landings 6,169.

9.0 Weight and Balance Summary

Air America Flight Services, Inc uses a weight and balance program to ensure compliance with applicable airworthiness requirements and aircraft operation limitations.

Per the OpSpecs (E0-96) the Falcon 50 35A aircraft must be weighed every 36 calendar months. The most recent weight and balance for N114TD was performed on July 12, 2012, see attachment two.

Basic Empty Weight:	21,420.5	pounds
Arm:	1.13	inches
Moment:	24.111.445	lb-inches

10.0 Service Difficulty Reports (SDR)⁶

A query of the FAA SDR data base was conducted for N114TD. There were no SDR found on file for the accident aircraft.

11.0 Major Alterations and Major Repairs

A records review of the FAA Airworthiness file for N114TD showed there were 27 major alterations and two major repairs on file for the accident airplane. None of the major alterations or major repairs affected the landing gear, landing gear brakes or the anti-skid system.

12.0 Method of Record Keeping

Per FAR Parts 43, 91 and 135, Air America Flight Services, Inc maintains records for the aircraft, engines and components with the use of aircraft and engine logbooks, flight logbooks, and other company required maintenance records.

In addition, Air America Flight Services, Inc utilizes a computerized maintenance tracking program (MTrax Maintenance Tracking) to assist in tracking:

- Life Limited Parts.
- Service Bulletins.
- Airworthiness Directives.

⁵ Moment as reported on the weight and balance form.

⁶ A Service Difficulty Report (SDR) is a report of the occurrence or detection of each failure, malfunctions, or defects as required by 14 CFR 135.415.

- 36-month Weight and Balance.
- Emergency Equipment Inspections.
- Next due inspection based on aircraft total time.
- Next due inspection based on aircraft total landings.
- Next due inspection based on calendar date.

13.0 Manuals

- (a) General Operations Manual (GOM) covers the operating policies and procedures Air America Flight Services, Inc personnel under its Air Carrier Certificate. The purpose of this manual is to provide guidance in order that company personnel can execute their assigned duties and responsibilities in accordance with all company policies and Federal Aviation Administration (FAA) regulations.
- (b) Minimum Equipment List (MEL) List of equipment and instruments that may be inoperative on a specific aircraft.
- (c) Manufacture Supplied Manuals Aircraft/Engine Maintenance Manuals, Structural Repair Manuals, Overhaul Manuals, Wiring Manuals, Fault Isolation Manuals, Illustrated Parts Catalog, Corrosion Program Manual, Service Bulletins and Engine Manuals.

14.0 Interview Summary

Mr. Timothy Fox, Director of Maintenance for Air America Flight Services, Inc. was interviewed on June 5, 2019.

See interview summary, attachment three.

Submitted by: Gregory Borsari Aviation Accident Investigator Maintenance

Attachment 1

Work Order – N114TD

AIRCRAFT

WORK LOG

The second s	
Owner:	Global Aircraft Acquisitions LLC
Date:	June 22, 2018
Work Order #:	622187
Registration #:	N114TD
Make:	Dassault
Model:	Falcon 50
Serial #:	017
Notes:	

Air America Flight Services, Inc. KPIE Hangar 4303 General Howard Drive Clearwater, FL 33762 561-682-1155 (P) 727-538-5658 (F)

DISCREPANCY SHEET

WORK AUTHORIZATION

I hereby authorize the following repair work to be done along with the necessary materials, and hereby grant AIR AMERICA FLIGHT SERVICES, inc. permission to operate and fly the aircraft for the purpose of testing and/or inspection. An Express mechanics lien is hereby acknowledged on the aircraft identified to secure the cost of repairs thereto. AIR AMERICA FLIGHT SERVICES, Inc. will not be held responsible for the loss or damage to the aircraft or articles left in the aircraft in the case of fire, theft, or any other cause beyond its control.

Owne Globa Acquis	<u>r:</u> Aircraft sitions LLC	<u>Street:</u>	<u>City, S</u>	itate, Zip	Phone	<u>WO#</u> 622187		<u>Date:</u> 6/22/2018		Hobbs Time:	
Make: Dassau	ult	<u>Model:</u> Falcon 50	Regist N1147	ration: D	<u>Serial:</u> 017	TTAF:		Landings:			
NUM		Discrepancy			Corrective Acti	on	Est. Hours	Date	Hour	s Technician	\neg
1	Perform 11 inspection: PERFORM ON 500	4, 1А+, 2А, 2А+, 4A an 5 m 12 mos, 12, DHR, 24 mos 55 INSPECTIONS	nos +					2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	5.5 5.5 7.6 7.6 0.6	2.5 1/10 10.70 1.5 1/10 19.0 1.5 1/10 7.5 1.5 1/10 4.5 5 1/10 4.5 5 1/10 4.5 5 1/10 11. 5 1/10 5 7 1/25 6.5	0.0 0.0
2	Perform 1C	inspection			9			2111 42 20 20 20 20 20 20 20 20 20 20 20 20 20	0.0 10.0 9.2 14.5 0.0 7.5	8/23.95	
3	Perform 3C	inspection			z						
	Perform 5C i	nspection		2							
4											•

NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
5	Both main batteries due replacement	REMOVED BATTERIES P/N RG39 5/2'S HOHYTOGI + HOYTEGGH INSTALLED NEW BATTERIES P/N */ 5/2 HO930448 + *2 5/2 HO 1.A.W 24-32-01-900-801	0E + AS390E A39120	6/27	1.0	
6	Pilot and copilot oxygen masks due overhaul	Romoved Priver Copiler of mask pilots ~ 2001 co unter gerisla lied Magk after cyth Privers ~ 2009 + Copiler 2921 Divers ~ 2009 + Copiler 2921 Defter Falcon SUM	0-61			
7	91.411 / 91.413 / RVSM / 12 month avionics inspections due	DONZE BY FULT. CERTS.				
8	Oxygen bottle due hydrostatic test	Renard OL BOTTLE Prastals7 Sor 1990 Reneworld Dotted PN GST 251 SN 631103/ Itan Felen 50 mm 354001- Sect191 Fer Server	1827 -900	୫/୦୦	1.71	
9	Life raft #1 and #2 due recert	REMOVED RAFTS PLD RAFIZOG-105T SLD 1038P+ 1029EP				
10	BOTH MAIN BATTELIES NEED SAFTIED + VENTS CONNECTED	DOVE				

	NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
	<u>,</u> 11.	Ha HYDRAULIC RESERVOIR NEEDS SERVICED.	SERVICES RESERVOIL w/5606 I.A.U F50 m m/m TASK 29-14-01-610-801.		6/28	0.1	
	19.	PERFORM BASIC	Preferred Besic. Inspection		e/aq	3.35	-
	3.	LH MLG EMERG. BRAKE PSI SWITCH (8IGI) LEAKING	Remared Press Sunden PN76665-1 SN 1542 + INStand Survey 76665-15N 868 NO Legks Been		02/20	1.0	
	μ.	RH MILG EMERG. BRAKE PSI SWITCH (8162) LEAKING	Removed Press Switch PN761663-1 SN 715 + From 1400 press Sudde 76663-1 SN 1582 NO Leals Seen				
16	5.	HA ENG, OIL LEAK AT OIL DIPSTICK	Deplaced Dipstich ORite Winen		6/29	.35	
16	».	H ENS START GEN OIL SEAL LEAXING					

L	NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
	[N.	H3 ENGINE, FCU LEAVING FUEL OUT DRAIN H ENG FIRE EXTINGUISHEL (14W1) ENE HANDING TEST 	F634 Removed Bottle P~ 560 S~24 500 00 1507 PERFORMED WEIGHT CHU I.A.W FALCON FED M/M 26-20-09-220-801.	70-01 9	8/19 8/19 1/20	1.0 .3 .5	
4	<i>P</i> .	CHY H 2 ENG FIRE EXTIN. (14W2) DUE HYDRD TEST + 12 MOS. WEIGHT CHY	Penaved Bottle or 860 640 SN 24 - 935 Included Buttle PN F60640 ST 51400		8/23 8/23	1.0 1.21 1.0	
3	0	^H 3 ENG FIRE EXTIN. (14W3) DUE HYDRO TEST + 12 MOS. WEIGHT CHX	Remarch Bottle P~860640 S~ 57093+Insterned Free particle PN 8606405N 1272		8/33 8/39 1/96	1.0 1.5 1.0	
9,	۱.	APU FILE EXTIN. (73W) DUE HYDIO TEST + 12 mos. WEIGHT CHECK	Renoued Bottle 30/11/02 SN 23971A1 Reinsteried Fire Bottle Sime Pr SNJAN		s{)⊃ v/∞	1.0 1.0	4
92).	REAL COMPARTMENT FILE EXT. (23WI) DUE HYORO TEST + 12 MOS. WEIGHT CHK.	Removed bettle 30702102 SN 0741201 Removed Size Putsu En acreed		1/2C	1.0	-

	NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
	93.	BAG. COMP. FIRE EXT. (23W2) DUE HYDLO TEST + 12 MOS. WEIGHT CHK	Renaved Bittle 3070200 SN 07413D1 Repsared Saptra Photon in Sure Position		J90	1.5	<
	Эн.	SERVICE COMP DOOR FORWARD CABLE FARYING (ALMOST COMPLETELY BROYEN)	REMOVED OLD CABLE ASSY + INSTALLED NEW CABLE ASSY.	-	3/18	.વર્ડ	
	£5.	AL FMS NEEDS BATTERY REPLACED	REMOVED FMS P/2 M47 17960-0102-0001 s/2 XMHE FOR REPAIR, REINSTALLED SAME P/2+ s/2	r e r P			
	QC .	HA FING WHITE SCREEN ONLY + NEEDS BATTERY REPLACED	REMOVED FINE P/W XMIG 17960-0102-00015/W PMP FOR REPAIR Incread Fins 17960 DIOZ-0001 SU XM QEVER REPUER, TELED UNIT. WILL NOT POWER UP. SEC # 101	197 140 1727			
9,	٦.	ELT BATTERY EXPIRED	Begineed w/ven + Teset ert ver Efferingen 10/20		16 <i> </i> 8	'n	
z	ь.	# 2 STATIC SYSTEM LEAKS	T/s Pound Broken like above Fredermack RH side of air crefor		2015 215 215 215 215 215	1.5 1.0 3.5 4.0 5.0 9.0	

	NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
	29	Transponders do not power up, there is no power at the rack P1-58 POWEN PIN 58 GROUND PING	femoued thanspondels 622-9210-005 s/N 469m, 4LCY REINSTRILLED SAME TERNS. P/N + S/N		בורה האים האים האים	2.25 2.15 1.5 .5 2.5	
	30	Radar will not turn on					
	31	Nose blower inop	TIS, FOUND PWR+ GROUND AT BLOWER. REMOVED BLOWER PIN ENTROSD SINISO Reinstal Repaired Dioner Some Pri/SN ERCL R Operation Soul attris The		8/99 J31	,5 Э.О	C
)	32	#3 HF inop					
	33	SSEC incorrect on ADC's, need to recheck with flaps up					
	34	Distance segments out on #2 HSI					

	NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
	35	Distance shows 0.0 on #1 RMI for the DME, suspect RMI need to swap					
	36	Terrain INOP in hangar, self test ok, need to retest outside					
	37	Traffic INOP need to recheck after fixing transponders	£				
	38	ULB battery expired	REMOVED BATTELY P/N DX100 5/N \$CH3915 INSTALLES NEW BATTELY P/N DX100/90 5/N ATTIGO90 I.A.N FSO m/m 25-62-00-900-801. NEW EXPLEY DATE 7/2005		8/18	איז	
and a second sec	39	ONLY WAY TO GET AUDIO OUT IS TO DEPRESS EMERGENCY SELECTOR ON AUDIO PANEL					
	40	Stringed Stervs need Veplaced on panhel 622 BT RH	Replaced w/ new screws NASS17-3-2				-

	NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
ſ	41	7 stripped screws need replaced on pannel 522AT 4 H	Replaced will new screws NASS17-3-2		nfaz	SEE 1	
	મગ્ર.	MULTIPLE FURBERKE GPJEASE FITTIJOGS NOT TAKING GREASE	Replaced ul new hardware 33411BE100026ME		กไลน	10.5	-
	મરૂ.	PERFORM LANDING GEAR FUNCTIONAL TEST	PERFORMED FUNCTIONAL TEST OF EXTENSION + RETRACTION OF LANDING GEARS + DOORS I.A.W FEO m/m 32-30-00-720-801.				
(ųЧ	Several Ingroper Bolts and washes on Wheel seven hub Covers	Fresht all new hardware on all 4 wheels ANIT3 HGIA XIZ AN960-101 XIZ				
	45.	APU START GEN DUE OH	Benoved Stever gev PN 8060-320-1 SN 1929 Beiszeied PN B060-320-1 SN 1927 aller 0/14 IAN Falcon SU MM 24-33-61-90		ee 8 15/0	<i>д.</i> 5 1.5	
	46	Back op Battleries Under aft carch Due For service	Remard Butt PND734-02-001 SV 2554+2553. Reinsland PND734-07-001 SN 2454+2553 aper Fepuir + Cheege		8/9) 1/31	1.0 1.3(

NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
47	Buck up Bettery Behud Cock pit cabert Due For Servic.	Renoved Octhery PN D734 SN 1418 De instant PND7 SN 1418 De instant PND7 SN 1418 alter Report Change	02-001 134-02-001	ופלח ופלח	1.0 ,5	
48.	FM& EMERGENCY POWER SUPPLY DUE SERVICE	REMOVED EMERGENCY POWER SUPPLY XL245A P(N 100-0540-02 s/N 0808749 INSTALLED REPAIRE EMERG. POWER SUPPLY XL2450 P/N 100-0510-02 s/N 2158	0 0	7/31 8/20	.85 .85	-
ન૧	wire Bundle Behind LH Wing Root Barel has accupte Bad adel	Replaced Z ade & w/n. On LH mig Roest wire Bundle	ev			-
5	LH Skid Control Due fer 0/14	Renard PN 9542732-2 SN June FO-375 Lu Skul commol Reinste wed Annistica contan 2000 Folcor 80 m 32-41-45-9 See # 83	ω	15/2 16/8	1.0 1.35	
51.	P&&35D POWER SUPPLY DUE CAP CHECK	REMOVED POWER SUPPLY P/2 501-1228-04 s/20 15254. REINSTRUCS REPAIRS POWER SUPPLY P/2 501-1228-04 s/215254.		131 8/20	,85 .26.	
52	CW AD 18-11-10	C/W AD PETEXT FG3 C/W SD P50-531 See Square 53 Neps Due Wig W 72 months		8/7	1.0	

	NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
(53	Per 52 AD Complience need Mandatory S/D # 531 C/W	C/w SBF50 - SJI Per text no squaks found at Anstine		8/2	1.0	, 1
	54.	c/w AO 17-09-03 ANBERAME			6/8 10/3 86/8 00/8	3.0 2.0 1.5 1.5	
	<u>5</u> 5	Rtt wing ID Speed Brack has hyd Line Danasad	Renoved & Replaced here al report, openal Speed Brake no babs Seev		8/2	,5	
	55o.	#1 ENG, C/W AD 16-17-02	NA BY MODEL				
E.	57.	# 2 ENS, C/W AD 16-17-02	N/A BY MODEL				
E	\$	#З ENS, clw HO16-17-02	N/A BY MODEL	5			

	NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
	59	Srews for air brake poinnels corrodel	Replace with new screws MASSI73-3			SEE 1	
	GO.	AIRCARFT NEEDS DETAILED			8/15 8/10 8/17 8/20 8/21 8/20 8/20 8/20 8/20	6.0 9.35 6.75 13.35 8.3 2.0 9.0	8/24 17.0 8/25 8.0
	۵۱.	AFM MISSING AEU. 36					14
	- <u>-</u>	OPERATING MANUALS 1,2+3 MISSING REU. IG					
G	,3.	AFM TABS IN BAO SHAPE	REPAIRED.				
6	н.	PERFORMANCE MONUAL TABS IN BAD SHAPE	REPAIRED				

	NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
C	65.	FLIGHT MANUAL SUPPLEMENTS + 337 BOOK NEED COVEL + TABLES OF CONTENTS UPDATED TO COLNECT INFO	2				
	.عک	SEVERAL FLIGHT MANNA SUPPLEMENTS MISSING FROM FLIGHT MANNAL SUPPLEMENT BOOK SEE 337 DDS LIST.					
	යා.	GO ARFS G.O.M MISSING FROM PLANE	INSERTED INTO AC	2.5			
	'Ð	GW AD 2008-04-14	C/W AD per Text and work could # 52-20-00-601 IN At chapter 5 Insp Per all TREPT		ક્રીાટ	1.0	
1	ه	Replace Fuel Filter When ON APU	Renared + Reprod Fuel Filter When Denserved Run APU NU Leds seen It W Garrett MM 49-30-49		8/10 8/17	.5 1.25	,
-	10	Peplece oil Fiver + Servie APU W/ 0il	See 96 for syroff		8/02 8/17	9.0 1.5	2

	NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
ſ	-ı	Insport ch Elec Fristention dr APU	Jaspecked Eletaskelletun JAW genet my 49-2000 NO Defects neted	2	8/17	:75	
	72	Inspect Plubing ON APU Per menued	Ins peaked plumbuy Inski Fix w garrett Mm 49.2001 Pd 203	actra	8/17	יאבי	
	נר	Jsnigher Plug ch UN apu	Renarch+ Check Isny #1 Plug And Reistalled Ibn Granett m 49-40-35 pd 201-204		8/16	. <i>15</i>	,
(74	CO-BOSTUR + Exhaust Section Remore + Inspet ON APU	Renard CK + Kushiled Comboster + Exhaust Sector on ap J IDN Gerreti MM 49-20-04		8/10	1.5	
	75	FJEI NOZZIE Cass Frageer on APU	Remuch chi Kinskiel Combuster Fuelvorcle Bow geneti M 49-30-51		ร/เc	,75	,
	<i>7</i> 6.	SH ALL SPEED BRAKE GREASE FITTINGS MISSING CAPS	ipstalles caps				· · · · ·

	NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
	nn H	Par 02 controller Ove er oft	Removed Control P. Alph 70 SN 2414 + Instand prich SN 984 IAW Falce SD M35-20-01-900-50)	†)o	8/18 8/8	3.5 1.25	
	78	Apu Draw needs Replaced per SB	Repleved fittur JAN SB GTCP36-49-6097		8/17 8	.5	4
,	A.	PANELS THAT WERE REMOVED WEED RESERLED	Reseated Reneved Done US		8/18 10/8	1.5 3.5	
	60	02 pressure Reduche Due Ser Off	Penaved Press Reducer PN RDN 1000 SN 635 + Insteried Reducer PN RDN1000 SN 1276 DAN Pelcon 50 M 35-40-05-900)-Se 1	8/20	7.0	4
¢	51	Service O2 Bottles Ch for bracks after Cong - feg laenets	SEQUICES 1.A.W F50 m/m 35-40-01-610- 801.				C
8	2	Speed brake joannels has 2 strippeed bolts	Replaced 4/ New Nardware NAS673V27F			·	

NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
	persistend annismed					
	Thetail Breform test					
102	JAW 32-41-00-701-801					
12	x		S.			
	Red Squb on fire Butty	Replaced Squib or Fre				i i i
	14WB Squb needs Belled	Bottle Win ver				
84	ť	No Show Squib			SEE	
		Pr 861385 200 Februsu			30	
		m 20-20-13-900				6 G
		5~01194				
	Green Squb on Fire Bittle	Replaced green Sauch				
	14WZ weeds Replaced	PN 861385 5N00954				
85		FAN Fare Summ			SEE	
		26-2-15-90			20	
	년. 第 7. 국	0 2 00 10 (00				
· ·	* • • • •	1. T.				1
	Red Squibor Fire Dottle	Replaced Red Scubor				
186	14WB Need 5 Replaced	Fice Dottle 14W2 when				
•		PN 861375 8N 01182			SEE	
		TAN Falser ma			19	
		24-20-13-500				
	4 X	00000		. 2		
	2 1 2	0 + + 0				
	Green Syston Fice Bit	e replaced Green Squa				
85	44W2 reeds Bellaced	WI STURE 04 Squb pr			SEF.	
		861385 20 50 JAN			19	
		Falcon 80 MM				25
		26-20-13- 700				
	HI engine made	Tratellel and				
		DI DULL				
86	fuel filter & oring	fiel filter		dia		-
	Teplacec	177 1769600		199	5	
	. .	D-CIVA				
		8# 59413-032				
		TFE 731 m/m 73-21-02				

	NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
<		#2 engine needs fuel filter and	Fistalled new filter PH 176 4660		8/22	,5	-
	89	D-ring replaced	and Oring				
		Tren	31 m/m 73-21-02 59413-032				
		H3 engine meeds	Installed New fuel				
	90	fuel filter and	filter 1764660		c6/8	.5	
		D-ring ich	ound O-ring th				
			151 m/m 15-21-02 59413	32			
		Replace Oking on	replaced when				
	QI	all 3 Eng BREAT	012.485		alaa		<
		on the caps	аў. Э		olaa	,5	
		# 1 Eng Charge oil	Changed Oil + Filter		8/22 1:75	1.75	
2	92	7011 F. 198 @	ON THIERY Serviced				
			Lector Secr	6			
			TEE 31m/m 79-20-01		• *		
		# 2 Eng change cil	Charged out + File		8/22	1.75	
	924	+ oil Fine	ON Sherry Serviced				
			Woin han sking				
			Locks Seen				
			TFE731 m/m 79-20-01				
		H 3 Eng Cheve	Chase oil + Filer		6018 6.6	1.95	
	93	Oil + oil Fito	ON # 5 En served				
			Woul no Larks for				
						*	
			TFE731 m/m 79-20-01				
J						l	<u> </u>

	NUN	1 Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
	94	Found 4 Bad grand Screws for Fire Botole	Replaced Scens w/ww				
(1	14W2 + 14W3		а. С.			
		1 Broken Static vice	Replaced 1 Each				
	95	- ich wing inp	Steric wice when				
	96	Take Sourp Sample GAV aput Change Oil	Charged oil + Fiver took sample sorvicel Worl				
	ຊາ	Check Chip Dedecker On # 15mpe	Pencued Ch + Reinstein Chyp Detect				
	98	Check Chip Detector ON # 2 Eng	Penskied Chip Deseel				
C	76	Check Chy Detector ON# 3 Eng	Renslevel Chy Der				· · · · · · · · · · · · · · · · · · ·
					and a second second second		

NUM	Discrepancy	Corrective Action	Est. Hours	Date	Hours	Technician
 100	All Life Vests Due fer Overhaul	Replaced of 11 Life vests				9
101.	AFTER Hag, Ha Frons WILL NOT POWEL UP.	REMOVED GNS-XLS P/W 17960-0102-0001 s/w XM1 + INSTALLED OUXAN LOANE P/W 17960-0102-0001 s/W 1462, 0P5 ~ 6000	รอา.	8/25	,25	
102.	STBY PK WO. PIPE LEAKING	REMOVED + INSTALLED RIEW PIPE.		8/25 8/26 8/29 8/29 9/1	3.5 .5 1.5 1.5	-
103	AIR OFTA COMPUTEL (IFX) NEEDS REPAIN.	REMOVED AIL DATA COMP. P/W G22-5465-414 5/W 162 + SENT TO DUNCAN. REINSTALLED SAME P/W + S/W, SYSTEM CENTIALD BY AUTODE CENTS				-
•••		*		a a		
					r K	
	15 m	25 	•.			

e 2

v.

Attachment 2

Weight & Balance

AIR AMERICA

FLIGHT SERVICES

July 12, 2012

Aircraft Weight Report

N114TD

Falcon 50 s/n 017

AIRCRAFT AS WEIGHED

Item		Weight	Arm	Moment
Left Jack		9,641.0		
Right Jack		9,621,0		
Sub Total		19,262.0	37,54	723,095.48
Nose Jack		2,132.0	-328.22	-699,765.04
TOTAL AS WEIGHED		21,394.0	1.09	23,330.44
Unusable Fuel		26.50	29.4717	781.0
AIRCRAFT BASIC EMPTY WE	IGHT			
Basic Empty Weight		21,420.5	1.13 26.01 % MAG	24,111.44
Maximum Ramp Weight	40,780.0			
Maximum Take Off Weight	40,780.0			
Maximum Landing Weight	35,715.0			
Maximum Zero Fuel Weight	25,570.0			
Aircraft Useful Load	19,359.5			

Aircraft was welghed using 25K Load Cells s/n's R510005A, R510241A and R510246A Indicator M2000 s/n 12-8466 Date of last calibration 4/2/2012



Attachment 3

Interview Summary



Interview Summary

Date/Time: June 5, 2019 at 08:40 EDT Mr. Timothy Fox, Director of Maintenance – Air America Flight Services, Inc Location: Clearwater Aviation, Clearwater, FL. Participants: NTSB, Gregory Borsari, Pocholo Cruz Representation: Mr. George Crow NTSB Accident Number – ERA18FA264, Falcon 50, Greenville, SC

After introductions were completed the interview commenced and Mr. Timothy Fox was asked if he had any FAA or FCC certifications which he responded he has an A&P license.

Asked what his position or title at the company for Clearwater Aviation, He responded he was the director of maintenance (DOM). How long have you been the director of maintenance for Clearwater aviation? Tim responded late 2009. Asked how long with the company and he said since 2001. Prior to being the DOM, he was in maintenance with Clearwater aviation.

Can you briefly describe your professional background? Before 2000 I was in the restaurant industry. About 2000, 2001 my father bought the flight school and I came to work for him. I started to learn about airplanes. As the DOM can you tell us about what your duties and responsibilities? For the flight school, to maintain airplanes in accordance with regulations. See that the inspections get completed. Make sure the personnel have what they need to complete the tasks. For Air America it was to make sure the company manuals were up-to-date and to keep the airplanes maintained. When asked about the two companies, Air America and the Flight school he clarified that there is only the flight school now. That Air America is no longer in business.

Asked what airplanes were on the Air America certificate he confirmed that there were three airplanes, a Super King Air, a Chieftain and the Falcon. Asked if they still had the two airplanes, he responded that yes to the King Air, no to the Chieftain.

Can you briefly describe the history of Air America? Not sure I really understand the question, my father purchased the company around 2003, 2004, 2005, sometime around then. Prior to that I could not tell you anything about it. After your father purchased the company and you came onboard, what did the company do? We chartered airplanes and I was just a technician back then. Several other people held the Director of Maintenance position. The certificate is gone so the only thing in operation is the flight school, correct? Yes, flight school and the maintenance. About Air America, can you tell us a little bit about it? It was just one hangar.

Asked if there were any previous accidents or violations or anything of that nature with Air America he responded, not that he was aware of. Were there any on-the-job incidents or did

anybody get hurt on the job? No there were none.

Going over the background, just to understand the company's workforce, workload under Air America how many mechanics were there? As of right now there's three of us, there was four, but about July or August maybe somewhere in there he left. Did the one individual leave on his own? No, my father let him go. Did you perform any of the hands-on work yourself for America? I did.

At that time what percentage of maintenance would you say you actually performed? He said it's really hard to say, about 30%, I really couldn't put a number to it. Asked if the other mechanics were A&P certificated, he responded yes, they were. Asked if any were FCC certificated or R&E mechanics, he said he did not know what an R&E is. Clarified the question, any radio and electrical mechanics? He said, no. I further added that according the records there was a recent 12-month avionics inspection and said, yes that type of work was outsourced.

Asked about component work, if they send the components out or do you do any component work in-house? He responded; no we don't do anything for components as far as working on the physical component. We remove and reinstall yes, but no physical work or tear down on the component itself. Asked if they used outside vendors and he asked do you mean like a Duncan Aviation? I responded yes and he said yes, they do use vendors to send the components out for maintenance.

Asked about training, as the director of maintenance do you provide any training? He said it was all hands-on training (on-the job training or OJT). Asked if there were any recurrent training requirements for the mechanics? Not that he was aware of. Asked if there were training resources available to him, he said, yes one time they took an APU course over at Tampa.

You talk about OJT, on-the-job training, do you maintain any training records? No records just provide the OJT where needed.

Asked if he felt the mechanics that work on airplanes if they were competent or any issues with them, he said they were competent, could perform the work on their own and had no issues with them.

Asked if he was responsible for the GOM he responded, no he did not think so. He added that his father and the director of operations took care of the GOM.

Asked about the Falcon specifically and under the 135-certificate how was maintenance tracked? How maintenance that would be coming due in the future was tracked? We have a program called MTrax. He said the company that designed it was Tdata.

Asked if he, as the DOM would input the items that needed to be tracked? He said yes, he would add the items. Asked if the items could be tracked by flight hours, flight cycles or calendar time, he said yes. Asked if the program could track any combination of the three and he said yes, any combination.

Asked about airworthiness directives as the director of maintenance did you review and determine whether airworthiness directives apply? He responded, yes, he used Tdata to review the AD's. He clarified that under that program you can select the make and model of the airplane and it would pull the applicable AD's up for review. Asked if the program provided that type of service, he said yes.

When asked about service bulletins he said he used the Falcon customer portal for service bulletins. Asked if that included engines, he said no, just the airframe. Asked about the engines he said he did his best to keep up with Honeywell, their portal. The DOM had access to both. Asked if he had a routine task for himself to check for SB's he said he would pull them up every 60 - 90 days to review. He added he would get e-mail notification every time a new service bulletin came up for the Falcon.

Asked if the program would provide an alert when an item was coming due, he said no, you would not get a notification, but he would check the program on a daily basis to see if anything was due.

Asked if he ever had to deal with an over-run or something that went beyond time, he responded no.

Asked about the method of record keeping. He said for that particular airplane it would be airframe, engines and APU logbooks.

Asked if he had ever dealt with a recurring log item, some people would call it a chronic item or a reoccurring item? He responded no; he did not remember anything like that.

He was asked about mechanical irregularities or service difficulty reports and he responded that he was familiar with them, but never had to deal with that.

Asked about tooling requirements, such as calibration requirements, he said yes, every 12 months and we have a record of it.

Asked on the Falcon if they had an MEL or used the MEL? He said that he had not used it in a long time. The airplane had not flown in years. Asked if there was anything deferred on the airplane? No, nothing deferred. Asked how he would track an MEL item? He said he has a board over in the office. Tracked by "N" number, ATA code, item, and due date.

The DOM was shown a copy of the work order on the Falcon and asked if he was familiar with it and what it was? He said that was the work order generated when his father wanted to put the airplane back in service.

Asked how long the airplane was in storage he said about four years, except for doing monthly runs. The airplane was kept in the hangar.

Asked about the work order that was generated that looked to be a work progression sheet he clarified the work order was everything that had to be done before the airplane could be placed

back in service. Asked if the work order was completed, he said no it was not. Asked how far along, he said if he remembers correctly about 60% complete.

Asked if the work was not completed was the airplane ready to go? He responded, no, not by the regulations and he (father) knew that. He added that there was nothing he did not know about that airplane.

Asked about an item on the work order to send the anti-skid control box out for overhaul, he said he thought it was the left anti-skid control valve. He added that each gear had an anti-skid valve and he did not remember which one. He was shown the item in the work order and agreed that it had left hand control box and not control valve as it should have. He added that it was not sent out for overhaul. Asked if his father knew this? Yes, he knew, there was nothing he did not know about that airplane. He added, if I knew it, he knew it.

Asked if we (NTSB) have all the records on the Falcon, he said the FAA came and took everything. I informed him that we have all the records the FAA gathered, I just needed to check that nothing else was there.

Asked if the main landing gear (MLG) was due for an overhaul? The DOM responded, yes. Was it overdue for an overhaul? He answered, yes. I explained that according to the requirements the overhaul is every 12 years with a plus five-month grace period and he added that he thought it was 12-year six month. I further stated while reviewing the records it looked like the last overhaul was about 14 years ago and he responded, that could be right, whatever is in the records.

I discussed that there was a number of airworthiness directives on the MLG brake hoses and the most recent AD had an effective date of September 2017 with a nine-month compliance period. Asked if he was familiar with this AD he stated that, yes he remembered something like that, but they had not gotten to the airworthiness directives yet, they were working on getting all the letter checks completed first. Asked if the AD was done, he responded that if it was applicable to the airplane then no, it would not have been done.

Asked if they had an area that they kept spares he said he that they had an area for chemicals, lubes, hardware and some consumables. We did not have a lot of parts or consumables for the Falcon.

We talked about the interview that was conducted with a pilot that had recently flown the airplane and had said that the brakes did not work after landing. Asked if he was given this information. He said he remember one time the plane was flown for maintenance and the pilot said that one pedal felt soft, but once he pumped it and they were fine. Once he reported it to me, I discussed it with my father saying we need to look at this. His father told him not to do anything until he checked it out himself. It was his airplane, there really wasn't a lot I could do. That was some of the tension between us.

I explained that in the interview the pilot said, no brakes on landing. He responded, I never heard that. He was asked if he was ever told, no brakes on landing and he said, no, never. He added

that he only had the one conversation with the pilot about the soft pedal. Asked that he was never told, no brakes on landing and he said correct, never told. I definitely do not remember being told that.

Asked if either the PMI or the PAI had ever been around to look at the facility, he said that the PMI had never been here and that the PAI came around one time as long as he'd been there. He added it was about May, June timeframe. He had called my father and said he was coming up to perform some "R" items. He was in the building for about seven to eight minutes. Asked what the "R" item was and he thought they were a recurring type of item. Discussed that the 12-month avionics inspection was outsourced he said he had to; we do not have the capability to perform that work.

Asked how the relationship with the FAA was? He said besides the onetime that the PAI was here he does not think the PMI was ever here while he was the DOM. He added he doesn't think he saw the maintenance guy more than twice. Asked in how many years, he said the current PMI started sometime in 2017. The only time he saw the PMI was when they did the conformity inspection on the Navajo in Ft. Lauderdale or West Palm, wherever we did it.

Asked if the local FSDO ever came around and he said yes, quite frequently they are here to look at the flight school so yes, we see them.

When asked if the FAA had any concerns with Air America or written any letters, he said not that he could remember.

Asked to clarify the relationship between Air America and Clearwater Aviation he explained that Clearwater Aviation is what we do business under with the flight school and the maintenance. Air America was the135 charter operation.

Asked who was the primary contact for the PMI he said that they would either call me or call my father. Ask if the PMI ever called to tell him they were coming over he said no, not that he could remember.

Asked if the PMI could have contacted your father and planned a visit that you did not know about he said, no, not that he could remember. He added if they contacted my father, he usually tell me about things like that. Doesn't mean it did not happen, I just did not hear about it. He added that the last visit by the PAI was in early 2018 and that was the last time I saw him. The last time I saw the PMI here was when the previous PMI had the certificate prior to the current PMI. The previous PMI was the last PMI in this building. He added that was sometime in 2017.

Can you explain the Tdata? He explained that Tdata is the company that builds several programs such as I Approach that tracks all the AD's and the MTrax program which I use for maintenance tracking and they have another program called ITrax for tracking inventory and their based in Ohio.

Asked if he inputted the data into MTrax he responded that yes, I would have built that right off of the Falcon 50 AMM chapter 5 for each maintenance item. Asked if he followed the

manufacturers maintenance program, he responded, absolutely, that is how it worked. He further explained that he has both the maintenance and AD tracking, but he did not have the inventory tracking. They did not maintain inventory on sight.

Asked about the progression sheet if that was from MTrax he said no, that is an internal work order document that he created. Asked if MTrax could print out a work order he said it can provide task cards but he uses the internal work order to keep everything the same.

Asked if his father had an A&P license, he said no, not that he knew of.

When asked about the report of problems with the brakes what did his father say? He said his father told him he wanted to check it out, go taxi the aircraft and see what was wrong.

Asked about the monthly runs while the airplane was in storage, he explained they would run up the engines, run the APU, check out the avionics and exercise the flight controls (flaps, slat, TRs, hydraulics and the brakes).

Did the FAA know the aircraft was in storage and he responded that yes, he talked to the previous PMI about it being in storage, but he did not recall ever talking to the current PMI about it being in storage.

Just to clarify, since you were doing monthly runs the airplane was not pickled and the maintenance program was still in affect? He responded correct. Asked if he was required to let the FAA know the aircraft was in storage he said no, not that he knew.

When asked about who actually worked on the Falcon, he said of the four the two junior mechanics might do some lubrication items that he really only allowed either himself or the other senior mechanic to perform the maintenance. The fourth mechanic that was let go did not perform maintenance on the Falcon? No, absolutely not.

Asked when the 135 certificate was surrendered, he responded not sure of the date, but it was within days after the accident.

Again, to clarify when he saw the current PMI he said when they did the conformity down south on the Navajo and maybe somewhere else, but not in this facility.

Asked if any of the mechanics worked on the brakes, the antiskid system, the wheel speed transducer, any wiring and he said no. The only thing he could remember was just R&R of the antiskid valve, nothing on the transducers or the wiring. Asked if the antiskid valve was up in the wheel well, he said yes in that area. Asked specifically if anyone touched the wiring, he said no, no one.

Asked if anyone removed the antiskid transducers he said no, we removed the wheels to do the wheel bearing lubrication, but you don't remove the transducers when you remove a wheel.

Asked about removing the brakes he said no, we removed the wheels, but we never removed the

brakes or the wheel transducers. Asked if the landing gear had ever been removed in the period of time they had the airplane and he responded no.

Asked if he knew anything about braking problems on the aircraft from the previous flights or anything written up on the brakes, he responded there was never any write-ups, only the one item from the maintenance flight that the pilot said the brake pedal was soft, spongey. Asked if the pilot wrote it up in the logbook, he said no.

When asked if anyone talked to him about any other brake issues, such as not being able to stop the airplane he said no, I am pretty sure I would remember someone telling me they couldn't stop the airplane.

Asked specifically if the pilots had a logbook that they could wright up maintenance items in he responded there was a flight can that had flight sheets in it with an area where you could write up squawks (maintenance items).

Asked if there were any write-ups on the brakes, can't stop, antiskid system, anything on the brakes? Or if anyone ever talked to you about the brakes? Not that he could remember other than the soft brake pedal item. He added I would think I would remember someone telling me they could not stop the airplane. He added, that would be pretty serious, and I would remember something like that.

Interview ended at about 9:40 EDT.