BOMBARDIER CUSTOMER SERVICES BUSINESS AIRCRAFT

Customer FORUM & Newsletter

TUESDAY, MAY 3, 2011

VOLUME 08 / ISSUE 09

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LEARJET, CHALLENGER AND GLOBAL SERIES

Michael McQuay Andy Nureddin James Hoblyn Leon Botteron Diane De Souza Gary Martin

A Word from the Bombardier Customer Services Leadership Team

Over the last year, you may have noticed some changes at Bombardier Customer Services. We have taken bold steps to expand and improve our service and support network with a particular focus on global expansion. Our mission is to put You.First. and we wanted to take this opportunity to share some of the major milestones with you.

In February of last year, we opened up our own service centre in Amsterdam and, during the course of the year, we added five Authorized Service Facilities around the world including Kuala Lumpur, Malaysia; Le Bourget, France; Monterrey, Mexico; Provo, USA and Riga, Latvia. This brought our total network to 60—the largest in the industry.

We opened Regional Support Offices in Dubai, Mumbai and Hong Kong. We also hired 65 field service personnel around the world bringing the total to 85. Again, this is the largest and most experienced team in Business Aviation.

We added three more training simulators in London, Amsterdam and Dubai in 2010. In early March 2011, training began on the Challenger 604 in Amsterdam.

We announced an investment of $180M to increase our stock of parts around the world and in April we opened a parts distribution centre in China, bringing the total to nine.

More recently, we decided to attack No Fault Found (NFF) parts, so we instituted a three-strikes rule for any NFF part found Defective on Arrival (DOA) and purged our inventory of suspect components. We backed this up in March by launching a Parts Satisfaction Guarantee—an industry first.

A Word from the Bombardier Customer Services Leadership Team (cont'd)

To speed AOG return-to-service, we expanded our PartsExpress Airborne Parts Delivery Service to the Middle East, Asia and Africa.

In April, we moved forward with the second phase of our Reliability Improvement Modification Program (RIMP) where we have already replaced over 1000 components on the Global fleet at virtually no cost to our customers.

In summary, we have built the largest and most innovative customer service network in Business Aviation. We won't stop here though. We have bold plans for the future and are excited by the improvements to come. We will do what it takes to put You.First.

Soon you'll have an opportunity to rate our performance when product support surveys from AIN and Professional Pilot are released. Please don't pass up this opportunity to tell us how we've been doing. Your valuable feedback will help us serve you better.

On behalf of the entire leadership team, thank you for helping us put You.First.

Sincerely,

James Hoblyn
President
Bombardier Customer Services & Specialized and Amphibious Aircraft

LEARJET SERIES

Weight and Balance Calculator Version 3.02.0000 Released

Customer Service Engineering has released version 3.02.0000 of our Weight and Balance Calculator.

This release implements two changes our customers requested at the recent Maintenance and Operations (M&O) Conference in Chicago.

- The recommended take-off trim setting display is relocated to just under the mission's CG chart.
- Generating a Summary Report for your mission now displays a preview of the report. Controls on the new preview display let you send copies of the report to a printer, a disk file, or the system clipboard for subsequent inclusion in another document.

The easiest way to update your Calculator is to use the Learjet Software Maintenance Center (SMC). The SMC can update any edition of 3.xx to 3.02.0000. Just select the Calculator's 'Setup' workspace and then click the button labeled 'Check for updates.' (This requires that the SMC be installed on your computer, of course.) If you do not want to use the SMC, you can order a new CD, without charge, from Peter Levy at +1-316-946-2659 or via e-mail at Peter.Levy@aero.bombardier.com.

Learjet 45: Main Landing Gear Strut Assembly Manual, CMM-002 – ATA 32

In the past, customers have been able to get their Learjet 40/45 main landing gear (MLG) overhauled/ repaired at any facility that posseses a Heroux Component Maintenance Manual (CMM-002). Due to unforeseen circumstances, maintenance and overhauls on Heroux MLG are now only performed at Learjet Wichita, Shorts Brothers Belfast and Heroux (the MLG strut assembly manufacturer).

For service facilities/customers that have purchased CMM-002, Learjet is asking that CMM-002 please be returned for complete credit. For customers that have not been contacted and have purchased CMM-002, please contact the Bombardier Learjet Tech Pubs Sales Team for return instructions.

CHALLENGER SERIES

Challenger 300: Optimizing ISI Battery Life Duration

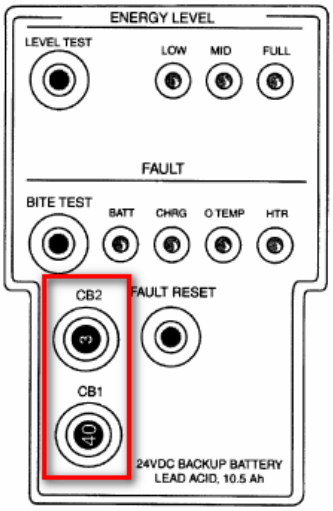
The ISI Battery assembly part number 100-2410-02 consists in two 13 Ah lead acid batteries with charge control and protection circuitry. The ISI battery re-charges when the aircraft power is applied. If the battery is left uncharged or the aircraft unpowered for several days, it can lose its charge due to internal power leakage. Some ISI batteries do not pass the capacity test or the bit test because of this condition.

- To avoid ISI battery replacement due to a low charge condition, changes will be made to AMM tasks 24-32-05-710-801 "Operational Test of the ISI Battery Capacity" and 24-32-05-710-802 "Operational Test of the BIT for the ISI Battery" in the revision of July 21, 2011. A note will be added to recommend that the battery is charged for one hour or more and then rest for one hour before testing.

Extensive discharge of the ISI battery can have an adverse effect on the battery performance. If it remains fully discharged for an extended period of time, the battery may become sulfated and the capacity may fall below 65 percent and require the battery to be returned for overhaul.

- To avoid this condition, the ISI battery should be fully charged and circuit breakers CB1 and CB2 be pulled if the airplane is unpowered for extended periods (five days or more). These changes will be incorporated in the next revision of the AMM in tasks 10-11-00-587-801 "Short Term Parking", 10-11-00-587-802 "Long Term Parking", the Preservation and Storage tasks 10−13−00−550−801 and 10−13−00−550−802 and their respective return to service tasks.

The ISI vendor also received several ISI batteries totally discharged and sulfated. This condition was attributed to circuit breakers CB1 and CB2 on the ISI battery front panel not being opened and tagged for shipment. Failure to open and tag the ISI battery CB1 and CB2 for shipping could expose operators to warranty deny. ISI battery removal task 24−32−05−000−801 requires the ISI battery CB1 and CB2 to be opened and tagged.



Challenger 300: Flight Control System – ATA 27

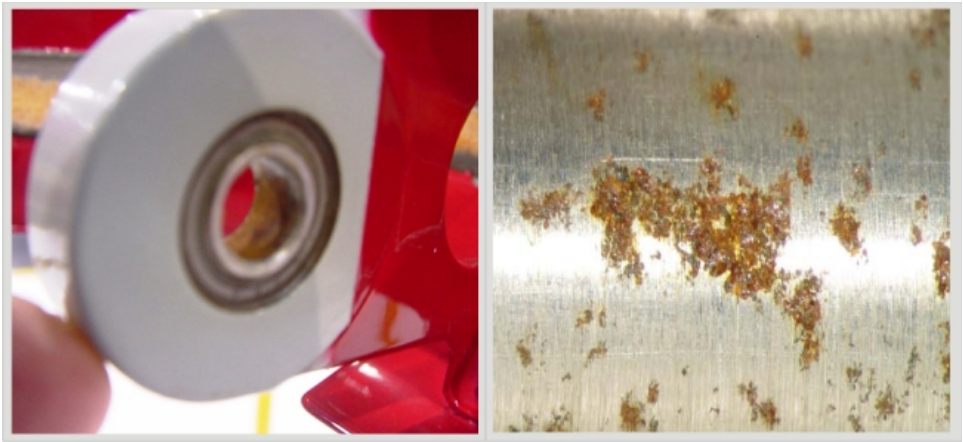
Inspection of the ailerons, rudder and elevators hinge bolts and bearings for fretting damage and/or corrosion

This article is to inform operators about the Service Bulletin (SB) 100-27-12 released April 18, 2011. This recommended SB is free of charge for aircraft under warranty if the work is done at a Bombardier Service Center (BAS) or at an Authorized Service Facility (ASF) within the compliance time identified in the SB.

The SB recommends an inspection of the ailerons, rudder and elevators hinge bearings and bolts for corrosion on aircraft serial number 20003 to 20274. The SB is written in a way that no flight control surfaces have to be removed to accomplish the inspection instructions and the bolt replacement.

Follow the instructions below to inspect and identify if there is corrosion on the bearings and/or fretting/corrosion on the bolts:

1. Clean the bolt surface and the bearing inner bore with a clean no-lint cloth moist with isopropyl alcohol.
2. Visually inspect for corrosion - see pictures below.
3. The bearing inner bore surface and the bolts surface should be free of corrosion, smooth and without any sign of wear.



Bearing MS21431-5, Condition of the inside surface
Details of the reddish deposits found on the surface of the ring.

If corrosion on the bearing or fretting/corrosion on the bolt is found, the associated flight control surface will have to be removed to allow the bearing(s) replacement.

To allow the bearing replacement, Ground Support Equipments GSE 27C-00-05 was created and made available for rent through our parts distribution centre in Chicago.

Because of the possibility of having to replace some bearings that will result in additional man-hours, take this into account and schedule your aircraft down time accordingly.

All the details and instructions are included in the SB; therefore it is important to follow the AMM procedures and to order Ground Support Equipments (GSE) accordingly. If a flight control surface is removed you will have to order other specific GSE for the installation and return to service testing of the surface.

If you have any questions concerning the incorporation of SB100-27-12, please contact your local Field Service Representative.

Challenger 300: Hydraulic System Reservoir Quantity Indicator Replacement

This article is to inform operators about changes that were made to the left, right and auxiliary hydraulic reservoirs.

In July and December 2010, Parker released the following Vendor Service Bulletins (VSBs) to introduce the hydraulic reservoir visual quantity indicators and the bleed relief valves as separate LRUs.

- VSB 960443-29-405 (Auxiliary Hydraulic Reservoir – Removal and Replacement of the Quantity Indicator)
- VSB 960443-29-406 (Auxiliary Hydraulic Reservoir – Removal and Replacement of the Bleed Relief Valve)
- VSB 960452-29-412 (Left Hydraulic Reservoir – Removal and Replacement of the Quantity Indicator)
- VSB 960452-29-414 (Left Hydraulic Reservoir – Removal and Replacement of the Bleed Relief Valve)
- VSB 960458-29-413 (Right Hydraulic Reservoir – Removal and Replacement of the Quantity Indicator)
- VSB 960458-29-415 (Right Hydraulic Reservoir – Removal and Replacement of the Bleed Relief Valve)

When a hydraulic reservoir quantity indicator or bleed relief valve failure occurs, we recommend that operators only replace the faulty component instead of the complete reservoir. The VSBs can be found in the Technical Library, Service Bulletins section of the CIC website (password-protected site). Proper instructions to remove and replace the hydraulic reservoir quantity indicators and bleed relief valves can be found in the AMM section 29-12-25 for the left and right system and 29-21-21 for the auxiliary system.

Challenger 800 Series Advisory Committee Update

Come to see it for yourself! Please join us at the Challenger 800 Series Advisory Committee in Montréal on May 10-11, 2011.

If you can't make it, take advantage of a **LIVE video webcast** of the Opening Session and Top Issues Session **from 8:30 a.m. - 11:45 a.m. (EDT) on May 10**. Watch the LIVE video webcast to see your advisory committee members in action. Log into the password-protected CIC website and click on the graphical link on the homepage.

For more information on the event, please contact Sandra Tymchuk at sandra.tymchuk@aero.bombardier.com.

Challenger 800 Series: Passenger Door – Modification to Adjustment Procedures for Outer Handle, Proximity Switch PS2MB

Reference: SL 52-025

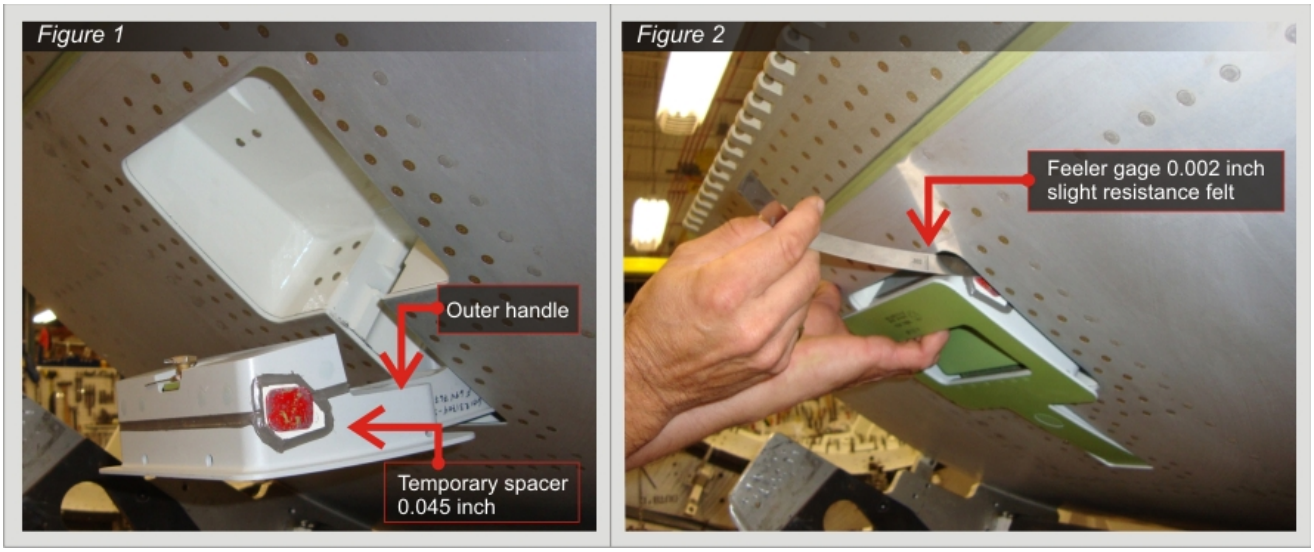
A review of the FRACAS data for the Passenger Phase 4 door has revealed that the Outer Handle Proximity Switch PS2MB for the Challenger 800 Series is one of the main drivers of reliability within ATA 5270. In most of these cases, the rectification is replacement and/or adjustment of Proximity Switch PS2MB.

Bombardier recommends the following procedure for adjustment of the Passenger Door, Outer Handle Proximity Switch PS2MB. The gap requirement may be difficult to attain as access with the outer handle closed or partially closed is limited.

The adjustment procedures within Aircraft Maintenance Manual (AMM) task 52-70-04-820-803, Sub Section C, CRJ100/200 "Adjustment of the Passenger Door Warning System" requires adjusting the switch to 0.050 +/- 0.005 inch gap.

Bombardier Aerospace recommends that the gap be adjusted using a metallic spacer of 0.045-inch thickness temporarily affixed to the target as per Figure 1. A 0.002-inch feeler gage is then inserted between the switch and target spacer and the switch adjusted until a

slight resistance on the feeler gage is felt as per Figure 2. The switch is then secured, the spacer removed and any material used to adhere the spacer to the target is cleaned.



Should further clarification be required, please contact the Customer Response Centre at ac.yul@aero.bombardier.com or by phone at +1-866 538-1247 or +1-514-855-2999.

GLOBAL SERIES

Passenger Door – Seal Striker Damage – ATA 52-11-00

The intention of this article is to pass along some guidance that may help prevent or eliminate seal striker damage. Sometimes, as the passenger door is closing, the abutment pins on the door may foul on the door frame's seal striker. Below are some adjustments that will help eliminate this interference.

Note: It is preferable to rig the door when the aircraft is weight on wheels, as this is the usual state for door operations. A user comment has been submitted to add this guidance to the AMM rigging task.

The first thing that should be checked is whether the airstair's lateral position is optimized {refer to AMM Task 52-11-00-820-801 para 3 G. (3)}. The airstair's forward swan neck can be shimmed to move the door/airstair forward or aft, as required, by adjusting the shims at the forward swan neck hinge. If the door tends to hit the aft seal striker when closing, adjusting the door/airstair forward will improve the clearance between the door's aft abutment pins and the seal striker.

A good technique to evaluate the clearance between the door's abutment pins and seal striker is to have someone inside that manually holds the door in the partially closed position and slowly close the door. As the door closes, stop the movement as the first (lowest) abutment pin passes the seal striker. Someone outside can then evaluate/record the forward and aft clearances. Repeat this for each abutment pin as the door is slowly closed. It is important to remember the door floats on the airstair, so be careful if using a feeler gauge, not to bias the door when taking the measurements.

Note: If the door has a history of migrating forward and aft, check if the forward swan neck hinge has been shimmed properly. A user comment has been raised to add a requirement to shim the swan neck to achieve a target float clearance of 0.004". This will limit the potential for the door to migrate forward or aft in service. A request for change was submitted to add this requirement to the installation drawing.

Once the forward or aft clearances have been assessed, the best lateral position for the door can be established. In order to further improve the aft abutment pin to seal striker clearance, we have authorized flipping the forward bushing in the forward door sill hinge fitting to gain some forward movement (this will provide an additional 0.063", the thickness of the bushing's flange).

If the lateral position of the door has been optimized, and the clearance at one or more of the abutment pins is still marginal, another approach we have authorized is to shim the abutment pin inboard. Two of the abutment pins on either side of the door also have hooks

attached, which will limit the potential inboard movement of the fitting to about 0.030". But, this is still enough to preclude a fouling condition.

Finally, General REO 700-53-20-356 is available for repairing passenger door seal striker damage up to 0.050" deep.

If required, we can authorize the above-mentioned deviations through the SRPSA process.

Typical seal striker damage

Door Abutment Pin
The socket is on the bolt that will receive shim washer.

View from inside the airstair, depicting the location of the shim washer

RECENT DOCUMENTS

Advisory Wires / Communiqués / Service Letters / All Operator Messages**

Click here to view all the Advisory Wires / Communiqués.

* Applicable only for **Challenger 850** – Go to iflyBombardier.com to view Service Letters (SL) / All Operator Messages (AOM).

All models

Date of issue	Number	Revision	Subject
April 25	BCSBA COM 0369	-	Aircraft Reliability Program

Learjet Series

Date of issue	Number	Revision	Subject
April 20	AW34-031	-	LCR-100 Attitude Heading Reference System (AHRS) BASIC Message on Aircraft Power-Up

Challenger Series

Date of issue	Number	Revision	Subject
April 19	AW600-34-2365	-	Challenger 600 and 601 Series: FMS Anomalies and Associated Navigation Database Changes
April 19	BCSBA COM 0375	-	Challenger 800 Series: Bombardier to hold Challenger 800 Series Advisory Committee May 10 – 11, 2011
April 21	AW300-32-0143	-	Challenger 300: Runway Landing Excursion
April 28	AOM 1271	Rev. NC	Challenger 850: CRJ200 Aft Equipment Bay Area Fire
April 28	AOM 1272	Rev. NC	Challenger 850: Release of SB 601R-24-130, ADG GCU P/N 604-90800-27

Global Series

Date of issue	Number	Revision	Subject
April 19	AW700-21-0307	Rev. 1	Hot Air Check Valve Packing
April 19	AW700-29-0311	Rev. 2	No. 1 Hydraulic Pressure Tube Assembly
April 25	AW700-34-0345	-	FANS/CPDLC Operational approval guide
April 29	AW700-24-0313	Rev. 13	Variable Frequency Generator (VFG) – Rotor Diode Failures investigation
May 2	AW700-56-0312	Rev. 2	Windshield Replacement

Service Bulletins

Click here to view all the Service Bulletins. Please go to iflyBombardier.com to view Service Bulletins applicable to Challenger 850.

Learjet Series

Date of issue	Number	Revision	Subject
April 25	SB31-27-16	Rev. 4	[Opt.] Flight Controls - Replacement Of Aileron Trim Tab Actuator
April 25	SB31-27-17	Rev. 5	[Opt.] Flight Controls - Replacement Of Rudder Trim Tab Actuator
April 25	SB31-27-28	Basic	[Opt.] Flight Controls - Replacement Of Aileron Trim Tab Actuator
April 25	SB31-27-29	Basic	[Opt.] Flight Controls - Replacement Of Rudder Trim Tab Actuator
April 25	SB60-27-14	Rev. 5	[Opt.] Flight Controls - Replacement Of Aileron Trim Tab Actuator
April 25	SB60-27-17	Rev. 5	[Opt.] Flight Controls - Replacement Of Rudder Trim Tab Actuator
April 25	SB60-27-34	Basic	[Opt.] Flight Controls - Replacement Of Aileron Trim Tab Actuator
April 25	SB60-27-35	Basic	[Opt.] Flight Controls - Replacement Of Rudder Trim Tab Actuator
May 2	SB23/24/25-31-1; SB28/29-31-2; SB31-31-6	Basic	[Rec.] Indicating/Recording Systems - Installation of the Cabin Altitude Warning System

May 2	SB40-34-14; SB45-34-26	Rev. 2	[Opt.] Navigation Unit - Replacement of The Attitude Heading Reference System (AHRS)
May 2	SB60-26-4	Basic	[Rec.] Fire Protection - Inspection/Modification of the Fire Extinguisher Squib Wiring

Challenger Series

Date of issue	Number	Revision	Subject
April 19	601R-28-067 (Challenger 850)	Rev. H	Fuel System - Fuel Quantity Gauging System - Change the Fuel Quantity and the Weight Indications From Metric Units to Imperial Units
April 25	604-24-023; 605-24-003	Basic	[Rec.] Modification – Emergency AC Generation System – Replace the Air Driven Generator (ADG) Generator Control Unit (GCU)
April 25	601R-23-059 (Challenger 850)	Rev. F	[Opt.] Communication -VHF Communication System - Installation of the Provisions for the Third VHF System
April 27	600-0747; 601-0610; 604-57-003; 605-57-001	Rev. 1	[Rec.] Special Check – Inboard Flaps – Forward Lugs
April 27	601R-24-130 (Challenger 850)	-	[Rec.] Electrical Power - Air Driven Generator (ADG) - Installation of P/N 604-90800-27 ADG Generator Control Unit (GCU)
April 29	800-00-004	-	[Rec.] Commercial Policy and Logistics for Recommended Service Bulletins
April 29	601R-23-060 (Challenger 850)	Rev. F	[Opt.] Communication - Aircraft Communication Addressing and Reporting System (ACARS) - Installation of the ACARS System
May 2	00 - SB Commercial Summaries for CRJ200 (Challenger 850)	Rev. 13	SB Commercial Summaries for CRJ200

Global Series

Date of issue	Number	Revision	Subject
April 20	700-00-001	Rev. 26	Service Bulletin Index
May 2	700-1A11-00-003	Rev. 4	[Opt.] Applicability Service Bulletin

Vendor Service Bulletin cover letters

Click here to reach the Service Bulletins menu and navigate to "By Vendor". Issued on April 30:

Challenger 600 Series..... CH604-APR/11-002

Global Series..... GX-APR/11-002; G5000-APR/11-002

CALENDAR OF EVENTS

Date	Event	Location
May 4	Bombardier Service Center Customer Round Table	Fort Lauderdale, FL, USA
May 10 – 11	Challenger 800 Series Advisory Committee	Montréal, Canada
May 11	Bombardier Service Center Customer Round Table	San Antonio, TX, USA
May 17	Bombardier Service Center Customer Round Table	Portland, OR, USA
May 17 – 19	EBACE 2011	Geneva, Switzerland
June 7 – 8	Challenger 300 Advisory Committee	Montréal, Canada
June 9	Safety Standdown Asia	Shanghai, China
June 20 – 26	Paris Air Show	Le Bourget, France
August 10	Safety Standdown Latin America	São Paulo, Brazil
August 11 – 13	LABACE 2011	São Paulo, Brazil
August 29 – 31	NBAA Learjet Technical Committee	Wichita, KS, USA
September 7 – 8	Challenger 600 Series Advisory Committee	Montréal, Canada
September 14 – 16	Jet Expo Moscow 2011	Moscow, Russia
September 20 – 22	Regional M&O Conference Europe	Frankfurt, Germany
October 5 – 6	Challenger 300 Advisory Committee	Montréal, Canada
October 10 – 12	NBAA 2011	Las Vegas, NV, USA
October 24 – 27	Safety Standdown USA	Wichita, KS, USA
October 25 – 27	Global Series Advisory Committee	Montréal, Canada
November 9 – 10	Challenger 800 Series Advisory Committee	Montréal, Canada
November 13 – 17	Dubai Air Show	Dubai, UAE

Note: To check availability of Bombardier technical training, please visit our Bombardier Aircraft Training website.