



The Twin State Flyer

EAA Chapter 740 Newsletter

Box 5530, West Lebanon, NH 03784
May/June 2005

Giving Back

By Tom Williamson, 740 Newsletter Editor

Well folks, you have heard many stories from me over the years, this one is an inspiration to me. Please read on.

One of the advantages of my job is the people I get to fly with. On a recent trip I was paired with a new (to me) First Officer named Brian MacLeod who commutes in from Columbus, Ohio.

Brian had been displaced into Boston when the high powers at my airline eliminated the 737 flying at Chicago. He started flying in the military, and was in the Ohio Air National Guard for 22 years flying several types of fighters. He was an F-16 instructor until May 2001 when he retired from the Guard.

Why he left the Guard is an interesting story. Brian had to eject twice from fighters, the first from an A7 in the October of 1988. Over the Indiana countryside while on a training mission the A7's throttle cable separated and he had no direct control of the thrust. He pointed the aircraft away from a populated area and ejected at about 500' AGL.

The A7 ejection seat consisted of a dynamite charge under the seat. When the charge was detonated an immediate upward 30G force blasted the pilot out of the airplane. Newer designs are less violent, but this was the

technology of the day. Brian ended up face down in a plowed field, in great pain and unable to move.



**American Airlines First Officer
Brian MacLeod**

The force of the ejection broke two vertebrae, crushed three discs, and herniated another. Due to mechanically induced degenerative disc disease he permanently lost two inches in height from the violent ejection. He was in traction for two months.

This did not stop him from flying fighters. His second ejection was in 1996 as he sat in the rear seat of the F-16 with a student in the front.

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Chapter Officers:

President:

Andreas Bentz 603-643-1447

Vice President:

Jim DeHaven 603-635-5775

Secretary:

Phil Cobbin 603-524-9639

Treasurer:

Frank Brunot 802-674-5698

Directors:

Tom Williamson 802-436-2868

Stan Spencer 802-674-6739

David Bridgham 603-469-3424

EAA Tech Counselors:

Marvin Bishop 802-295-7200

Newsletter Editor

Tom Williamson 802-436-2868

Young Eagles Coordinator

Joel Godston 603-787-6771

Webmaster:

Bill Molloy 802-649-9057

Membership Chairman & Flight Advisor:

Dino Vlahakis 603-448-3729

EAA Chapter 740

PO Box 5530

West Lebanon, NH 03784

Website:

www.eaachapter740.org



Boilerplate

Chapter 740 is a local chapter of the Experimental Aircraft Association. It received its charter in October 1981 and operates as a non-profit club. Monthly meetings are normally held on the 2nd Tuesday of each month at Signal Aviation Services building at the Lebanon Municipal airport, W. Lebanon, NH at 7 pm. Visitors are always welcome.

This newsletter is a monthly publication and is sent to all Chapter members in good standing, EAA HQ and certain other EAA Chapters. A complimentary 3-month subscription will be sent to prospective members on request. Please send address corrections to the editor at 85 Best Rd., Windsor, VT 05089 or email at: twill01@vermontel.net.

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They were flying High Angle of Attack Maneuvers, actually flying almost straight up at full thrust. At 19,000' they were at the peak of the climb and at zero airspeed. If the maneuver is done correctly the airplane is subjected to positive G's throughout. The student failed to do this, and a zero G condition existed for about 15 seconds, and two things happened. First, being a fly-by-wire aircraft, the computer that controls the fight controls assumes you don't know what you're doing and locks the pilot out, taking over control of the airplane. Secondly the zero G condition caused oil starvation to the main thrust bearing of the engine, and the engine came apart and disintegrated out the tailpipe.

The F-16 they were in was burdened with three external fuel tanks, one under the fuselage and one under each wing. Also there was a bomb rack mounted inboard of each wing aux tank. These devices, it was later determined, had the aerodynamic effect of forcing the aircraft onto its back when in this type of maneuver. They entered an inverted oscillating spin. Emergency systems in the aircraft allowed the pilot to have some flight control authority after an engine failure, but with no forward airspeed and no thrust there was little response. Finally, by timing elevator input with the oscillations occurring while in the spin, Brian got the F-16 oriented straight down. Now with some forward airspeed building he was able to pull the aircraft out of the dive, and he and his student ejected at 1900'. All this happened within a few seconds. While hospitalized in traction for a second time he decided he had tempted fate enough and if he planned to survive into anything near ripe old age

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Giving Back, from Page 2

he had to quit this stuff. He also realized what a lucky guy he was to be alive and he had to pay back the powers that enabled him to survive. In partnership with an aviator friend Brian established a company, used a rented Cessna 310, and began flying hospital patients for Air Lifeline Midwest and Angel Flight. That was the total purpose of his company. For those who are not familiar with these organizations, they match patients in need of transportation to a hospital or clinic with a pilot willing and able to transport the patient. The pilot pays all the operating expenses, with no payment required from the patient. Brian started this over 8 years ago. The company has grown to include an Aero Commander 680, a Cessna Skymaster, a Cessna 150 and a 172. They have also built a hangar with offices and facilities, and a flight school that helps offset the expenses. The whole operation is now funded by corporate and personal donations. The support the operation receives is incredible. When they were building their hangar a local construction company came in and built the office space inside the hangar for free, all materials and labor. The Aero Commander was in need of a new battery, a \$1400 item. Brian mentioned it to one of the other pilots, and next day there was an envelope delivered with a check for \$1400, an anonymous donation, he still doesn't know who sent it. The city of Springfield, Ohio, where their airport is located, donated \$30,000 worth of site and foundation work. A heating and air conditioning contractor installed the heating and ac for free. They get a check each and every month from a woman several towns over, for \$10. Then there is Snap-On. The A&P who was maintaining their aircraft moved away, and they needed some tools so local mechanics could work on the aircraft on the side, all volunteer, of course. Snap-On stepped up and donated a full set of their best stuff, from screw drivers to air tools, electrical analysis tools, three sizes of digital torque wrenches, socket sets, wrenches, specialty

aircraft tools, all housed in the best Snap-On cabinets with shock absorbing casters, twenty seven drawers worth, with a retail value of \$28,000. Help comes in from architectural firms and pharmaceutical companies. When they have an unusual expense they go knocking on doors and donors have never failed to meet the need. Brian's wife and his partner's wife handle the fund raising and the bookkeeping. Their company has flown over a hundred Angel Flights, with increasing numbers every year. Every day we read of car bombs, corporate malfeasance, political shenanigans, terrorism and hatred. This small operation in Ohio is a beacon of light in the dark environment of current events but certainly is not alone, there are many more out there. This came out of the generosity of spirit on the part of two men, Brian and his partner, and has grown into something towering. It is heart warming to see the support that this receives. Certainly many people who are in need of the service Brian offers will benefit for a long time to come due to the generosity of many other people. I am pleased to mention our own Chapter President Andreas Bentz has flown many Angel Flights in his Beech Sundowner. Here's to you, Brian, and to you Andreas, and all those who give so generously. We all salute you and recognize your selflessness.

- June 4th** Dean Memorial Airport Awareness Day, see next page for details
- June 14th** First summer Barbecue for Chapter 740, to take place at Lebanon Airport, west row of hangars, at 6 pm. Bring side dishes, and guests, grill stuff and beverages will be provided.
- July 23rd** Fly-In BBQ Lunch co-sponsored by 740 and Ascutney Aviation at Claremont, NH, 11 am to about 2:30 or 3:00. Flyer enclosed in this newsletter, please copy, post and get the word out.
- July 24th to July 30th**, EAA Airventure at Oshkosh, all the information you need at www.airventure.org.

Young Eagle (YE) Flight Experience #1

Submitted by Joel Godston, 740 YE Coordinator

After a brief preflight, with three 10 or 11 year old YE candidates, we climbed into our Cessna 182 aircraft, 1408M. As you know the pilot-in-command (that's me) sits in the front left seat, two passengers sit in the rear seats; and one passenger (for this YE flight let's say it's Carol) sits in the right front seat which has all the flight controls that I have....all of us have headsets, and can talk and hear all that is said all the time.

Before I start the engine, I go over normal procedures and one critical emergency procedure. If I should determine during the flight that we will NOT be able to land on an airport runway; but must land in a 'corn' field or in the trees, I will ask the person in the right front seat (Carol) to OPEN the DOOR JUST BEFORE WE LAND...I ask, "Now why would we want to do that?...NO RESPONSE.... "Well !!", I say, "with the doors closed, the the fuselage could 'twist' as we touch down in the 'corn' field or trees.".... Before I can say anything, I hear, "Oh, we won't be able to open the door, so we can't get out of the airplane."

I respond, "That's right and that would not be a good thing"..... My final comment is, "Now we won't have that emergency; but it is always good to know what to do; just in case.."

We take-off.... fly around a bit.... Carol in the right seat flies 1408M for a few minutes, and then we enter the traffic pattern to land. Just as I am touch down on the runway, Carol says, "Do I open the door NOW?" I respond, "No, NO!! Don't open the door.... we are landing on the airport runway as we planned."

We all laughed about the experience...I took a picture, and gave Carol and the other two youngsters their YE Certificates...and off they went to tell their friends and parents about the fun flying experience!!.....HAVE YOU HAD THIS HAPPEN TO YOU?

Young Eagle (YE) Flight Experience #2

After a brief preflight, with three 10 to 12 year old YE candidates, we climbed into our Cessna 182 aircraft, 1408M. As you know the pilot-in-command (that's me) sits in the front left seat, two passengers sit in the rear seats (for this YE flight let's say Jeff and Mike; and one passenger sits in the right front seat which has all the flight controls

that I have....all of us have headsets, and can talk and hear all that is said all the time.

After starting the engine, performing normal ground checks including radio checks by each YE candidate..." I read you 5 by 5".... "I hear you ok".... For safety purposes as discussed with the YE candidates earlier; before taking the active the runway, since we are at a non-towered airport, I make the following radio transmissions to let other aircraft in the area know what we are doing. I transmit , "Dean Memorial Traffic, Skylane 1408M taking active runway..back taxing for 01 take-off"...then, "Dean Memorial traffic...1408M on 01 take-off roll... Dean Memorial."

Just as we break ground on take-off Jeff says for all of us in the airplane to hear, "If the propeller stops, are we going to die? Before I can say a thing, Mike, Jeff's friend sitting next to him said matter factually, "Oh No!! He'll just put the nose down and we'll glide to a nice landing.....and we'll just walk away!!!" I Could not have answered the Question any better !!



Joel and two of his "victims" plus Dad

Announcing
9th Annual Dean Memorial Airport
Awareness Day Saturday June 4th,
Rain Date June 5th, at Dean
Memorial Airport, North Haverhill,
NH, 10 am to 3 pm. Young Eagle
Flights, Adult Scenic Flights (.20
per pound) Free Flights for Kids!

Minutes from 5/10/2005 Directors Meeting

Submitted by Phil Cobbin, 740 Secretary

Draft Meeting Minutes for May 10, 2005 executive meeting:

Meeting opened at 5:34pm by Andreas Bentz.

Attendees:

Stan Spencer
Jim DeHaven
David Bridgham
Tom Williamson
Dino Vlahakis
Andreas Bentz
Bill Molloy
Phil Cobbin

Resignation of Technical Advisor:

Letter from Francis Stites resigning as technical advisor in light of wife's health.

Trailer:

Discussion regarding purchase of trailer for storing chapter materials such as BBQ equipment. Motion made to authorize expenditure of \$2000 and appointment of a committee to locate a trailer. The committee is composed of Tom, Dini and Jim.

Young Eagle Day:

July or August and discussion of support for June 2 world tour visitor. Target date turned out to be end of September when school is back in session for a Young Eagle day.

Fly-in:

July 23 +/- 11-3 pm in Claremont. This is the Saturday/Sunday before Oshkosh and will be in conjunction with Ascutney Aviation. Ascutney Aviation's phone number for the event is 542-6094. Will need volunteers: setup, cleanup, and cooks.

Roster:

Still trying to get the roster up to date.

6:44 pm adjourn

Minutes from 5/10/2005 Chapter Meeting

Submitted by Phil Cobbin, 740 Secretary

Draft Meeting Minutes for May 10, 2005 chapter meeting:

Meeting opened at 7:09 by Andreas Bentz.

Attendance: 25

Announcements: Search committee for trailer purchase; Different start date for Oshkosh this year; Fly-in in conjunction with Ascutney Aviation and request for Volunteers. Young Eagles event at N. Haverill is June 4. Still need to get membership dues paid squared away for chapter; Planning on a Young Eagles day for end of September;

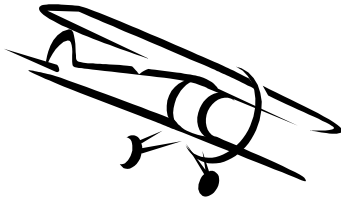
BBQ season:

Need helpers for BBQ: Carl, Jim, Bud volunteered...Discussion about adding some speaker content to BBQ events such as a request from local Civil Air Patrol chapter.

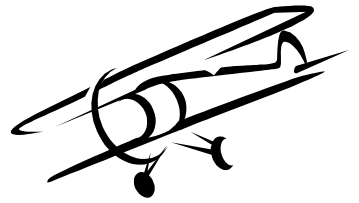
Speaker: John Wilson, formerly with Garmin and involved in the development of the Garmin G1000 system:

Jim is a 20 year flyer, and aerospace engineer with an R&D background. Genus of glass cockpit systems is FAA/NASA R&D focus on making aircraft easier and safer to fly. Was with a company back in 99 (Seagull Technology) doing R&D on attitude sensors. Early work incorporated a Stanford University researchers work. By 2001 the company was shopping around to market their technology and eventually hooked up with Garmin. Garmin's history includes some parallel R&D efforts resulting in G1000 having a 14 year development history. According to Jim, Avidyne is Garmin's primary competitor. Garmin does not market the G1000 to the experimental market. It was Jim's view that PDA type devices for attitude systems were a 95% solution. While Avidyne may be Garmin's primary competitor, it was Chelton's success in getting a synthetic vision system cert'd through the Seattle office that has put pressure on Garmin to develop a synthetic vision system. Interesting background information on office shopping for getting avionics certificated with the FAA.

Meeting adjourned at 8:33



FLY-IN BBQ



Sat July 23, 2005 (Rain date July 24)

11:00 – 14:30

Claremont Airport (CNH)
Claremont, NH

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