



CHAPTER 81

SKY WRITER

June 2010 Newsletter

Meeting Notice!

***June Chapter Meeting:
19 June, 10 AM, Ryan Field Admin Building***

2010 EAA 81 Dues are Due!

Annual dues are \$20. As of June 10th 85 of our 104 members have paid their 2010 dues. Checks should be made payable to: EAA Chapter 81 and sent to Mick Myal, 2900 E. Weymouth, Tucson, AZ 85716, or brought to a chapter meeting.

EAA Chapter 81 Meeting Minutes May 15, 2010

Meeting was called to order in the Ryan Field meeting room by President Duane Boyd at 1005.

Treasurer's Report: Mick Myal assures us that, as of 4/21/10, there was \$11,617.03 in the bank. He also informed us of a change in the law that apparently occurred three years ago, of which he had been

unaware: a requirement that Non-Profit organizations must file on-line by May 15 or be subject to a substantial fine, or, possibly, lose their Non-Profit status. The purpose of such a change in law was unclear, other than the obvious motive of collecting fines. It would appear that, previously, any Non-Profit organization which made less than \$25K annually did not have to do this on-line filing. An organization known as the Alliance of Arizona Non-Profits sent out the alert, and, the ever-alert Mick investigated and filed on-time. Patrick McWhirter suggested that we reward this heretofore unknown watchdog organization by sending in a contribution. This initiated a heated debate, and, when all the name-calling and tomato flinging were done, it was decided that \$50 be donated, on the condition that Mick investigate the legitimacy of this Alliance first.

Secretary's Report: Bob Miller was successful in calming the agitated atmosphere of the meeting by employing the somnolent effect of his droning voice in reading the Minutes of the Project Meeting of April 17. In brief summary, those who attended were impressed by the hangar/palace of Bob Sutherland as much as by his newly-started Titan T-51 Mustang. This is a ¾ scale replica of, you guessed it, a North American P-51 Mustang fighter of WW II. Unlike most such replicas, the Titan T-51 is intended to be built and flown by those of modest training and means. It has the benign flying characteristics of the Titan Tornado, with a gentle stall in the 40 MPH range, and, with Bob's "Mini-Merlin" Suzuki 180HP V-6, a rate-of-climb of over 2000 FPM, and cruise of 180 MPH. Fully aerobatic and with hydraulic

retractable gear and an electric variable-pitch 4-blade Whirlwind prop, this will be a challenging project for Bob, who admits to lacking mechanical expertise. I am sure that, with the support of Chapter 81, Bob will succeed in his adventure.

Newsletter Report: Editor, Publisher, and General Overachiever Erik Fjerstad brought copies of Skywriter and rosters to the meeting. He also informed us of an upcoming article he will contribute to next month's newsletter reporting the wisdom of Tim Warlick, until recently, a technical manager at Teledyne Continental Motors leading their alternative fuels efforts. Tim is sharing some of his thoughts regarding what to do when 100LL fuel goes away, based upon the engine manufacturer's research into the area of alternate fuels. Erik also apprised us of software/hardware available for laptop computers that will present "Highway in the Sky" imaging in-flight.

Webmaster Bruce Noon suggested that we plan presentations for each Chapter Meeting. Bob Miller has volunteered to do some of these presentations and invites all to share their knowledge at a meeting. Bruce suggested that we might like a Facebook page, but the present membership decided against it. Joe Seibold suggested that we book aviation speakers for our meetings as well. He also reminded us that, for those attending Airventure this year, he will again be driving the Welcome Wagon which will pick you up and transport you to the Red Barn from 0700 to 2000. The Welcome Wagon can be called at (920) 230-7906 and Joe's personal cell # is (520) 905-8904, from 0700 to 1200, please.

Old Business: We were reminded that the model rocket strip to the north of Ryan Field sends missiles aloft vertically up to 4600 feet AGL, which can ruin your whole day. Notams will give warning, but it is better just not to overfly this potentially dangerous site.

New Business: Dennis Hall will attend a workshop in California on sheet metal work, taught by Kent White, "the Tin Man." Kent is a guru of the English Wheel, able to shape sheet aluminum into compound curves far beyond the abilities of mortal men. He did his internship 34 years ago at the Harrah's Auto Collection, so this man has some serious skills. Dennis will provide an article for the newsletter about his experience. He also reminds us that there will be a "Neat Little Taildragger" fly-in (previously the Hatz/Pietenpol fly-in) 1 week before Airventure at Brodhead, about 100 miles south of Oshkosh. Also, just before Airventure, former Chapter 81 President

Dan Plowman will be obtaining his Seaplane Rating. Two visitors and new member Jim Davidson were introduced; Jim is with Bombardier and is looking for a project aircraft. Visitor Don O'Rourke has Eldon Helmer's Celerity, and his plans-built Mirage is ready-to-fly. He is seeking a test-pilot. Visitor Buzz Backenstow has a Waix and is building a Jabiru 250 in Oregon. Duane Boyd told us about an aircraft auction in Kansas, 4 planes on the block on June 5. He also presented a letter from EAA offering the purchase of a brick for The Arch, prices ranging from \$1000 for a full brick to \$350 for a quarter-brick. This offering was greeted with a resounding lack of enthusiasm from the present members. Bob Miller reminded members that we will need volunteers for the August and October Project Meetings, but that the June 19 meeting will be at the Ryan Field meeting room, as it is just too hot for a project in June. The December meeting will be the X-mas Dinner, again to be held at El Corral restaurant.

Bob also requested, and received, input from the present membership on dead-reckoning for cross-country flying. It seems that Bob has been flying for 36 years, but has hardly done any cross-country navigating. He suggested that we have become complacent with our GPSs, which could disappear with a sunspot, or at the whim of the government, and that we need to keep up our dead-reckoning navigation skills.

Meeting was adjourned at 1120, and most of us went outside to drool over Joe Seibold's new Czech Sport Cruiser, the airplane that Piper is using as its new Light Sport aircraft offering.

Respectfully Submitted by
Secretary Bob Miller

Notes from Members

Tim Warlick wrote: I have led the Teledyne Continental Motors alternative fuels work and have done extensive engine testing on autogas (0 to 10% ethanol), Swift renewable fuel, and UL94 (100LL without the lead). I also led the efforts to create a UL94 Unleaded Avgas ASTM fuel specification which was to receive final approval at the December 2009 ASTM meeting, but TCM did not send a representative. TCM is in the process of completing certification of a 310 BHP TSIO550 engine on UL94. This turbocharged engine was flown in a Cirrus airplane from Mobile, AL to Oshkosh, WI last summer on UL94 with NO engine changes. TCM is promoting certifying engines on this fuel now for an eventual change from 100LL to UL94 in the future. I was in the process of assessing the impact on all current and

past model engines. Engine BMEP and compression ratio were the key determining factors of the impact of the lower octane fuel. Electronic ignition with knock sensors to retard the timing was a key add-on technology for high compression or high BMEP engines. For information on unleaded avgas, you can check the TCM link:

<http://www.genuinecontinental.aero/altenatefuelsprogram.aspx>

Swift fuel has been promoted as a "transparent" fuel but actually, the fuel density is greater so impacts aircraft loading, some fuel injection/carburetor set-ups and many fuel measurement devices. The FAA Technical Center conducted a 150 hr durability test with Swift fuel with good results. Swift is currently trying to obtain field experience with their fuel. Swift fuels main attribute is an excellent marketing group.

Other fuels being considered are G100UL (different fuel density) from GAMI and a 50% lower lead content 100LL (drops octane to 100 minimum). For the past 2 years, the EPA has been pushing GAMA (General Aviation Manufacturers Association) to offer a transition plan to eliminate leaded fuel. Obtaining a consensus from all involved (fuel producers, aircraft manufacturers, and engine manufacturers) has been almost impossible without an EPA mandate that says by 20?? that no leaded fuel can be sold in the US.

A truly transparent unleaded fuel replacement for 100LL is not possible. The oil companies are content with continuing to produce 100LL forever. Because of the low volumes, they will not produce another fuel in parallel with 100LL. The FAA's involvement is to determine how to allow blanket certifications of groups of like engines (possibly based on compression ratio and BMEP) on a new fuel. Their main concern is safety.

In conclusion, several unleaded fuel options are available and none are transparent. The general aviation industry will NOT make a change unless an EPA mandate eliminating lead is issued. The EPA will not issue a mandate without some outside force giving them no choice. Therefore, do not expect a change in 100LL availability short term.



Don O'Rourke wrote: It was a pleasure meeting everyone at the chapter meeting. Enclosed you will find a couple of pictures of my Mirage-Celerity. I am finishing the condition inspection now and with some help from a competent test pilot/instructor, hope to be flying it soon. I look forward to meeting the rest of the Chapter 81 members in the future. *Ed note: You can contact Don at donoraz@msn.com (520) 615-3770*

AirVenture News (Reprinted from EAA.ORG) Huge DC-3 Activities at Oshkosh

More elements to the huge DC-3 75th anniversary celebration at EAA AirVenture Oshkosh have been added this week, creating more opportunities to enjoy a unique gathering of these aircraft at "Aviation's Family Reunion." The latest addition is a DC-3 and C-47 "Max-Effort Day" on Tuesday, July 27, that will include formation flights and aerial displays from all DC-3 aircraft that wish to be flown that day. That includes groups of the aircraft type in both airline and military configurations, plus others. This activity will give more aircraft the opportunity to participate above the previously scheduled mass arrival on Monday, July 26.

"While everyone was originally anticipating a single mass arrival of these aircraft, months of discussions made it apparent that creating an experience to meet the standards expected at Oshkosh would be extremely difficult," said Tom Poberezny, EAA chairman/president and AirVenture chairman. "We also had DC-3 operators who want to participate in group flights but had indicated they would arrive separately from the independent 'The Last Time' reunion prior to AirVenture. Ultimately, everyone coming to Oshkosh wants to see as many of these venerable aircraft in the sky as possible. That's what we intend to do."

Among other highlights of the weeklong DC-3 celebration:

- A very special DC-3 / C-47 reunion evening at Theater in the Woods, hosted by David Hartman and including special guest Jim Douglas, grandson of DC-3 designer Donald Douglas;
- "Salute to Veterans" activities in cooperation



Don O'Rourke's Mirage-Celerity

with Disabled American Veterans (DAV) to include re-enactor displays and personal appearances by WWII veterans of "Easy Company" (known from the HBO series "Band of Brothers");

- Air Show programs throughout the week to include a parade of classic airliners, a unique heritage flight that pairs the C-47 with the modern C-17 Globemaster;
- An appearance by the aircraft and stars of hit Canadian reality TV series "Ice Pilots", still operating the DC-3 in daily passenger service;
- DC-3 movie screenings, including the John Wayne classic "Island in the Sky" at the outdoor Fly-In Movie Theater;
- Numerous public forums related to the people, history and operations of the DC-3;
- A major week-long effort by the EAA Timeless Voices of Aviation team to capture and preserve the video oral histories of all people connected with the DC-3.
- An exclusive DC-3 community cookout hosted by Basler Turbo Conversions of Oshkosh, which refurbishes DC-3s from its base at Wittman Regional Airport for continued use at locations around the world;
- A luncheon on Wednesday, July 28, in the EAA AirVenture Museum Founders' Wing for anyone who has even been connected with the DC-3, including pilots, mechanics, flight crew, veterans, etc. (Registration details will be forthcoming)

Many of the aircraft will be arriving at Oshkosh after first visiting the separate "The Last Time" DC-3 reunion at Rock Falls, IL, on July 24-25. Those airplanes, along with other DC-3 aircraft, will be arriving at Oshkosh just before AirVenture or on opening day, in time to participate in the many activities.

"The Last Time is an independently organized event that complements the activities at Oshkosh this year," Poberezny said. "We wish them success and look forward to welcoming the participating aircraft from that event to Oshkosh afterward."

In addition, a rare DC-2 aircraft will be joining the assembly at Oshkosh, as well as a beautifully refurbished DC-7B aircraft.

EAA already has commitments from a large number of DC-3/C-47 operators who intend to arrive at Oshkosh. Other DC-3 and C-47 operators who wish to participate should contact EAA at dc3@eaa.org,

and will be sent specific details on arrival procedures, aircraft parking, accommodations, and other important logistics.



The Museum of Flight's DC-2

That's all for now.

Please send items of interest, classifieds, (<mailto:newsletter81@eaa81.org>) or to Erik's address on front page.
Erik Fjerstad, Newsletter Editor

Check out the Chapter Website at
<http://WWW.EAA81.ORG/>

Chapter Officers & Staff

Duane Boyd, President (931) 472-4700
<mailto:citationpilot60@hotmail.com>
Hal Burlingame, Vice Pres. (520) 977-8600
<mailto:eea81@theriver.com>
Bob Miller, Secretary (520) 322-0677
<mailto:rmiller88@msn.com>
Mick Myal, Treasurer (520) 881-2232
<mailto:mick@dcn2.net>
Bruce Noon, Webmaster (520) 760-5925
<mailto:Webmaster81@eaa81.org>
Joe Sielbold, Director (520) 818-0603
<mailto:seiboldj@aol.com>
Stan Gorman, Director (520) 886-6533
<mailto:smcgreevy@msn.com>
Erik Fjerstad, Newsletter (520) 578-2005
<mailto:newsletter81@eaa81.org>

Tech Counselors:

Gil Alexander (520) 544-8191
<mailto:gilalex@q.com>
Eldon Helmer (520) 665-9341
<mailto:mirage@copper.net>
Norm Radtke (920) 921-5125
Chuck Valade (520) 579-6235
<mailto:bd4flyer@netzero.net>