



# THE LEADING EDGE

## NEWSLETTER OF MUROC EAA CHAPTER 1000

*Voted to Top Ten Newsletters, 1997, 1998 McKillop Award Competition*

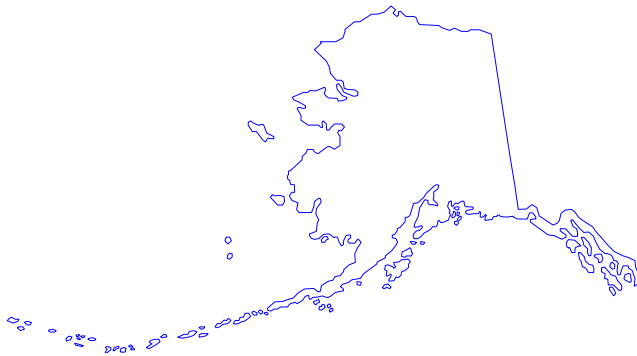
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**March 1999**

Chapter 1000 meets monthly on the third Tuesday of the month in the USAF Test Pilot School Scobee Auditorium, Edwards AFB, CA at 1700 or 5:00 PM, whichever you prefer. Any changes of meeting venue will be announced in the newsletter. Offer void where prohibited. Your mileage may vary. Open to military and civilian alike.

### This Month's Meeting:



**The Capstone Program**  
**Tuesday, 16 March 1999**  
**1700 hrs (5:00 PM Civilian Time)**  
**USAF Test Pilot School Auditorium**  
**Edwards AFB, CA**

"And now for something completely different," as Monty Python would say. But, you'll all be completely comfortable with the situation, as in the past when we were all turned into guinea pigs. Yes, once again we will be asked what we think of a new system being developed by the FAA called the Capstone Program. Wen Painter's nephew, **August Asay**, will be here from Alaska to do the presentation. Read on for a brief description of the Capstone Program.

The Federal Aviation Administration-Alaskan Region's Capstone Program is an accelerated effort to determine if new technology GPS-based avionics systems can improve operational safety and efficiency. Alaska suffers the loss of approximately 45 lives each year from aircraft accidents. This accident rate is 5 times greater than in any other area of the United States. A recent Mitre-CAASD study concluded that approximately 38 percent of these fatal accidents could be avoided by providing the pilot with improved situation awareness of terrain, weather, and other aircraft. The Capstone program has chosen to equip all commercial operating aircraft in an isolated area of western Alaska with the following equipment in an effort to improve pilot situation awareness: an IFR-certified GPS receiver; Automatic Dependent Surveillance-Broadcast (ADS-B); a Multi-Function Display with a moving map that presents traffic,

terrain, weather, NOTAMS, PIREPs, and special-use airspace status information. A limited flight demonstration of this technology will occur in June/July 1999. The evaluation program will begin in January 2000.

For a more detailed description you can look on the web at: [www.alaska.faa.gov/capstone](http://www.alaska.faa.gov/capstone). So everyone show up and have a look at this new system. They are looking for our input as to the feasibility of using a system like this in Alaska and the lower 48, or is that 49? As always, there will be the standard shmooze time before the meeting and the gourmet dining at the BK Lounge afterwards. See you there.

*(Any talk of a Chapter 1000 sponsored flight test project? I think there might be a VC-180 available--and of course the demod costs would be prohibitive so it would have to be left in after the completion of testing...)*

- George Gennuso  
 Vice Kommandant and Schmoozemeister

### Operation Rubidoux Sundown VII--Victory



**Read the  
 Complete  
 Report!! See  
 Page 2!**

### DVES DELINQVENTS!!!

All right, we've threatened you enough, now it's time for public humiliation, right here on the front page of the Chapter 1000 News-rag! Oh, the shame of it all! If your address label is highlighted and/or your name appears below, the keeper of the chapter database (the Information Czar) shows you as having not paid your dues for 1999! Pay up now (see page 12),

(Continued on page 6)

## **Operation Rubidoux Sundown VII**

### **OFFICIAL REPORT TO THE MEMBERSHIP**

In keeping with historical precedent, a duly authorized **Project Police Tactical Assault Force (PPTAF)** was formed to execute **Operation Rubidoux Sundown VII** on 27 February 1999. On the occasion of the **EAA Chapter 1 Open House**



each February, the **Project Police** are called upon to inspect the happenings at Flabob International Airport to ensure the maintenance of the highest levels of EAA craftsmanship, eat, rouse some rabble, and generally have a good time and encourage others to do the same.

The mission started out pretty much like they all do. Various members of the **PPTAF** gathered at their dispersed airfields and not-so-secret hangars to properly preflight their **Aerial Assault Vehicles**. Here **Vice Kommandant George Gennuso** assists with the inspection of **Kommandant Gary Aldrich's VC-180 Fighting Skywagon**.

The **Project Police** are strong believers

in the axiom "If it ain't broke, don't fix it." Thus, we once again flew to the pre-raid staging point at Apple Valley (APV) airport for final briefings and a chance for a good breakfast.

Present for the final briefings were **Gail Nusz, Jenna Ware** as the **Project Police K-9 Support Unit** with **Project Police Dog (PPD) Counselor Troy, George Gennuso, Doug Dodson, Miles Bowen, Gary Aldrich, John Bush, and Russ Erb**. Also present as acting photographer was **Mandy Scott**.

Following the requisite photo shoot, the Confederate Air Force (CAF) safety briefing was issued (*Don't hit each other, and don't do nuthin' dumb!*), as was the navigation briefing (*After takeoff, maintain runway heading. When Flabob appears underneath you, descend, enter the pattern, and land.*). The **PPTAF** members stepped to their respective aircraft and set out for their objective.



Some of the **Project Police Aerial Assault Vehicles** on the flight line at Apple Valley. Shown are **Secretary Bowen's VC-170, Kommandant Gary Aldrich's VC-180, John Bush's LC-140**, and an unidentified C-172. The 172 never made it to Flabob.

**Jenna Ware and Counselor**

**Troy** led the attack in the AK-35 Bonanza with the stealth V-tail. **John Bush** and **Mandy Scott** followed in the LC-140. Number 3 in the "loose" formation (same way, same day) were **Gail Nusz and Doug Dodson** in the M-201.

Once again, EAA Chapter 1 was throwing up the usual defenses against all attackers, primarily in the undefined traffic pattern. Mount Rubidoux was again cleverly placed to block the optimum turn point from downwind to base, forcing everybody to decide whether to turn inside or outside of the mountain. The resulting gross buffoonery and furball effectively kept all attackers more interested in avoiding each other than in getting a good bead on the target. To further increase the confusion, two aircraft, possibly planted by the Flabobians, decided not to review the pattern procedures prior to takeoff, but rather to discuss them over the CTAF upon arrival. To further confuse the attackers, they decided to follow the exact opposite path that everyone else was obviously following.



Using tactics adapted from the Gulf War, the members of the **PPTAF** finally made it onto the runway, where they were confronted by the Flabobian Marshalling Team. Taking a cue from Solomon, competing marshallers tried to send the pilot's



half of the airplane to the left and the copilot's half to the right. Failing to see the wisdom in that, we decided to go to the right because that marshaller's truck was bigger. The end result was that all of the **Project Police Aerial Assault Vehicles** were spread out all over the field. The Flabobians may have thought this would weaken our effort, but much to their dismay it merely meant we were able to start the inspection at multiple locations simultaneously as we regrouped.

We noted only token resistance in the form of a few hastily assembled 8.5x11 poster-ettes scattered haphazardly around the field. Having previously identified the core of their resistance unit, the **Project Police** had ensured that **Virgil Polit** was kept sufficiently busy building his Kitfox (getting close to flying!) that he was unable to make his services available to the Flabobians. After all, the **Project Police** are welcome everywhere. It says so in our bylaws...

The **Kommandant** and **Webmeister** did notice that the airport structures had returned to some level of normalcy since their last visit during **Operation PROVIDE SCHMOOZE**. These structures once again looked more like Southern California and less like some Hollywood set-dresser's idea of a Philippine village.

Scouring the field for familiar faces, we saw **Bill Aronson** proudly displaying his EAA Chapter 1000 nametag. The Rosamond Skypark Low-Speed Attack Bunch of **Scott Liefeld** (Pietenpol), **Tony Ginn** (Aeronca Chief), and **Gary** and **Connie Trippensee** (Luscombe) finally arrived, and set about distracting the locals from the efforts of the **Project Police**. **Jack Huffman** was seen with his Cardinal, complete with his bring-your-own-marshaller **Jack Hakes**. **Bob** and **Carol Hoey** were seen with their classic BD-4. **Frank Roncelli**, **Doug Triplat** and **Herb Carlson** were spotted, but with undefined methods of transportation. There may have been others, but my memory is only so good.

To list those who weren't there, there was...(wait a minute, I'd like to finish this today)...never mind.

The **Project Police** noted the interesting paint job on this RV-4 owned by Roger Hansen of San Ramon CA. He told us that he painted the basic color, but that the dragon was painted by a friend of his. He did say that if he had known the **Project Police** were coming, he would have at least cleaned the dust off. Since we couldn't see what this had to do with MEDEVAC operations, his plea fell on deaf ears. It was hardly an excuse, since they never knew when the



extensive inspection of the landing gear installation. **Gary Aldrich** checks with the **Project Police Archives** by phone to double-check an aspect of the reproduction thought to possibly be inaccurate. After several hours of exhaustive inspection, no squawks were found to cite Roscoe Turner for. Several suggestions were offered by the **Project Police** to Bill Turner, some in the area of wall covering material, which were all summarily ignored.

Spanish Inquisition was coming either. Otherwise, it was a nice looking aircraft.

The **Project Police** also noted that **Jan Johnson** has finally accepted the power of the **Project Police**, in that her Woody Pusher was nowhere to be found on the field this year. Having previously been cited for no visible means of propulsion, we can only surmise that it was kept hidden to avoid a repeated citation.

The **Project Police** are concerned not only with safety and workmanship in the present day but historically as well. A high point of each year's **Operation Rubidoux Sundown** \*\* is a visit to Bill Turner's Repeat Aircraft. Having found Bill's latest project, a reproduction of Roscoe Turner's 1939 Thompson Trophy Winner "Champion," **Miles Bowen** and **George Gennuso** stand guard as **Doug Dodson** performs an



**Leo Williams**, recent new member of Chapter 1000 and member of the Special Operations Forward Recce Team, is seen on his stealth ***Project Police Ground Assault Vehicle***. **George Gennuso**, official ***Project Police Picture Pointer (P<sup>4</sup>)***, (not to be confused with **P5**), correctly identifies the ***Project Police Aerial Assault Vehicle*** placard, slightly modified and pressed into service in an alternate role. **Leo** arrived early that morning by heavily disguised 1966 Ford Van to secure the field for arrival of the main ***PPTAF*** strike force. He has also taken up the role of making ***PPTAF*** uniform apparel more readily available.

lack of cheese on their Philly-Steak Cheese sandwiches.



But even this minor setback (who's bending metal?) did not slow down the **Project Police** on their mission to investigate all that was to be investigated. Here they find a Cessna 172 which is obviously used by the "**P**"*roject* "**P**"*olice*, but was unknown to the members of the team. A later search of secret databases ([www.landings.com](http://www.landings.com)) showed the aircraft to be registered to a **John Findley** of Riverside. Perhaps an inside man so secret that





his mere existence is unknown even to the **Project Police**? Did we just blow his cover? The investigation continues.



In a demonstration of the power of the **Project Police**, the sun was forced to set over Mount Rubidoux in honor of **Operation Rubidoux Sundown VII**. Flabobians and astute students of astronomy should notice quickly the exceptionally unusual nature of this demonstration, just by inspection of this photograph. (This makes more sense if you look at the color version on the web site.)

The **Project Police** are nothing if not thorough. Spotting this building obviously marked for use in the Young Eagles program, an investigation into its mission suitability was launched. Here selected members of the **PPTAF** are seen checking the integrity

of the wall construction. Nothing is insignificant when it comes to the safety of the aviators of tomorrow. Due to complex nature and importance of this task, the **Project Police** enlisted the aid of several Flabobians. As seen here, Prezident **Jack Gentry** points out suspected weak areas, while Newsletter Editor **D.K. Heller** helps **Miles Bowen** apply sufficient force to the wall for proper evaluation. Former Prezident **Jan Johnson** stands by with her namesake hammer to help shore up any weak spots, and an unidentified Flabobian stands by with a broomstick to test higher areas if required.

Don't believe anything you may read from the Flabobians as to what was going on in this picture. That's our version of the truth and we're sticking to it.



Here the **Project Police** stand watch to ensure a smooth transition of power at EAA Chapter 1 in the best traditions of our constitutional form of government. Here **Jan Johnson** passes the Presidential Hammer to incoming Prezident **Jack Gentry**. Not all members of the **PPTAF** are present as it is critical to keep our forces dispersed in case of

terrorist attack.

Having been pleased with what we saw, the **Project Police** declared "Victory!" and left the diplomatic power of EAA Chapter 1 intact to ensure stability in the region. That, and to make sure



they were around to put on another Open House next year so we could come back and "inspect" again. All **Project Police Aerial Assault Vehicles** were then cleared to return to their dispersed bases.

Having successfully completed our mission, the **Kommandant** and the **Secretary** decided to fill some "close" formation (in sight of each other) squares on the way back.

Here we see the VC-170 over the EAA Chapter 1000 primary base of operations, Edwards Air Force Base.

Our mission complete, we returned the VC-180 to its home base at William J. Fox Field. The **PPTAF** then dispersed, once again blending



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into the population, ready to reform at a moment's notice. Okay, maybe a week's notice.

To the members of Chapter 1: Thanks for another great party! We expect you to return the favor by coming to visit us on **15 May 1999** at the **Eighth Annual Scotty Horowitz Going Away Fly-In** at Rosamond Skypark (L00)! But don't get complacent--the **Project Police** will be back to check up on you again next year--you can count on it!!

(See this report with full color pictures at <http://www.eaa1000.av.org/pix/orsvii/orsvii.htm>)

- PPO Erbman

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### Operation Rubidoux Sundown VII Pre-Assault Report

PPTAFSOG/FACRECON RPT-2/27/99

0645-SOG team departed secret safehouse somewhere in Hemet in GAVDS, or the Ground Assault Vehicle Delivery System. Actually, a barely modified '66 Ford Van. Uneventful transport to our rendezvous with the Free Partisans on Flabob Airfield. Pathetically easy to penetrate the early warning defenses on the 2-wheeled, biped powered Ground Assault Vehicle. Actual penetration of the Chapter One HQ area occurred at 0730. No hostile forces encountered during the dangerous crossing of the Flabob cross wind runway, past various sentries and moving aircraft, and near the active runway. After consuming an alarming amount of food at Silverwings Cafe, the team prepared for the landing of the main assault force from **PPTAFHQ** by hobnobbing with our friends at the **Travis Gammil** hanger/Command Post near the cross-wind runway.

0940-SOG team awakens from digestive torpor and notices black **PPTAF** uniforms everywhere. Obviously our pathfinding penetration of the Flabob Combat Area Assault Zone had been successful.

Conclusion: **Operation Rubidoux Sundown VII** Preoperational Forward Air Control infiltration of Flabob Aerodrome was conducted by new **PPTAF** team member **Leo V. Williams** and his wingman...er...daughter, **Kathleen D. Williams**.

Thanks to Chapter 1000 for being filled with such nifty people. El Presidente **Gary Aldrich** and his crew made me feel right at home on my first operation. I look forward to many more.

- Leo Williams

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### DUES DELINQUENTS!!! (continued)

or we'll convert your file to a string of zeros, cut off your favorite newsletter after April, and you'll lose that coveted "continuous membership since..."! (If you've paid up but your name has been included here by mistake, point it out and we'll happily print a retraction on page 11 next month...)

#### The Delinquents:

Ron Applegate, Bill Aronson, Craig Bowers, John Bush, Stephen Corda, Dr. Gerry Curtis, Norman Devereux, Ed Dutreaux, Lee H. Erb, Connie Farmer, Jon Goldenbaum, Dave Halasi-Kun, Paul Hoynacki, Steve Irving, Vance Jaqua, Randy Kelly, Gretchen Lund, David

McAllister, Bill McCune, Al Norman, Con Oamek, Terry Pierce, Chris Reeder, Harry Richardson, Jack Roth, Rich Runyon, Ronald Scaggs, Vince Sei, Doug Shane, Ryan Smith, Kermit Steria, Larry Sweetser, Quentin Toyloy, Rich Turner, Bob Waldmiller, Jenna Ware, Larry Wright.

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## PAY UP!

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### Last Month's Meeting

#### EAA Chapter 1000

Scobee Auditorium, Test Pilot School, Edwards AFB

1700, February 16, 1999

**Gary Aldrich**, Presiding

The meeting was called to order sometime around the appointed 1730 following schmooze time. No one was allowed to stop schmoozing until all of the Chewy Chips Ahoy were consumed. This appears to be a requirement, but we can't confirm it, since the **Project Police Bylaws** were last seen floating aimlessly about cyberspace where even **Buck Rivetz** is powerless to locate them.

#### Announcements

There were probably some announcements, but I can't remember. The secretary's notes are nowhere to be found, possibly spirited away by Flabobians searching for intelligence on **Operation Rubidoux Sundown VII**. Therefore, you're reading what I can sort of remember of the events as they may have happened.

**Bernie Bakken** has formalized a process for procuring official **Project Police** uniform apparel. Order forms were printed in the February newsletter. Contact him to place your order.

The new way-cool Chapter 1000 patches are still available; contact **Gary Aldrich** (\$5 each) and order a bunch.

I'm sure there was much talk of **Operation Rubidoux Sundown VII** on **Saturday, Feb. 27**. Of course, that's now in the past. **Project Police** SIGINT officers read the intelligence found on Chapter 1's preparations in the Chapter 1 newsletter.

To all delinquent dues non-payers: **Pay up!** Just do it!

#### Minutes

Probably accepted as published. Nobody raised a ruckus.

#### New/Old Business

I don't recall.



**Program**

This month we regressed to our happy pre-salad days of kindergarten when we all looked forward to Show and Tell.

Since it was Vice Kommandant **George Gennuso's** idea, he led off first. He showed us his Pulsar instrument panel complete with all of the water-slide decals he made as detailed in the February *Leading Edge*. It's amazing how good they look. You'd swear the markings were silk-screened on by some professional for some obscene charge.

Next up was **Russ Erb**, who showed some of the jigs he made to do repetitious procedures. The Bearhawk ribs use angle stiffeners which are riveted on. There's only a few billion of them, or so it seems. Each stiffener must be bent from flat sheet and drilled for rivets. He showed how a relatively inexpensive aluminum brake was modified heavily to make it serviceable for bending the angles, and was fitted with a depth stop to allow quick positioning of the blanks. Once set up, each angle took about 20 seconds total to bend.

He also showed drilling jigs set up for drilling the rivet holes. The accuracy was so good that light could be seen through the holes in a stack of angles six inches thick. Also shown were a block ground to joggle rib flanges when used with a hammer. Russ showed one of the tip ribs with a chord of about 5 feet. **Doug Dodson** was heard to comment on how big it was compared to his Glasair wing.

Third up was **Roy Bailets**, who had brought all sorts of cool toys from his composites business. He talked about many of the techniques used to rapidly create female molds for various parts. Not all were serious airplane parts—Roy displayed an alien bust he had created, suitable for selling at the **Roswell Ramada**. This was all very interesting to a metal working guy, and Roy commented on how he avidly collects all newsletter articles about metalworking. Roy also slipped and agreed to write an article for the chapter newsletter on welding band saw blades.

**Adjournment**

The meeting was adjourned at sometime well after it started, at which time, according to tradition, many attendees did their duty to economically support the local Burger King, a.k.a. **PPHFFRC (Project Police High Fat Food Replenishment Complex)**. Discussions were held that would almost have been worthy of Design Group founder **Vern Blomquist**.

- **Erbman, Pseudo-Secretary**

**The Prez Sez...**

Victory! You've probably heard the news by now...even if you weren't part of the assault. *Operation Rubidoux Sundown VII* was a resounding success. I won't bore you with my rendition of the truth (as it may have occurred) as *Project Police Propaganda Meister Erb* has covered it well in multiple media. I will say that the current Flabobian leadership accepted the attack graciously and with excellent humor. To quote one..."It's good to

have fun again!" And indeed that is the recurrent theme if you could read the *Project Police* By-laws (whosoever finds them, please pass them around...until then you'll just have to believe us.) Yup, fun is the name of the game and I'd like to encourage more of you to get in the swing of things and join us at our next gathering. I realize that many of our readership are remote (as well as living far away) and we are considering more weekend meetings to allow those folks to participate.

In fact, we just happen to have a weekend event in the offing...the annual Chapter 1000 Scotty Horowitz yada, yada fly-in coming up in May! This would be a perfect opportunity to come on out and show your *Project Police* colors...or, if you prefer, you may remain undercover so as not to alarm the populace of the sleepy little burg of Rosamond. Better yet, volunteer to help out with some aspect of the execution. Don't be swayed if you can only show up the day of the event. Your BoD is vastly experienced with line-o-sight tasking. You can be part of the crack, well-oiled machine. Pay no attention to the apparent chaos that surrounds our normal gatherings...it's all part of the plan. If you can't help out or come out at least wish us fair skies and following (light) winds. See you at L00!

Check 6 and Fly Safe!

- **Gary Aldrich**



**Young Eagles Update**

This is my first report of the year - sorry its late. So far we have had 3 great rallies. I would like to thank everyone who showed up to help!!!! We have gotten off to a good start with a total of 55 YE so far this year! See you at the next rally. (NOTE: there are 2 people who have made every rally this year - please help me thank them!!!) (hint: ground crew).

**Next Rally: March 13th, 8am, Fox Field**

**January 9, 1999 Fox Field Rally Total = 8**

**Flight Crew**

<i>Pilots</i>	<i>Equipment</i>	<i>#YE</i>
<b>Ray Greene</b>	Cardinal 177B	3
<b>Mike Hartenstine</b>	Cessna 120	3
<b>Bob Hoey</b>	BD-4	2

**Ground Crew:**

**Paul Rosales Victoria Rosales**  
**Kristin Abraham**

**January 16, 1999 California City Rally Total = 28**

**Flight Crew**

<i>Pilots</i>	<i>Equipment</i>	<i>#YE</i>
<b>George Heddy</b>	Cessna 172XP	9
<b>Ozzie Levi</b>	Bellanca Cruisair	4

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Dick Monaghan	Luscombe 8A	4
Wen Painter	Cessna 182	11

### Ground Crew:

Paul Rosales	Victoria Rosales
Ron Wilcox	Miles Bowen

February 13, 1999 Fox Field Rally Total = 19

### Flight Crew

Pilots	Equipment	#YE
John Bush	Cessna 140	3
Don Gates	Cessna 150	3
Ozzie Levi	Bellanca Cruisair	1
Con Oamek	Bonanza F-33-A	3
Wen Painter	Cessna 182	6
Connie Trippensee	Grumman Tiger	2
Gary Trippensee	Luscombe 8A	1

### Ground Crew:

Paul Rosales	Victoria Rosales
Ron Wilcox	Miles Bowen

Angela Webber

(expecting)

Next Rally: March 13th, 8am, Fox Field

Don't miss this one !!!! EAA kids day. In addition to our usual crowd of Antelope Valley kids, bring your very own young eagle(s) for a sanctioned ride. No, it doesn't matter whether they have flown Young Eagles before or not! Be sure you bring their friends. Age limit is 7-17. See you there!

Thanks for your help!!!!

### Young Eagle Operations:

Dave Webber	David McAllister
Dave.Webber@dfrc.nasa.gov	David.McAllister@dfrc.nasa.gov
dawebs@ptw.com	256-4829
948-9589	

- Dave McAllister

(PPO Jim Payne reminds us that a Young Eagles rally will be held on April 10th at Rosamond Skypark. *Project Police Spouse* (PPS) Jackie Payne, a teacher at Desert High School at Edwards, says to expect a big gaggle of kids from the base. The Rosamond Rotary will be serving breakfast from 8:30 am. Young Eagle pilots will get free food! Do you need any better reason to show up?)

## New Members

The word is getting out! Applications have been flooding in to join up with the *Project Police*! As many of these applications are coming in printed from our web site, it's tough to figure out how these folks are finding out about our fine chapter. No matter—they all reveal their exceptional intelligence by their decision to join up!

First to come in was **Shawn Keller** of Tehachapi. Shawn is an Electronics Engineer who is working on a TEAM Z-Max to be powered by a Subaru EA-71 engine. He lists as his project on his nametag an "Eindecke 2000."

I'm not sure if this is the Z-Max or something else. Shawn has lots of experience working with R/C models and flight simulators. He's also been seen around the group at Scaled Composites, as he designed the electrical systems for the Williams V-Jet II and the prototype Proteus.

Next in was **Leo Williams**, whom you already met on page 4. Leo lives with his wife Wanda in that California town that you could swear was missing a letter in its name (Hemet). He spent 10 years seeing the world as a flight engineer on Air Force C-141 Starlifters, and has also worked at Starduster. He lists his projects as a Starduster Too and a Rand KR-2. Currently working as a screen printer and artist, Leo was especially in a hurry to join Chapter 1000. **Bernie Bakken** hired Leo as the official *Project Police* uniform shirt printer, and Leo wanted to secure the rights to wear one of his creations during *Operation Rubidoux Sundown VII*. Leo is doing a great service to the chapter, printing T-shirts in much more flexible quantities and at a much lower price than our previous supplier.

The *Project Police* have recruited an inside man at the Teledyne Ryan's **RQ-4A Global Hawk** project. **Brad Norman** of Rosamond works as a Flight Test Engineer and UAV Command and Control Operator. In fact, he was the second person to "pilot" the Global Hawk. When he wants to actually pilot an aircraft without a radio link, he flies his Mooney M20F.

Finally, **Vance Cochran** joins us in the Det 11 area (San Carlos). Vance lives in Belmont CA, and apparently comes to us after **Norm Dewitt** told him what a great chapter we have. Vance flies an L-29, which he describes as "An L-29 is a Czechoslovakian Jet Trainer built by Aero Vodochody, commonly called a Delphin. Here in the US it is certified in the Experimental Exhibition Category. I don't have an electronic picture handy, but I would love to fly it down to a chapter meeting." Vance is a Consultant with interests in the area of flight testing and aerodynamics. He is also a prestigious FAI World Record holder for the fastest time from San Carlos, CA to Santa Barbara in a Katana DA-20. (*I wonder who holds the world record from Fox to Flabob?*)

## Bryan Duke At OTS

*Project Police Officer Bryan Duke* has set up a temporary EAA Chapter 1000 Detachment at Maxwell AFB, AL where he has absolutely no time to write anything for the newsletter. He has infiltrated the USAF Officer Training School (OTS) disguised as an officer candidate. While there, he will be learning all of that important stuff like how to salute, other officer's first names (they're all named "Sir"), and critical pieces of historical trivia about Air Force history that are generally useless except as fodder for bar bets. He is also probably learning how to march with all of his closest friends, which will probably be of no use while schlepping a parachute out to the mighty T-37. That's what's next on his calendar—Undergraduate Pilot Training (UPT). We'll find out later where he'll be learning to fly the Air Force's finest training aircraft.



Prior to leaving for OTS, Bryan again showed his excellent judgement on 14 Feb 99 when he proposed to **Tanya Adams**. She, in turn, showed her excellent judgement by accepting. She knows what she's getting into—she grew up in an Air Force family.

You too can keep up with what's going on. Tanya is posting the latest news on Bryan's adventures at <http://www.qnet.com/~bd/ots.html>.

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## **Band Saw Blade Welding Made Easy**

During the course of the February Chapter 1000 meeting I inadvertently agreed to write about a non composite material (namely ferrous metal band saw blades) for inclusion in the newsletter. I can still remember the moment as though it was only yesterday. My mind began racing and my palms started to sweat as I searched desperately for a plausible excuse to get myself off the hook. The *Project Police* grilling was relentless! I vaguely remembered reading a copy of the chapter bylaws, yet I didn't dare mention it for fear they (names withheld to protect the innocent) would whip out a fresh copy and a whole new wave of grilling would ensue. Just the excuse necessary to continue their brutal tag team tactics. My will to resist was fading fast as I found myself repeatedly uttering the same statement over and over again. If only I could hold out a few more moments. After all, how were the plastic and composite people going to react? I finally agreed to write about a seasoned aerospace workers (code name: "THE OWL" aka Metal Bender) time tested band saw blade welding secrets.

If you have ever welded a band saw blade, you know the goal is to weld a blade that will not break the moment you go to use it. Secret NO. 1 is to apply less pressure to the butted blade ends about to be welded (see pressure knob) by dialing in about one half (1/2) the recommended pressure. Secret NO. 2 is to apply lower annealing temperatures (see annealing button) when annealing a fresh weld. We will get back into this stuff later.

### **Instructions**

The concept behind changing the standard instructions slightly, is to avoid misaligned and brittle welds. Following instructions to the letter usually results in a lower success rate. All band saw blade welding machines share the same basic functions of welding, annealing and grinding. Band Saw Blade Welder component parts in sequence of use are: blade cutters, blade clamps/copper electrodes, welding button, pressure knob, annealing button, grinding switch and abrasive grinding wheel. Product quality from manufacturer to manufacturer varies and is not a big deal.

### **Preparation**

- (A) Trim blade ends square.
- (B) Remove oil residue with acetone or other solvent.
- (C) Remove rust with scotch brite or 150 grit sandpaper.

### **Welding**

(A) Properly aligning and positioning each blade end in the blade clamps (straight and centered with ends touching).

(B) Apply pressure by twisting the pressure knob in a counter clockwise direction just enough to barely push the blade ends together. Experiment with test samples by using varying degrees of pressure. Too much pressure will cause blade ends to overlap instead of butt.

(C) Press welder button in all the way until glowing hot metal cools completely (about 5 seconds).

(D) Manually return pressure knob to zero.

(E) Unclamp blade, being very careful not to bend it even slightly.

(F) Visually inspect weld. A good weld runs full width with no air gaps.

### **Annealing**

(A) Position blade at the front of the clamps. Include everything except the teeth. Make sure weld is centered evenly between copper electrodes.

(B) Press annealing button until weld starts to change color then instantly release annealing button the moment you see a discernable color change. Without removing the blade, depress and release the annealing button two (2) or three (3) times. As the blade heats up its color will first turn dark blue then dark red and finally orange. It is not necessary to make the weld joint and surrounding area turn orange. Eye hand coordination is important here. The cold steel blade will appear a gunmetal gray color.

(C) Reposition blade 0.040" (1mm) to the right of center and repeat step (B).

(D) Reposition blade 0.040" (1mm) to the left of center and repeat step (B). Inspect your welds by bending several test samples by hand. Physically bend samples back and forth two or three times or until they break. Note: If you have trouble getting wider blades in the 1/2" range to weld properly, try turning the blade around for one final annealing on the opposite side.

### **Grinding**

(A) Grind down the weld joint and fusion film on either side of the blade. Take care to remove just the right amount of metal without making the blade too thin. Thin blades will still work. I use a hand held pneumatic grinder with good results.

(B) Grinding metal lumps off the back side of the blade will allow the weld to slide past blade guides without making a thumping sound.

### **Final Notes**

A second annealing and grinding operation may be required yet is not an absolute must, especially if your blade welds are holding up under working conditions. Sandpaper can be used in place of grinding to remove fusion film.

- Roy Bailets

### Langley Park Fly-In

*(Every three years, a fly-in is held at Langley Park in Perth, Australia. The park along the river was the first airport in Perth, but is now primarily a sports field in downtown Perth.)*

Just a few words describing the latest triennial fly-in to Langley Park on 27<sup>th</sup> February. As you have the picture of the 1996 event on the web you should be able to picture it OK. This year we had a huge amount of hassles with the authorities – mainly police - in the organisational phase and we were all very glad that the fly-in went without incident. In previous years we got away with A\$10 million insurance coverage but this time we were faced with A\$100 million which was well beyond our means. Luckily the Perth City Council helped us out and we only had to fund the insurance cover for the first A\$20 million.



I had every intention of flying our Auster in and, as my instructor (and copilot) was the chief safety officer for the event, we were scheduled to be the first plane out of Serpentine Airfield at 0717 hours. Imagine my disgust when I got out to do the preflight and found a flat tyre. To cut a long story short we took the wheel off and eventually found that the valve stem on the tube was cut where it went through the hole in the split rim, and, of course, there was no spare available. By this time it was about 0930 and most of the aircraft had taken off so we decided to substitute Jim's Mooney and we eventually got into Langley at about 1130 hours as the second last aircraft to land.

The landing was interesting to say the least as it was a right hand circuit within the confines of the river banks (luckily it is a fairly wide river at that point) to keep away from the residential areas. Turning onto the base leg we were faced with tall city buildings that were well above our height and only a matter of 100 metres (328 feet) or so from the centreline of the runway. I am glad then that I was not flying! Just to make matters worse Jim found that his approach speed was very high and had to 'plant it' onto the grass—it was only later that we found out that the wind had just shifted and we had about a 10 knot tailwind. Bearing in mind that the effective strip length was only 618 metres (2028 feet) onto grass it was a bit of a challenge for Jim but he made it with plenty to spare.

We had a total of about 135 aircraft land on and park the field over a period of 3 1/2 hours so the spectators had something to keep their interest. The aircraft ranged from

ultralights to T-6's and a Partenavia twin with the majority being homebuilts (Jodels, T18's, RV's) or Classics (Austers, Cubs, Stinsons etc.). About 1530 hours we started to depart for home and a well earned beer or two. In my case it was champagne to celebrate my 60th Birthday which happened to fall on the day.

The following day we had an air show at Serpentine airfield which was quite well attended (and we got the Auster flying for the 'Classic' flyby segment). Altogether it was a very successful weekend (although very hot - around 100 deg. F on both days) but we were very glad to see the Sunday night and the (more) beers. A number of people came from the other side of Australia including one couple from Queensland in a Piper Cub. It took them a week to get here.

I am not sure if we will do it again as the problems we had in the organisation this time were a bit much and I doubt if anyone will put their hands up to do it again.

- **Graham Byass**

EAA Chapter 1000 Det 10, Perth, Australia

### Boredom Fighter Update

New pics taken 27 Feb 99 at Half Moon Bay. Getting close! Ran the engine Saturday and did some additional taxi testing. Still handles pretty good. After the engine sat since last October, it started on the third pull.

- **Jim Piavis**







### New KIS Super Cruiser Rolled Out

Thought you might like a roll out picture of our new Super Cruiser - Continental IO-360, constant speed prop, and some cosmetic changes - fin, nose gear, and the new in thing - eyeball cowl inlets.

- Vance Jaqua

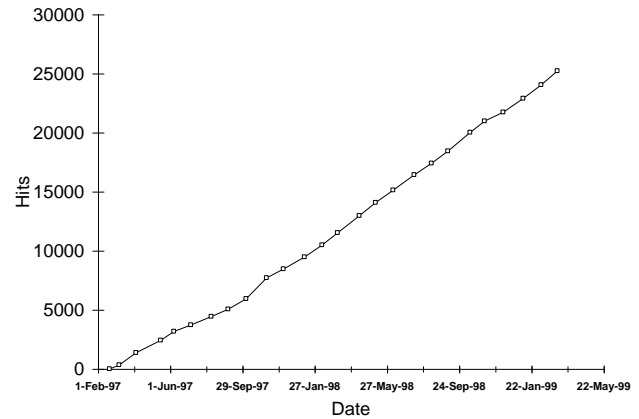
EAA Chapter 1000 Det 8, Camarillo CA



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### Web Site Update

As of 6 March 1999, the ol' hit counter stood at **25219** hits. February was a very good month, with the hit rate up to 43 hits/day. With a few of those "I don't want to look at the project" days, I managed to post the October, November, and December 1998 newsletters. Of course, the official report on *Operation Rubidoux Sundown VII* was posted in full color.



Usage History on <http://www.eaa1000.av.org>

- Russ Erb, Webmeister



Just a reminder that the EAA Chapter 1000 Web Site is hosted courtesy of Quantum Networking Solutions, Inc.

You can find out more about Qnet at <http://www.qnet.com> or at 661-538-2028.

**Chapter 1000 Calendar**

Mar 13: EAA Chapters 1000/49 Young Eagles Rally, 8:00 a.m., General William J. Fox Field, Lancaster CA (661) 256-4829

**Mar 16: EAA Chapter 1000 Monthly Meeting, 5:00 p.m.,** Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 490-1476

Apr 7: EAA Chapter 49 Monthly Meeting, 7:30 p.m., Sunnysdale School. 1233 S. Ave. J-8, Lancaster, CA. (661) 948-0646

Apr 10: EAA Chapters 1000/49 Young Eagles Rally, 8:00 a.m., Rosamond Skypark, Rosamond CA (661) 256-4829

Apr 13: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., Edwards AFB. Test Pilot School, MOL Room (661) 490-1476

Apr 11-17: Sun 'N' Fun EAA Fly-In, Lakeland FL.

**Apr 20: EAA Chapter 1000 Monthly Meeting, 5:00 p.m.,** Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 490-1476

May 5: EAA Chapter 49 Monthly Meeting, 7:30 p.m., Sunnysdale School. 1233 S. Ave. J-8, Lancaster, CA. (661) 948-0646

May 11: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., Edwards AFB. Test Pilot School, MOL Room (661) 490-1476

**May 15: Seventh Annual Scotty Horowitz Going Away Fly-In,** Rosamond Skypark (L00), Rosamond CA.

**May 18: EAA Chapter 1000 Monthly Meeting, 5:00 p.m.,** Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 490-1476

Jun 2: EAA Chapter 49 Monthly Meeting, 7:30 p.m., Sunnysdale School. 1233 S. Ave. J-8, Lancaster, CA. (661) 948-0646

Jun 8: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., Edwards AFB. Test Pilot School, MOL Room (661) 490-1476

**Jun 15: EAA Chapter 1000 Monthly Meeting, 5:00 p.m.,** Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 490-1476

Jul 7: EAA Chapter 49 Monthly Meeting, 7:30 p.m., Sunnysdale School. 1233 S. Ave. J-8, Lancaster, CA. (661) 948-0646

Jul 7-11: Northwest EAA Regional Fly-In, Arlington WA

Jul 13: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., Edwards AFB. Test Pilot School, MOL Room (661) 490-1476

**Jul 20: EAA Chapter 1000 Monthly Meeting, 5:00 p.m.,** Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 490-1476

Jul 28-Aug 3: EAA AirVenture '99 Fly-In Convention, Oshkosh WI  
Aug 4: No EAA Chapter 49 Monthly Meeting

Aug 10: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., Edwards AFB. Test Pilot School, MOL Room (661) 490-1476

**Aug 17: EAA Chapter 1000 Monthly Meeting, 5:00 p.m.,** Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 490-1476

**For Sale:**

Sonera IIL project. Fuselage and wings 95% complete. Modified for A65 engine. Engine torn down for overhaul but complete with a great many spare engine parts. Includes instruments. Hydraulic brakes. All excellent work. Call Fletch Burns 760-373-3779

*To join Chapter 1000, send your name, address, EAA number, and \$20 dues to: EAA Chapter 1000, Gary Aldrich, 42370 61<sup>st</sup> St. W, Quartz Hill CA 93536. Membership in National EAA (\$40, 1-800-843-3612) is required.*

*Contact our officers by e-mail:*

*President Gary Aldrich: gary\_aldrich@pobox.com*

*Vice President George Gennuso: pulsar1@qnet.com*

*Secretary Miles Bowen: miles\_bowen@ple.af.mil*

*Technical Counselor Gary Sobek: gasobek@jps.net*

*Inputs for the newsletter or any comments can be sent to Russ Erb, 661-258-6335, by e-mail to erbman@compuserve.com*

From the Project Police legal section: As you probably suspected, contents of The Leading Edge are the viewpoints of the authors. No claim is made and no liability is assumed, expressed or implied as to the technical accuracy or safety of the material presented. The viewpoints expressed are not necessarily those of Chapter 1000 or the Experimental Aircraft Association. **Project Police** reports are printed as they are received, with no attempt made to determine if they contain the minimum daily allowance of truth. So there!

**THE LEADING EDGE****MUROC EAA CHAPTER 1000 NEWSLETTER**

**C/O Russ Erb**

**6708 Doolittle Dr**

**Edwards CA 93523-2106**

**<http://www.eaa1000.av.org>**

**ADDRESS CORRECTION REQUESTED**

**THIS MONTH'S HIGHLIGHTS:**

**REGULAR MEETING 16 MARCH AT TPS**

**RUBIDOUX SUNDOWN VII: THE REPORT!**

**WELDING BAND SAW BLADES**

**BOREDOM FIGHTER UPDATE**

