

THE LEADING EDGE

NEWSLETTER OF MUROC EAA CHAPTER 1000

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

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

February 2018

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:



Rotax Aircraft Engines

Bryan Toepfer
Operations Manager, Rotax USA
Tuesday, 20 February 2018
1700 hrs (5:00 PM Civilian Time)
USAF Test Pilot School Auditorium
Edwards AFB, CA

(If the following looks familiar, that's probably because it is. This is our speaker we hoped to hear last October, but were foiled by a blown tire on the Corona runway. Come join us as we give it another shot! – ed)

In today's aircraft engine market, Lycoming and Continental pretty much own the segment from 150 – 350 horsepower. In the 100 horsepower segment, Continental had the O-200 and Lycoming had the O-235, but these are becoming more rare.

During the 20th century in Austria, a company known as Rotax was developing small motorsports engines. Initially they built two-stroke engines which became very popular in personal watercraft and snowmobiles.

As the ultralight movement grew, these light weight, high power engines became very popular for use in aircraft. Even though the reliability of two-stroke engines was less than stellar (it wasn't a question of if the engine would fail but when), this was an acceptable risk for ultralights because they rarely got out of glide range of the airfield.

Pay Your Dues! Now! This Means You!

(If you have already paid your dues, please disregard this notice)

Send your cash, check, money order, or other legally negotiable instrument to any chapter officer, or pay online by **PayPal** through the [EAA Chapter 1000 web site](#).

Do it now and avoid the embarrassment of appearing on the **Dues Delinquent** list next month!

You may also qualify for the government sponsored EAA Chapter 1000 "Free Dues" program.¹

Recognizing that there was a market in aviation, Rotax developed a four-stroke engine in the 80 – 100 horsepower range, the now very popular 912 series. This engine is different from your basic Lycoming or Continental in that the cylinders are air cooled, but the cylinder heads are liquid cooled. Additionally, they use a unique dry oil sump, which leads to the somewhat unusual procedure of "burping" the engine before checking the oil level.

If your primary experience is with Lycomings or Continentals, and you haven't worked with a Rotax engine, then there is probably a lot you think you know about these engines, but you really don't. Fortunately, the **Vice Kommandant** has you covered. He has invited **Bryan Toepfer**, the Operations Manager for Rotax USA to come speak to us. While we don't know for sure exactly what he will talk about, I can pretty much guarantee that you will learn something that you didn't know.

¹ Simply write your name on a government printed "Free Dues" coupon and hand it to any chapter officer. "Free Dues" coupons are available at any bank, ATM, and many businesses. Ask for it by the secret code name "Twenty Dollar Bill."

We will follow our usual process, starting at the Test Pilot School in the Rick Husband Lounge with yummy snacks from the **Schmoozemistress**. Then we will proceed in an orderly fashion into the auditorium. After learning as much as we can about Rotax engines, we'll go to the **BK Dead Cow Emporium** where you can ask more questions about your next engine installation! See you there.

TAKE NOTE: If you do not normally have base access and depend on having your name on an Entry Authorization List to get past the young airmen with weapons, **you must get to the Visitors Center at the West Gate No Later Than 1630!** At 1630 the Visitors Center closes, and after that you will not be able to get in based on the EAL. That's the last procedure I was briefed on. Don't ask questions and don't be late!

Contact **Russ Erb** if you need to be added to the Entry Authorization List. Do it now—anything after **13 Feb 18** will be too late. The rocket scientists at Security Forces need time to process their paperwork.

- **Erbman**

Subbing for the **Vice Kommandant**

Last Month's Meeting/

EAA Chapter 1000

USAF Test Pilot School

Scobee Auditorium

Edwards AFB, CA

16 January 2018

Gary Aldrich, Presiding

The January meeting was held at the Test Pilot School at Edwards AFB with 11 members and guests attending. Social hour began at 1700 with chips, dips, salsa, Tuki Kukis and soda (leaded and otherwise).

The guest speaker was Steven Cable and his wife Holly, who along with 16 other family members own and operate Cable Airport in Upland, CA which is the largest privately owned public use airport in the country.

Having moved from Iowa, the family started Cable Claremont Airport (CCB) in 1945 on an 80 acre parcel with a 1200 foot runway. The main terminal was erected in 1949 which also housed the restaurant now known as "Maniac Mike's" run by Steve's cousin. The first hangars were constructed in 1949.

Cable Commuter Airlines started in 1964 operating Twin Otter's based at the airport. In 1968, Cable Commuter Airlines was operating a hub at LAX with flights to Burbank, Colton, Inyokern, Ontario, Oxnard, Palmdale, Palm Springs, Santa Ana, Santa Barbara and Santa Maria as well as to Lake Havasu City in Arizona. Cable Commuter was acquired by Golden West Airlines.

In 1966, Walter Cable flew a Cessna Turbo 210 to a still-standing record altitude of 40,500 feet.

CCB is the home to 400 aircraft based at the airport with 90,000 operations per year. They currently have 90

box hangars and 86 T Hangars. Ontario Police helicopters are based at Cable, along with Civil Air Patrol Squadron 25, Experimental Aircraft Association Chapter 448, Commemorative Air Force 3rd Pursuit Squadron, and the Foothill Flying Club which has 3 T-6 aircraft available for instruction. Cable holds an annual airshow the 2nd week of January, and a monthly aircraft display day the 1st weekend of every month.

Cable now has a 3800 foot runway with avgas available. It recently completed a \$500k repaving of the runway, and just installed a \$208k AWOS system. It's next project is a \$905k apron rehab along with a construction of a large maintenance hangar and new airport offices.

In case I had not mentioned it, Last Name Brewing (formerly known as Dale Brothers brewery) is an easy block and a half walk.

There are at least 5 members of the Cable family at the airport every day to run operations. Steve and Holly are the 5th generation with no end of the dynasty in sight.

At the conclusion of the meeting, Steve and Holly were whisked away to the Dead Cow Emporium for dinner and more stories about the airport.

Most of this is true.

- **Kent "Cobra" Troxel**

Minister of Propaganda

Chapter 1000 of the Experimental Aircraft Association of these United States of America and Occupied Territories

"We have more zeroes in our chapter than any other!"

Kommandant's Korner

Greetings

from the "other

side". No, I'm not

dead...just adjusting

to my retired status.

It's kinda hard to

break habits forged

during 44-odd years with

my nose to the proverbial grindstone (you'd think my nose would be smaller...) but I'm doing my best. Fortunately, I have been able to take advantage of the experience of other **Project Policemen (JD3, Cobra, Knife)** who continue to blaze new trails into the retirement world.

With all this balmy weather we've been having this winter...and my new status as a man of leisure, you'd expect I would be piling on the hours on the **Fightin' Skywagon**. At 11.6 hours in the last 30 days I have logged increased activity. I penned trips to O69 to visit the girls over the Christmas weekend, some Pawnee time in an impromptu towing session at L94, and a visit to KHND. The Henderson trip enabled me to check off a "bucket list" item...attendance at the annual SHOT Show in a huge convention center on the Vegas Strip. SHOT is obviously an acronym, but after 40 years of the events I think the meaning of the letters has faded into obscurity...kinda like



“SPORT” and “LASER”. Anyway, the SHOT Show is the annual convention of the National Shooting Sports Foundation (NSSF) which is the trade organization representing all things related to outdoor activities with an emphasis on those involving firearms. You can think of it as AirVenture for gun enthusiasts (and the military and law enforcement) and it certainly rivals the great Oshkosh experience in numbers of attendees and exhibitors. It’s open only to folks associated with the industry and nothing is for sale, and it’s an exercise in sensory overload concerning current trends and leading-edge technology in the shooting trade. Very cool. If you are a fan of the shooting sports and you get a chance to attend, I recommend it highly.

Other aviation adventures in the near future include a **Young Eagles** mission rescheduled from 10 to 17 February and another glider tow session on Saturday the 10th. If you add on the terrestrial adventures **Mrs. Kommandant** and I have experienced...like last weekend’s Rotary Wine Tour of Paso Robles you can see I’m doing my best not to become a couch tuber.

Let’s have a good turnout for our guest speaker from California Power Systems (read, “Rotax”) this month at TPS! Until then,

Fly Safe and Check 6,

- **Gary Aldrich**
Kommanding

1950’s Nike Missile Sites Around Los Angeles

During the early years of the Cold War, America’s aerial defense network consisted of the DEW-Line Early Warning radar system and batteries of U.S. Army Nike missiles peppered around the country. Most sites were strategically located near U.S. Defense assets, which in California included military and manufacturing entities spread up and down the coast. In L.A., Douglas Long Beach, North American and Northrop El Segundo, and Lockheed Van Nuys and Burbank plants were all protected by a bevy of Nike Missiles – conventional warhead-equipped Nike Ajax in the mid-1950s, then nuclear-tipped Nike Hercules missiles by the 1960s.

Many of these once-classified sites have been converted to military armories or mountain-top radio, TV, and microwave antenna farms, and one of the largest in the Los Angeles basin existed until recently at the Northwest corner of LAX, directly north of the departure end of Runway 24 Right. Located at 9014 Pershing Drive were missile assembly and fueling buildings and 24 launchers atop underground missile storage bays. This combined launch site was designated LA-70 and LA-73.

The Admin area is currently the home of “Jet Pets,” a large animal air-freight center for the airport, processing thoroughbred race horses, zoo transfers, and the like. The accompanying photo was taken from a Cessna 172 transiting the LAX VFR corridor in 1982, and shows the launch sites and missile assembly and maintenance areas

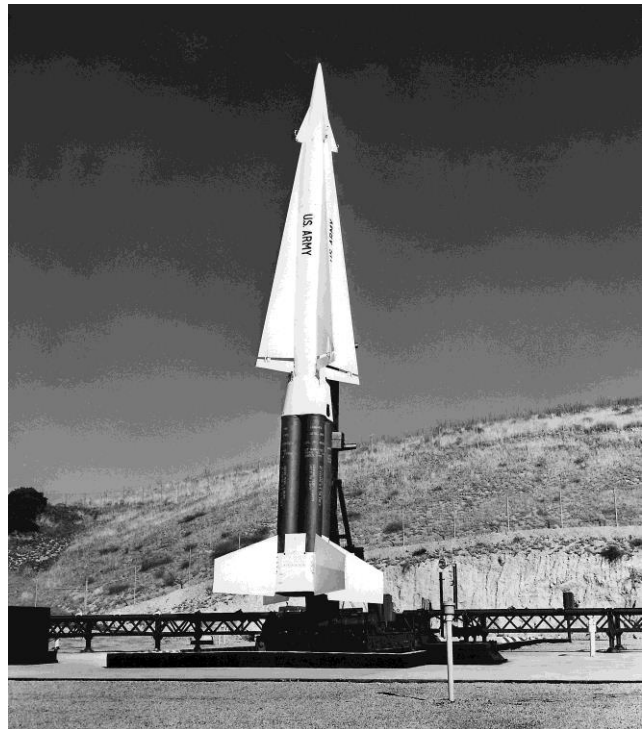
still intact. All were destroyed to build Westchester Parkway, and any remnants of the site have since been obliterated.



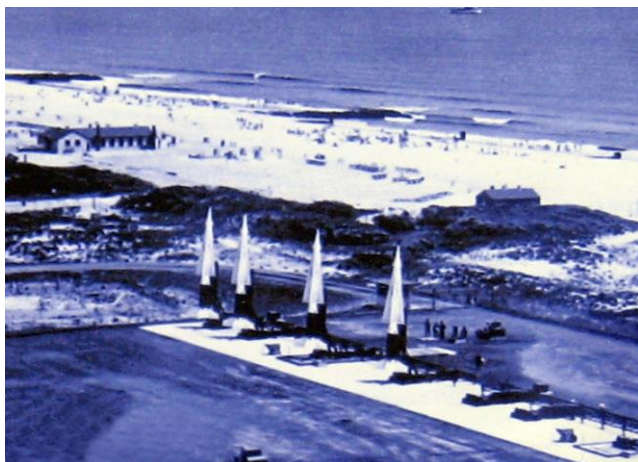
Nike missile site at northwest corner of LAX

A staggering total of more than 25,000 Nike Missiles were built from 1956 to 1974. Thankfully, not one was ever fired in anger, dutifully proving the concept of nuclear deterrence between the United States and Soviet Union during three very stressful decades.

- **Mike Machat**



Nike Hercules Surface-to-Air Missile



Nike site at Point Lookout, Long Island NY

FIFI at Home

During my trip to Texas in October 2017 to represent you at the **Stormy** and **Mary Weathers** wedding, I thought I was going to Meacham Field in Fort Worth to visit the Fort Worth Aviation Museum which I had visited several years ago. This was all very confusing, because in the intervening years the Fort Worth Aviation Museum had moved, and another museum, the Vintage Flying Museum, had taken up residence in the same hangar. I entered the museum and paid my admission. The displays in the museum looked somewhat familiar, and I took the time to look them over. Eventually I decided to wander out into the hangar bay. I opened the door, and was surprised to find FIFI, one of the two airworthy B-29s in the world, right in front of me. Last I knew, FIFI was based at the Cavanaugh Museum in Addison TX. There were no barricades and I had full access to the airplane, at least the outside.

- Erbman



FIFI in all her glory



Much to my surprise, not only is the airplane named FIFI, but each of the new engines has a name. Number One is named Ingrid.



Number Two is named Mitzi.



Number Three is named Rita.





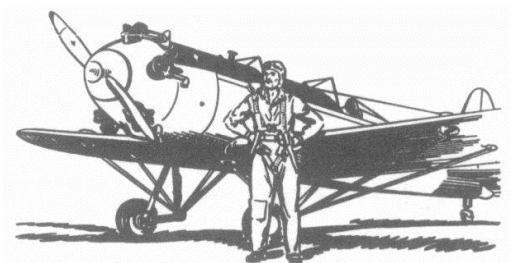
Number Four is named Betty.



Looking up FIFI's snout



FIFI's roommate is Diamond Lil, the CAF's B-24A. When I saw it, it appeared to be undergoing a major engine overhaul. One of the engines was removed and the rest were uncowed.



While I was there, the museum had just finished flying one of their Douglas A-26 Invaders



A T-6 painted in New Zealand colors put me in the mind of PPO Vanhoy



The most entertaining find was this rust-brown fixture, which is a bead breaker for B-29 size tires

Web Site Update



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

Feb 13: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

Feb 20: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

Mar 13: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

Mar 20: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

Apr 10: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

Apr 17: EAA Chapter 1000 Monthly Meeting, 6:30 p.m., Flying Dog Ranch, 4400 Knox Ave, Rosamond CA. (661) 609-0942

May 8: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

May 19: EAA Chapter 1000 Annual Aviation Event, To Be Determined. (661) 609-0942

Jun 12: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

Jun 19: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

Jul 10: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

Jul 17: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

Aug 14: EAA Chapter 1000 Board of Directors Meeting, 5:00 p.m., El Indio Restaurant, Rosamond Skypark, Rosamond CA. (661) 609-0942

Aug 21: EAA Chapter 1000 Monthly Meeting, 5:00 p.m., Edwards AFB. USAF Test Pilot School, Scobee Auditorium. (661) 609-0942

To join Chapter 1000, send your name, address, EAA number, and \$20 dues to: EAA Chapter 1000, George Gennuso, 3119 Lennox Ct, Palmdale CA 93551. Membership in National EAA (\$40, 1-800-843-3612) is required.

Contact our officers by e-mail:

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Inputs for the newsletter or any comments can be sent to Russ Erb, 661-256-3806, by e-mail to erbman@pobox.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****3435 Desert Cloud Ave****Rosamond CA 93560-7692****<http://www.eaa1000.av.org>****ADDRESS SERVICE REQUESTED****THIS MONTH'S HIGHLIGHTS:****REGULAR MEETING 20 FEB @ TPS****KOMMANDANT REPORTS FROM "THE OTHER SIDE"****NIKE MISSILE SITES AROUND LA****FIFI AT HOME**