

PENINSULA FLYER

South Bay

SoCal

October 2012

Editors Corner

Xavier Marshall

Congratulations to Dennis Lord on his retirement! We will see you around the airport more often now, right?

The biplane pictures in the last issue were:
Green Biplane – Culp Special
Grey Biplane – Hawker Fury Mk.II



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President's Report

Keith Spreuer

October snuck up on us this year! Two main items need our attention. First our annual election is this month. There are only 4 positions up to be filled this year. Those are the 3 even year BOD members and the position of Secretary. The Secretary position has gone unfilled this past year but it is important that we get someone to fill that. Maybe that would help us remember that election were due. We are proposing that Two of the expiring terms BOD members be re-elected, Dave Bristol and Rhon Williams. The third one due for election was Jack Kenton (you replaced David Wade). Jack has moved to Riverside. Carl Lekvan has been nominated to take that seat. I will be looking for a candidate to run for Secretary between now and the meeting so please step up if you can. It really mostly involves just taking notes at the BOD meeting.

The second item is the Holiday Brunch. I have contacted the Alpine Village and Khoury's restaurant in Long Beach. Both are available for Dec the 2nd (Sunday) and the 9th. The alpine Village runs \$26/person including tax and tip, while Khoury's is \$31.

However Khoury's has a much better buffet, Champagne, and a waterfront view. Give me your feedback at the meeting and we will set it up. I will leave the date open till the next meeting on the 20th.

But scour your closets for donations to the annual auction. Baked items and jellies are always a good item. Of course the men can't resist any kind of tool, but the ladies love decorator items and novelties.

We have been talking to a lady that has a PQ-14 (Culver cadet drone) that was reportedly willing to donate it. But it seems one of the former partners may be interested in it. There is also a BD-5 project that we may get and re-sell.

There are two upcoming Young Eagle events. The first is at Los Alimitos Wing Wheels and Rotors on Oct 28th. This requires the pilots to file PPR paperwork early and

those are due now. We also need to coordinate with Chapter 7 on this as they have taken the lead. The event after that one is back a CPM airport on 12/1. That will be the usual time with flying starting at 1pm.

The speaker at our next meeting is a lady named Jerri Bergen. She has studied and collects Nose Art. Her presentation will give us a history of the subject, pretty ladies and airplanes...what more could a pilot want?

Our Membership Renewal Drive is coming up in January. We are going to put an extra effort into getting all our members back into the group since we have been lacks about that recently.

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Hangar Report

Keith Spreuer

There are basically 1.5 large spaces vacant but the tool space is also producing no rent. So that puts us \$843 below the full rental amount. That is very close to our breakeven point. Rich moved in to a space behind my Cozy, near the sink. I may have mentioned that last month. Other than that there have been no changes. I did spend some time last Saturday patching a wall in the storage room and putting rat poison out to get rid of some varmints that have actually been chewing thru aluminum cans of soda! Hopefully that will put an end to that. There are the usual maintenance items like replacing the overhead light bulbs and cleaning.

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ROTARY ENGINES

Jim Stothers

Now gone the way of the dinosaurs, "rotary" engines were once the most numerous of aircraft engines. These are not the same as the Wankel type "rotary" engines we know as powering the Mazda automobiles. To look at one of the earlier engines at rest, the first impression is that one is seeing a "radial" engine of the type associated with everything from Kinner to Pratt & Whitney "Wasp" aircooled engines. In operation, however, the whole mass of the rotary engine spins wildly around with the propeller attached firmly to the front of the crankcase.

The *raison d'être* for this remarkable exhibition is fairly simple. In the early decades of the 20th century, internal combustion ("IC") engine technology was crude by today's standards. Even more primitive was an understanding of the fuels used to power those engines. Refining processes in those days produced fuels little better than "casing head" gas, with a variable octane rating somewhere between 20

and 35. (Of course, there was no such thing as "octane rating" in this period. It hadn't been invented yet!) As a consequence, IC engines required elaborate cooling systems to disperse the heat energy of fast burning, low energy fuels. Liquid cooled engines worked well, but were heavy, and required significant amounts of water (at 10 pounds/gallon) to remove the heat. They tried air-cooled engines, but at slow speeds heat dissipation was inadequate.

Interestingly, an American, , is credited with first producing a workable rotary engine (though not for aircraft use). The advantage of the rotary engine was its ability to create its own "wind" or air flow past the cylinder fins, thus providing cooling, and the capacity of the centrifugal action to throw out the exhausted gases and draw in the air/fuel mixture through the hollow fixed crank. Yes, the crankshaft was firmly bolted to the airframe, and crankcase and cylinders revolved upon it *en masse*. Magnetos were fixed to a stationary flange at the rear, with rotational energy to them provided by gears meshing with a ring gear attached to the crankcase. Attached to that ring was the "distributor", an insulated plate with copper segments energized by a rubbing block directing the magneto energy from there to the "sparking" plugs via bare copper wires. Carburetion consisted solely of a fuel pump injecting fuel, mixed with castor oil for lubrication, directly into the hollow crank. Throttle control was non-existent. Engine speed was controlled by a cut-out or "blip" switch that grounded out the magneto for the appropriate interval. Obviously, plug fouling was a constant threat to be reckoned with.

The rotary engine in aircraft use had several remarkable characteristics: turns to the right (in tractor configuration) were instantaneous due to the rotational and gyroscopic coupling. As might be expected, turns to the left were accordingly laborious and, in the dog-fight situation, downright hair raising as the pilot waited for response. The engine also produced other "raising" effects. Castor oil was thrown out indiscriminately by the exhaust, and the pilots' usual experience was one of nausea. The cliché of the WW1 pilot with face blackened except for circles where his goggles had been, is fact based, as is the heroic token of the white scarf used to wipe his goggles and sift the air he breathed.

Combatants on both sides in the "Great War" used the rotary engine, mostly in fighter or "scout" applications where light weight and maneuverability were highly desirable. These names may be familiar to you: French; Clerget, Gnome-Rhone, Le Rhone. British; German; Oberusel.

With the end of WW1 the rotary engine had reached and passed its prime. Except for the rare exhibition aircraft such as may be found at Old Rhinebeck, those that remain now are museum pieces.

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Side notes: I am aware of several rotary engines in a collection at Groveland airport, and a beautiful Sopwith "Pup" resident at Porterville. Also, many years ago David Hatfield spoke to Chapter 96 on his experiences in early aviation, in which he described landing at Huntington Beach on a flight from San Diego to Mines Field in his war surplus Thomas-Morse Scout, for the express purpose of removing the spark plugs from his rotary engine, and "cooking" the carbon out over an open fire.



2012 Officers and Advisors

President: Keith Spreuer
Vice President: Jack Massie
Treasurer: Merrill Eastcott
Secretary: Vacant

Board Members:

Dave Bristol
Jim Lobue
David Wade
Rhon Williams
Robert Cullinan
Ariel Hazi

Young Eagles: Glen Parkison
Hangar Manager: Keith Spreuer
Flight Advisor: Dave Bristol
Technical Counselors: Dave Bristol
Mark Zeitlin
Membership Chair: Jim Lobue
Newsletter Editor: Xavier Marshall
DAR: Bob Hayos
Website Editor: Dave Bristol

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CALENDAR OF EVENTS

TBD

NEWSLETTER IDEAS OR ARTICLES?

Send your newsletter ideas or articles to Xavier.Marshall at gmail dot com Please put "EAA Newsletter" in the subject line.



FOR SALE

- 1: Bushby "Mustang II" complete with construction manual.
- 2: Wittman "Tailwind" – W-10
- 3: Wagaero "Cuby"
- 4: Kaminskas "Jungster II"

Contact: Jim Stothers - jimdons1926 at verizon dot net

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DAR: Bob Hayos
Website Editor: Dave Bristol

Contact information can be found on the [Chapter 96 website](#).



Tie down rings and fuel vents for Xavier's RV project.