



*EAA Chapter 124, 5550 Windsor Road, Windsor, CA 95492*



MESSAGE FROM THE FRONT DESK...

JUNE, 2008

Joe Lacchia, President

We have scheduled a work day for May 31<sup>st</sup> at 9am. Dennis McGuire is setting this up and we'll be doing some painting, electrical work, furniture moving, pothole repair and general clean-up. If anyone has any ideas on what else needs work around the Chapter Club House and site, speak now or forever hold your peace. After the sweat is over we'll be getting some pizzas and relaxing with a drink. It should be a fun morning. There is a Sonoma Sky Park open house on that day so if we get finished with our work early we may want to head over there for a visit.

Although I couldn't attend because of a cold, I understand that the fly out to Healdsburg and Cloverdale went well with a good attendance. Michael Heintz and Doug Dugger always put on a good show and, wow, what a nice job on Jim Smith's WACO at Healdsburg.

The big event of the year, Oshkosh, is also coming up and Bob Gutteridge is planning a Chapter 124 fly-out for the event. This is the biggest flying event in the world and shouldn't be missed by anyone interested in airplanes. Bob will have more to say about this at our next meeting.

Things coming up:

- |  |                                      |
|--|--------------------------------------|
| May 31 <sup>st</sup>                         | Work Day, 9am sharp...               |
| June 6 <sup>th</sup> -7 <sup>th</sup>        | Merced Antique Fly-in                |
| June 6 <sup>th</sup> – 8 <sup>th</sup>       | EAA West Coast Fly-in, Marysville CA |
| July 9 <sup>th</sup> – 13 <sup>th</sup>      | EAA Northwest Fly-in, Arlington WA   |
| July 28 <sup>th</sup> - Aug. 3 <sup>rd</sup> | Oshkosh WI                           |
| Aug 15 <sup>th</sup> -16 <sup>th</sup>       | Van's Aircraft Homecoming            |

Happy Flying,  
Joe Lacchia

\*\*\*\*\*

**EAA Chapter 124 members:**

Thank you to all the members of Chapter 124, both past and present, who attended the barbecue and memorial for Art. It was an honor to see so many of our friends, and to hear the special memories of him shared by many of you. This day was reminiscent of the barbecues of years past, which he so much enjoyed.

I am especially grateful to everyone who gave their considerable time and energy to make this a very memorable occasion.

Sincerely,  
Sandy Beer



## **Volunteers Needed for the 2008 Centennial Challenge**

(Thanks, David Lynch)

The CAFE Foundation will be putting on the second Centennial Challenge in cooperation with NASA. This one week long event will be the first week of August 2008, just after Oshkosh. We will be giving away up to \$300,000 in prize money, including the Green Prize. We need about 60 volunteers to make this event run smoothly, and you can help. All of you who volunteered last year remember what a great time you had. And the CAFE Foundation appreciates your help. This is the year to make this event run even smoother than last year.

We are looking for people who can volunteer for only one day, up to people who can volunteer the entire week. If you think that you might like to try this let me know: call David Lynch at 707-578-2087 or send me an email at: { [HYPERLINK "mailto:lynchdavidb@yahoo.com"](mailto:lynchdavidb@yahoo.com) \t "\_blank" }. I will also have a sign up sheet at the upcoming meeting.

I am looking for people who would like to help volunteer to help run a test, inspect for aircraft safety, move aircraft, go'fer, aircraft impound monitoring, and more. If this sounds like fun to you, give me a call and we can talk about it. If you want to know more about this event go to: { [HYPERLINK "http://cafefoundation.org/v2/main\\_home.php"](http://cafefoundation.org/v2/main_home.php) \t "\_blank" }

\*\*\*\*\*

### **AOPA AIR SAFETY FOUNDATION RUNWAY SAFETY PROGRAM:**

Find out how to navigate the FS21 system and get the most from your preflight and in-flight briefings:

AOPA's newest interactive minicourse, { [HYPERLINK "http://flash.aopa.org/asf/flightservice/?priority=F508FSE2"](http://flash.aopa.org/asf/flightservice/?priority=F508FSE2) }, provides:

- A behind-the-scenes look at the new Flight Service system and how it's changed.
- A helpful guide to using the system, both on the ground and in the air.
- A list of alternate resources for times when you're having trouble reaching a briefer.
- A multitude of helpful tips and tricks for getting the most from Flight Service.

This course can be completed in 20-25 minutes.

{ [HYPERLINK "https://www.aopa.org/asf/osc/loginform.cfm?course=flightservice&project\\_code=F508FSE2&priority=F508F"](https://www.aopa.org/asf/osc/loginform.cfm?course=flightservice&project_code=F508FSE2&priority=F508F)

SE2" }



## **FAA Mandates More Precise Taxi Instructions**

(Thanks, David Heal)

Under new { HYPERLINK "http://www.faa.gov/news/updates/?newsId=56328" \t "\_blank" } (see below) that take effect this week, air traffic controllers must provide specific taxi routes to pilots, instead of simply OK'ing them to proceed to a stated destination. Controllers now must name the taxiways the aircraft should follow at each step along its route. FAA safety officials developed the new procedure as part of an effort to reduce runway incursions. A panel of risk-management experts and aviation user groups analyzed risk factors associated with the new procedures, such as longer periods of communication between controllers and pilots, and the increased chance of miscommunication. They concluded that the new procedure was safe.

The panel also is reviewing recommendations for changes in takeoff and landing clearance procedures.

## More Detailed Taxi Instructions Improve Runway Safety

---

May 19 — Air traffic controllers are now giving more detailed directions to pilots and airport vehicle operators to improve runway safety by reducing mistakes.

Starting May 19, controllers must tell pilots and airport vehicle operators the specific route an aircraft or vehicle should follow across the airfield, instead of simply giving them an intended destination point. The new mandatory detailed instructions require controllers to name the specific taxiways the aircraft or vehicle should use at each step along its route.

FAA safety officials developed the new procedure to help eliminate pilot or driver confusion about which route to follow on the airport surface. The more detailed instructions are designed to reduce runway incursions caused by controller, pilot or vehicle driver mistakes.

Safety Risk Management experts from the FAA's Flight Standards, Air Traffic, Airports and human factors offices evaluated the new procedure, along with pilot associations.

Using a safety management system process to identify possible risks, the panel looked at taxi instructions already in use at several facilities. The group also analyzed several risk factors, such as longer periods of communication between controllers and pilots, and the increased chance of miscommunication. They concluded that the new procedure was safe.

The FAA's Runway Safety Call to Action committee identified the new taxi instructions as one of several procedural changes that could significantly improve runway safety. The Safety Risk Management panel is also reviewing recommendations for changes in takeoff and landing clearance procedures.



### **Building/Owning a Homebuilt in Partnership**

(Thanks, Kevin Quirk)

For the information of the members of Chapter 124, two of our members are presently building kits and are seeking partners. I have some thoughts on this subject I would like to share with you all. I have built four Van's Aircraft RV kits and recently started on a fifth. Building these airplanes and meeting, building with, and flying with a number of new friends I have met while doing so in the EAA has been a wonderful experience. The first project I did was an RV6A and I built it about 97% myself. I had some help bucking rivets, moving wings, moving the plane to the airport, mounting wings, etc., but the last few months of work involved a number of cold, lonely, rainy nights working by myself out at the EAA hangar and then the gun club. It was not fun, but I was absolutely determined to finish.

Soon after finishing the RV6A I started an RV6 (side by side taildragger), a plane I still own with my

excellent partner Jim McCord. This project and another one which followed, an RV8, I built in partnership with a guy who became a very good friend, Jose Caubet. He was an engineer, a highly skilled furniture designer and woodworker, had no previous experience in building aircraft or working with aluminum but learned quickly.

Building these two aircraft with Jose was a lot of work but also a lot of fun for both of us. It also relieved me from the kind of financial stress I had gone through on my first kit without help with kit financing from another person. More recently I built an RV7A mostly by myself (Jose had moved to Hawaii) and rediscovered that building solo can be difficult and stressful. Our member Mike Shook was most supportive to me in the late stages of that project and really helped greatly to finish up the plane. I am very grateful for his expert help.

The two chapter members who are building Van's Aircraft kits are Craig Schwartz, building an RV8 (tandem taildragger) and David Lynch, who is building an RV8A (tandem tricycle gear). Both members had intended to build and own these aircraft by themselves but both have recently decided that they would like to bring in partners to help finance, finish and co-own their planes.

I hope to entice chapter members to give this some consideration. Is this a golden opportunity for you? If you have dreamed of owning a personal aircraft with outstanding performance, but were unsure whether you could afford your dream plane or be able to build it, **partnership** may be the solution. If you would like to learn more about the RV8 and the RV8A, go to Van's Aircraft website and read up and check out the pictures. Both of these builders are going to have fuel injected 360 cubic inch engines of 180 horsepower, a constant speed prop, autopilots, and an up-to-date EFIS panel (not yet built, avionics not yet finally decided on or purchased).

These aircraft will have absolutely outstanding performance. RV's are the standard of excellence for handling and flying qualities in the experimental aircraft world. The planes will have climb performance solo of 2000 FPM or better, and should cruise at 165 to 170 knots. If you have never flown in an RV you owe it to yourself to arrange for a demonstration flight either with one of us in the chapter who has an RV or up at the Van's factory in the Portland area (now served by Horizon Air, rent a car and you're there.) Rolf Unternaehrer has a recently completed RV6, John Whitehouse has a recently completed RV4, Ray Rotge has an RV8 built in Fremont with one of the most beautiful paint jobs I have ever seen. Jim McCord and I have an RV6 that has been flying for ten years.



### **Building/Owning a Homebuilt in Partnership (continued)**

There are other RV's in our chapter as well. Over 5700 RV's have been built *and are flying* worldwide and several thousand more are under construction. Van's has just started taking orders for their brand new sport-light kit, the 100 hp, **RV12** model, for those of you who have medical certificate concerns and don't need to fly at 170 knots. The Rotax specified for the RV12 is happiest on unleaded automotive premium gas.

Both Craig and David have bought engines and propellers for their RV's. David Lynch already has his, and Craig's engine and prop are on order and due to arrive soon. I am the technical counselor for both of these builders and can testify that both are building excellent airplanes. They have built beautiful wings and empennages and are in the later stages of fuselage work, canopy, interior, etc.

Craig's RV8 is up on its wheels.

These aircraft will be based at the Sonoma County Airport. I believe both will be ready to fly within fifteen months, perhaps within a year. Both builders work full time at real jobs and this does get in the way of building a dream aircraft, slowing it down somewhat! Things will go faster if they have partners to help finance the projects and likely also to help finish the building under David's or Craig's watchful and experienced eyes.

Some of the many advantages of building and/or owning an experimental aircraft in partnership are:

- You cut the cost of everything in half, including not only the cost of building the aircraft but hangar rent, insurance, maintenance, property tax, replacement of consumables like oil, filters, tires, brake pads, batteries and so forth. It is customary for partners to buy their own fuel but to split everything else.
- When it's time for the annual you have two (sometimes three) partners to help. One of the builders can hold an FAA aircraft repairman's certificate to be able to inspect and sign off the annual. (Only one certificate per airplane.)
- The project can be finished and flying sooner. These projects are about  $\frac{3}{4}$  done.
- You can get to know, build with, and likely fly with a new friend.
- It is easier and a lot more fun to build with others than alone. I've tried it both ways and this I know for sure.
- You can afford shared ownership of an airplane that you could not afford to own by yourself.
- You can become an RVator!
- You could have either Craig or David as an aircraft partner, and this is like gold and jewels! I have flown with both of them many times, have bucked rivets for them, advised them and I like them both a lot. You will never find two nicer guys or better pilots. I would be proud to be partners with them in any airplane.

If you would like to see David's project in Wikiup or Craig's in Rincon Valley, Santa Rosa, call them up and arrange a visit. David's home number is 578-2087 and Craig's is 538-3260. Do it!



## Propeller RPM Restrictions and Placards

*This is information only. Recommendations aren't mandatory.*  
(Thanks, David Heal)

### Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners, operators, pilots, mechanics, and certificated repair facilities of the **potential for propeller failures on piston engine aircraft due to prolonged operation in a restricted RPM (revolutions per minute) range as a result of inaccurate tachometers, missing or improper tachometer markings, or missing or improper instrument panel placards.**

Piston engine aircraft typically have a maximum propeller RPM indicated on the tachometer. Many aircraft models also have a range of restricted propeller RPMs. As an example, an aircraft may require a

placard that states to, “Avoid continuous operation between 2,000 and 2,250 RPM”. Such limitations typically result from certification testing when increased propeller stresses are observed during certain operating conditions. Prolonged violation of such restrictions could result in structural damage to a propeller leading to propeller failure.

Today, many general aviation aircraft are over 30 years old. Replacement or modification of the tachometer, propeller, engine, and/ or instrument panels might have occurred over the years. Also during this time, periodic tachometer calibration may also have been neglected.

The FAA is concerned that many tachometers and restriction placards in older aircraft are no longer correct, thereby increasing the risk of exposing the propeller to damaging vibratory stresses. The concerns are that:

- If a tachometer was replaced or modified, the tachometer might not have the proper markings (redlines, yellow arcs, red arcs, green arcs, or other noted limitations).
- Tachometers might be out of calibration resulting in propellers being operated in a restricted RPM operating range or causing propellers to exceed their maximum propeller RPM.
- Instrument panel placards for RPM restrictions might be incorrect or missing.
- If a propeller and/ or engine was replaced or modified, the propeller RPM restrictions or placards might not be correctly updated.
- Non-compliance with Airworthiness Directives that require changes to RPM restrictions are not reported.

## **Background**

Propeller manufacturers determine a propeller’s operating vibratory stresses during certification. RPM zones of localized high vibratory stress are a relatively common finding during testing. If a zone of localized high vibratory stress occurs within the propeller operating range, then the propeller may be approved with the addition of an operating restriction, placard, or life limit.

Operating restrictions for the propeller may be found in the Aircraft Maintenance Manual, Pilot’s Operating Handbook or Approved Flight Manual, Type Certificate Data Sheet (TCDS), or Supplemental Type Certificate (STC) documentation. The documentation may mandate the installation of a red or yellow arc on the aircraft tachometer and/ or an instrument panel placard. A life limit, where



## **Propeller RPM Restrictions and Placards (continued)**

applicable, is included in the Airworthiness Limitations Section of the Aircraft or Propeller Instructions for Continued Airworthiness. An operating restriction or life limit may also be mandated by an Airworthiness Directive.

Failure to comply with tachometer markings and instrument panel placards could result in prolonged operation within a restricted RPM range and increase the potential for a propeller failure. Mechanical tachometers do not necessarily retain their accuracy for the life of the aircraft. Reports of tachometer errors of 50 RPM are common. Errors of 150 to 250 RPM have been reported. Using an inaccurate tachometer could result in a restricted RPM range or maximum RPM red line being unknowingly violated by the pilot, which could result in repetitive or prolonged exposure to damaging propeller stresses.



The most common failure associated with this condition is a blade tip separation that results from a fatigue crack, but failure of the propeller hub and/ or blade retention feature can also occur. Prolonged operation within a restricted RPM range, or above the maximum RPM, will be further aggravated by the presence of surface conditions such as nicks or corrosion pits.

#### **RECOMMENDATIONS:**

- Check the aircraft records for replacement or modification of the tachometer, and changes to the propeller model, engine model, or installation changes.
- Verify that the proper RPM restrictions are accurately marked on the tachometer and instrument panel placard.
- Check the accuracy of the tachometer to ensure that the readings are accurate.
- Check the accuracy of mechanical tachometers at intervals not to exceed 60 months.
- Contact the propeller manufacturer for corrective action if the propeller was operated in a restricted range.

#### **For Further Information Contact:**

Jay Turnberg, Propeller Specialist, Standards Staff, FAA, Engine and Propeller Directorate; 12 New England Executive Park, Burlington, MA 01803; e-mail: [jay.turnberg@faa.gov](mailto:jay.turnberg@faa.gov); phone: (781) 238-7116; fax: (781) 238-7199.

#### **For Hamilton Sundstrand, Avia, Dowty, Hoffmann, or MT Propellers:**

Terry Fahr, Aerospace Engineer, Boston Aircraft Certification Office, FAA, 12 New England Executive Park, Burlington, MA 01803; e-mail: [terry.fahr@faa.gov](mailto:terry.fahr@faa.gov); phone: (781) 238-7158; fax: (781) 238-7170.

#### **For Hartzell Propellers:**

Tim Smyth, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, Propulsion Branch, 2300 East Devon Avenue, Des Plaines, IL 60018; e-mail: [timothy.smyth@faa.gov](mailto:timothy.smyth@faa.gov); phone: (847) 294-7132, fax: (847) 294-7834.

#### **For McCauley Propellers:**

Jeff Janusz, Aerospace Engineer, Wichita Aircraft Certification Office, FAA, Propulsion Branch, 1801 Airport Road, Room 100, Wichita, KS 67209; e-mail: [jeff.janusz@faa.gov](mailto:jeff.janusz@faa.gov); phone: (316) 946-4148; fax: (316) 946-4107.

#### **For Sensenich Propellers:**

James Delisio, Aerospace Engineer, New York Aircraft Certification Office, FAA, Propulsion Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; e-mail: { [HYPERLINK "mailto:james.delisio@faa.gov"](mailto:james.delisio@faa.gov) }; phone: (516) 228-7321; fax: (516) 794-5531.





**May 7, 2008 Board Meeting:**

President Joe Lacchia called the Board Meeting to order at 6:30 P.M.

Joe Lacchia, Pres	P	Charles Nelson, Board	P
Joe Wiegand, VP	P	Dennis McGuire, Board	P
Steve Fredericks, Sec	P	Brian Cluer, Board	P
John Whitehouse, Treas.	P	Ray Shipway, Board	P
Larry Rengstorf, Facilities	A	Mike Tovani, Board	P
Donna Turrentine, Newsletter	A	Steve Barnes, Board	P

**Minutes:** Minutes from prior meeting are approved.

**Treasurer's Report:** John provided the usual reports on activity for the month. John reports that the hangar and tie down rental accounts have been brought up to date. Report was moved, seconded and approved.

**Young Eagles:** Ray and Sher met with Pacific Coast Air Museum (PCAM). They will be hosting one of their "climb aboard" days on June 21. PCAM is hoping that a Young Eagles event could happen on the same day. Pilots interested in participating please contact Ray and Sher, so this event can become a reality.

**New business:** A memorial plaque for Art Beer was proposed. The Board agreed that Art's contributions to the formation of the club should be recognized.

Respectfully Submitted,  
Steve Fredericks, Secretary

\*\*\*\*\*

### **Good Advice, Military Style (Thanks, David Heal)**

- "Aim towards the Enemy." - Instruction printed on US Rocket Launcher
- "Cluster bombing from B-52s is very, very accurate. The bombs are guaranteed to always hit the ground." - USAF
- "When the enemy is in range, so are you." - Infantry Journal
- "It is generally inadvisable to eject directly over the area you just bombed." - U.S. Air Force Manual
- "Tracers work both ways." - U.S. Army Ordnance
- "Bravery is being the only one who knows you're afraid."
- "If you see a bomb technician running, follow him." - USAF
- "Though I Fly Through the Valley of Death ... I Shall Fear No Evil. For I am at 80,000 Feet and Climbing." - At the entrance to the old SR-71 operating base Kadena, Japan
- "You've never been lost until you've been lost at Mach 3." - Paul F. Crickmore (test pilot)



### **May 7, 2008 General Meeting:**

President Joe Lacchia called the Meeting to order at 7:30 P.M., 40 members were present.

**Minutes:** Minutes from prior meeting are approved.

**Treasurer's Report:** John thanks all whose aircraft parking accounts were behind for bringing their accounts up to date. John also provided the usual reports on activity for the month. Report was moved, seconded and approved.

**Young Eagles:** The next Young Eagles event will be held in conjunction with the next Pacific Coast

Air Museum (PCAM) "Climb Aboard" Day. June 21 is the date. The Young Eagles event will go from 8:00 to 1:00. Ray and Sher need volunteers, especially pilots, so this event can become a reality.

**Announcements:** Dennis McGuire is coordinating a work party for Saturday, May 31. Meet at the chapter site at 9:00 A.M. Dennis has a list of worthy projects that could easily be completed in a day. A pizza lunch will be provided.

**CAFÉ:** Brien Seeley gave a report on the April 26, Electric Aircraft Symposium. Brien reports that EAA National is working to get electric engines into the LSA rules. CAFÉ is working with Boeing and possibly Google to sponsor a prize for a new "green aircraft" competition.

August 2-10 will be the PAV challenge. Volunteers will be needed, contact David Lynch if you think you can help out.

**Builder's reports:** Chris Hoover is working on his RV-7 tail kit.

Thanks to the cooks for tonight's BBQ. A special thanks to Donna Turrentine for organizing the Art Beer memorial chapter BBQ, and to Dale and Donna Wittman for the catering.

The program was presented by Bob Nichols. Bob is the Chapter's new neighbor at the former Hamilton Hangar. Bob's company is PropJet Aviation. Bob brought over one his company's beautiful Cessna P210 turboprop conversions.

Respectfully Submitted,  
Steve Fredericks, Secretary