

# T-CRAFT AERO CLUB

## MONTHLY NEWSLETTER

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Here we go! The year 2012 is well on its way, and we've had some great flying opportunities. As the seasons change, so does the scenery; we're hopeful our pilots return with more photos and flying adventures for the newsletter this year. If you're not aware by now, the Club Annual Meeting is 31 January 2012, 7:00p.m., EAA/CAP Hangar; the Board will provide the membership information concerning the financial health of the Club, review changes in our Constitution, and conduct the Annual Elections. We have a great article written by our Maintenance Director "geared" to teach us a little more about Cessna nose wheels. And our Safety Director has put together another entry to help us focus on bettering our piloting skills.

### From the Membership Director

#### "Flying Is As Safe As YOU Choose to Make It"

I love the placard in Ponderosa Aero Club planes, "Don't Do Anything Stupid". There are some circumstances beyond our control, such as an engine failure, but for the majority of accidents, the cause is the pilot's lack of skill and/or judgment. And even some of those beyond our control, we can practice for the inevitable and be prepared to react if such an event occurs.

In reviewing the GA accident statistics in the last AOPA Air Safety "Joseph T Nall" Report for the safety presentation this month, the same trends prevail. For non-commercial operations in GA airplanes (like we fly) the pilot's lack of skill or decision making capabilities resulted in 70% of the accidents and 63% of the fatalities. And for the last ten to fifteen years, these numbers have not changed much.

Brief Summary 2009 Nall Report GA Pilot Related Accident Statistics

829 Total Accidents – 147 Fatal accidents resulting in approximately 300 fatalities.

Lethality is the percent of accidents that are fatal.

	Accidents	Fatal Accidents	Lethality
Fuel Mismanagement	74	8	10.8%
Weather	42	26	<b>61.9%</b>
Take-off & Climb	153	25	16.3 %
Maneuvering	67	39	<b>58.2 %</b>
Decent & Approach	48	19	39.6%
Landing	348	6	24.7%
Other:	97	24	24.7%
- Inadequate Pre-flight	25	3	12.0%
- Go-Arounds	25	3	12.0%
- Mid-Air	10	7	70.0%
- Alcohol/ Drugs /Hypoxia	6	4	66.7%

You can download the Nall report at the following link for more detail and breakdown of accident trends and factors.

<http://www.aopa.org/asf/publications/nall.html>

What can we do as pilots to insure that safety is first and foremost in our thoughts and actions?

### **Put Safety First!**

Make it your choice to be safe!

- Recognize and Avoid risky flight operations.
- Establish personal minimums, for weather, currency, types of flight - PAVE checklist.
- Establish personal "RED" rules. Rules that you will NOT violate.

See this link for more on RED rules and PAVE: <http://cfidarren.com/r-redrules.htm>

- Learn from mistakes – yours and others.
- Use Checklists
- Monitor Weather Conditions
- Monitor Fuel Usage
- Use ATC, Flight Watch, and other in-flight resources
- Plan and execute the each flight like a Professional
- Think, Act, and Fly like a professional, as if you are flying your own airline.

### **Keep our Skills Sharp!**

- Currency – are FAA currency standards of three take-off and landings every 90 days good enough for you, and that's only if you carry passengers?
- Can you meet or even remember the PTS Standards?
- When was the last time you practiced a simulated loss of power, performed stalls, executed a go-around, banked into steep turns, or rolled into short/soft take-off and landings?
- Are you afraid of stalls, spins? Get some instruction from any of our club approved CFI's

### **Ongoing Study**

- AOPA Flight Training Moto – A good pilot is always learning

There are numerous online courses, webinars, real pilot stories available through AOPA Safety Foundations at [http://www.aopa.org/asf/online\\_courses/](http://www.aopa.org/asf/online_courses/). One highly recommended is "*Do the Right Thing: Decision Making For Pilots*"

- The FAA Safety Learning Center also offers numerous courses. Another highly recommended course is "*The Art of Aeronautical Decision Making*" at:

[https://www.faasafety.gov/gslac/ALC/course\\_content.aspx?cID=28&sID=105&searchresults=true&preview=true](https://www.faasafety.gov/gslac/ALC/course_content.aspx?cID=28&sID=105&searchresults=true&preview=true)

These are some ideas and ways to spend some time this winter in our down time. If you have any ideas or suggestions to make us better pilots, please let me know.

*Fly Smart, Fly Safe and Have Fun,*

Jim Hudson

Safety – Membership Director

**Membership:** We currently are at 73 members.

**New Members:** Please welcome the following new members who joined us this month.

**Jeff Ewing** – Jeff is starting on his Private Pilot Certificate and like most of us, is putting Wings on his Dreams.

**Resigning Member:** Gary Lindstrom has been a member since 2005. Gary has contributed to the success of our club in many ways. He most recently has been our facilities director and kept our hanger in tip-top shape.

## **Training/Events:**

February 15<sup>th</sup> 7:00 PM – AOPA/CAP facility: 800YD Accident Review

## **Aircraft Maintenance**

Contact Jim Eyre [cell:(208)794-0667] with squawks, and use the notification feature found on-line in [Schedule Master](#) to alert pilots intending to use impacted aircraft. Write the tachometer time on the Squawk Sheet clipboard found on the hangar wall. Sign your name, and include a phone number where you can be contacted. Document Hobbs time for all other recordings. Report leaks immediately.

### **Nose Wheel “Shimmy”**

Nose wheel shimmy is a common problem with single engine Cessnas and we have had some issues with the nose gear on our aircraft. The following should give you a better understanding of causes and corrections by Aero Services.

Balancing the nose wheel/tire assembly is the most important point to check. Aero Services uses both static and dynamic balancing. If the tire won't balance fairly quickly with a static balancer and the wheels and wheel bearings are in good shape, the tire is replaced. This has happened with new tires and we return them for replacement warranty adjustment. Whenever changing tires and tubes, or experiencing a vibration upon lift-off/landing, we balance the main tire/wheel assemblies in the same way.

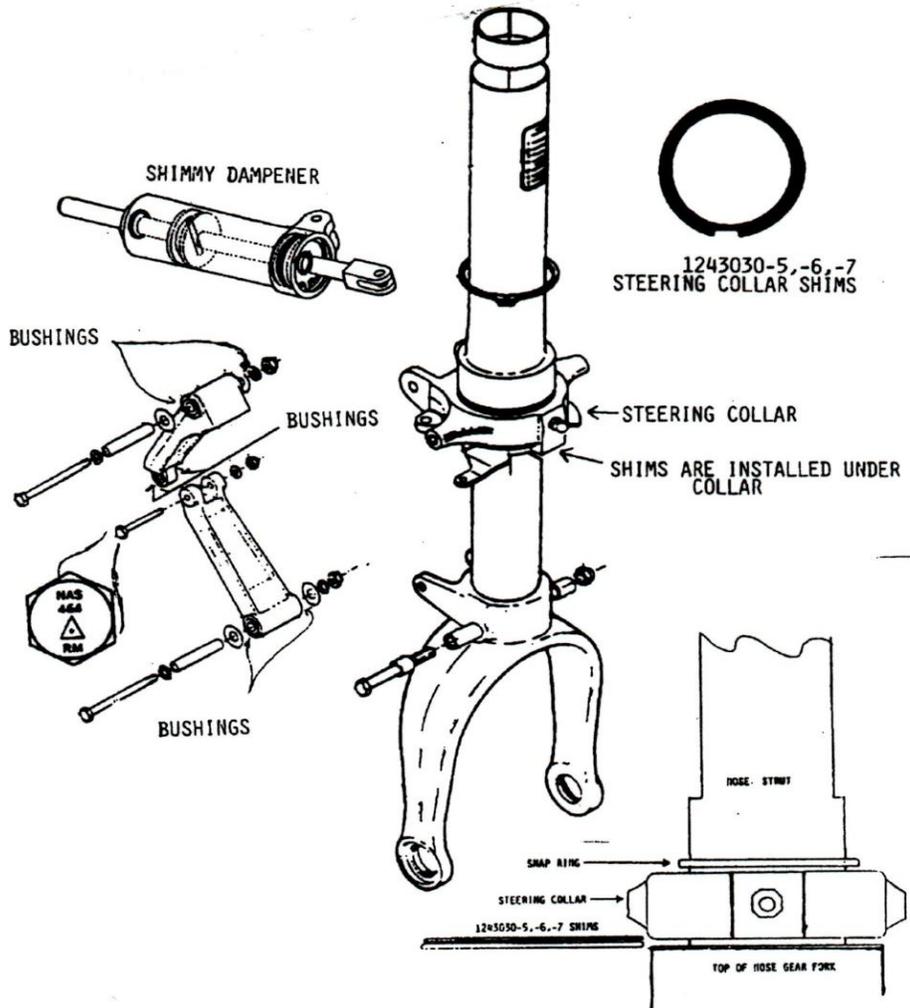
Sometimes the nose wheel assembly may balance but still cause a shake due to an out-of-round tire or tire damage such as a broken belt or separating ply. All new tires are checked for out of round. My philosophy has been to replace any tire (nose or main) that hints at being suspect.

The torque links are the connection between the nose tire/wheel assembly and fork, and the steering collar and shimmy dampener. Any wear, stop or looseness in the torque link bolts, spacers or bushings will allow shimmy to continue uncontrolled by the shimmy dampener. All bushings, spacers and bolts are replaced at same time when the torque links are rebuilt. It is critical that the correct high strength bolt is used in the center joint of the scissors. Look for a triangle or an NAS part number such as NAS 464, NAS 1103, NAS 6203, etc.

The steering arm assembly (collar) shims is another area of close inspection when trying to correct nose wheel shimmy problems. The upper end of the torque links attaches to the steering collar, so shimmy is transmitted from the wheel to the torque links, then to the collar. It's important that the collar only move in a rotational motion around the strut; any up and down or cocking movement of the collar will allow shimmy to continue since the shimmy dampener isn't designed to combat this movement of the collar. If cocking is detected, or shimmying continues after all other solutions have been attempted, removal of the complete nose landing

gear is necessary for re-shimming of the collar. There are three shims of varying thickness that are designed to tighten up the collar and eliminate any up and down movement.

The shimmy dampener is a closed chamber full of hydraulic fluid. When shimmy occurs the motion is damped by hydraulic fluid being forced through a small hole in a moveable piston. Fluid leakage past the shaft and end cap seals, fluid leakage past the thermal relief valve O-ring and bent piston shafts can occur. Our mechanics check the bolt holes at the shimmy dampener attach points for elongation. Any play at these points will cause a shimmy that can't be dampened.



## From the Board

Flying rates (effective 26 July 2011)

375	-	\$58.00*
64R	-	\$84.00
686	-	\$86.00
91X	-	\$121.00
93S	-	\$124.00

\*[all rates recorded per hour "wet"]

Fuel re-imbursement for January 2012: **\$4.89gal.**

(Review your receipts and confirm \$.25/gallon is recorded. Report any discrepancies **ASAP** to Dennis Wheeler.)

### NEW MEMBER NOTICE

**T-Craft Board approved members** must be formally accepted into the Club by member vote during a General Membership Meeting. The next General Membership Meeting is scheduled for 31 January 2012, 7:00p.m., in the EAA/CAP Building, Nampa airport.

## General Information

\*\*\* Members wishing to maintain currency may attend the following meetings:\*\*\*

Next Board Meeting: 14 February 2012, 7:00p.m., T-Craft Hangar training room.

Next General Membership Meeting: 28 February 2012, 7:00 p.m., EAA/CAP Hangar, Nampa, Id

## Websites of Interest

(Hover your pointer over the link, hold down the Ctrl key, then click your left mouse button.)

[http://activefiremaps.fs.fed.us/lg\\_fire2.php](http://activefiremaps.fs.fed.us/lg_fire2.php), Large fires, some including TFRs  
<http://airspace.nifc.gov/mapping/nifc/index.cfm>, TFRs on WACs or Sectionals  
[http://aviationweather.gov/adds/icing/icing\\_nav.php?icg\\_type=CIPSEV50&height=max&fcst\\_hr=0](http://aviationweather.gov/adds/icing/icing_nav.php?icg_type=CIPSEV50&height=max&fcst_hr=0)  
<http://aviationweather.gov/adds/metars/>  
<http://faasafety.gov/>  
[http://tfr.faa.gov/tfr\\_map\\_ims/html/index.html](http://tfr.faa.gov/tfr_map_ims/html/index.html), FAA  
[http://www.aopa.org/asf/online\\_courses/](http://www.aopa.org/asf/online_courses/)  
[http://www.aopa.org/asf/online\\_courses/](http://www.aopa.org/asf/online_courses/), AOPA Flight Safety on-line courses  
<http://www.aopa.org/asf/publications/advisors.html>  
<http://www.aopa.org/index.html>  
<http://www.aopa.org/letsqoflying/>, AOPA's "Let's Go Flying!"  
<http://www.aviation.state.or.us/>, Oregon State  
<http://www.faa.gov/go/runwaysafety>, Runway safety  
[http://www.faa.gov/news/safety\\_briefing/](http://www.faa.gov/news/safety_briefing/), FAA Safety Briefings  
[http://www.faa.gov/regulations\\_policies/handbooks\\_manuals/aircraft/airplane\\_handbook/](http://www.faa.gov/regulations_policies/handbooks_manuals/aircraft/airplane_handbook/)  
<http://www.firedetect.noaa.gov/viewer.htm>, Fire Reporting  
<http://www.flyidaho.org>, Idaho Aviation Association  
<http://www.itd.idaho.gov/aero/>, Idaho Aviation Association Calendar of events  
<http://www.nampairport.org/airport/Category/news>, Nampa, Id. Airport news  
<http://www.navmonster.com/>, TFRs along your route  
[http://www.undaerospace.com/cbt\\_files/virtualengine/Magneto/virtual%20Engine.swf](http://www.undaerospace.com/cbt_files/virtualengine/Magneto/virtual%20Engine.swf), Magneto Fun!  
<http://www.weather.gov/aq/sectors/pacnorthwest.php>  
<http://www.wrh.noaa.gov/boi/>, National Weather Service – Boise Office  
<http://www.wrh.noaa.gov/satellite/?wfo=boi>  
<http://www.wrh.noaa.gov/zoa/cwa.php>  
<http://www.ghcc.msfc.nasa.gov/GOES/goeswestpacus.html>  
[https://faasafety.gov/gslac/ALC/course\\_catalog.aspx](https://faasafety.gov/gslac/ALC/course_catalog.aspx)  
[www.backcountrypilot.org](http://www.backcountrypilot.org)  
[www.cubgearstore.com](http://www.cubgearstore.com), Survival, and back country gear  
[www.shortfield.com](http://www.shortfield.com)  
[www.t-craft.org](http://www.t-craft.org), the official website for T-Craft Aero Club Inc.

## Reminders

**Answers** concerning our Club, Policies, or even locating a **New Member Application Form** for your friend or family member can be found on the T-Craft website: [www.t-craft.org](http://www.t-craft.org).

**T-Craft Business Cards and Pamphlets** are available. Share them with friends and acquaintances in the community who may be looking for piloting opportunities.

**Delete** the remainder of any unused flight time from ScheduleMaster immediately after landing. Somebody may be able to use that time.

T-Craft Members are responsible for keeping their **contact information** (phone numbers, email addresses, postal address) updated in ScheduleMaster. To check or update your information, login to ScheduleMaster, click the "User" tab at the top, then click the link that says "Click here to edit your user info".