

#### Volume 7, Issue 6, June 2010, T-Craft Aero Club Inc., All Rights Reserved



What can we say about June? We got some great performance out of our aircraft, and we got to travel again to our favorite destinations in the best way possible – by air. Bill McGlynn, with Jim Hudson, presented a great program on weather forecasting, in conjunction with back country training, sharing with us some of the most important websites that collect and broadcast this information. Jim Hudson talks more about our annual Garrden

Jeff Vanhoozer and Jim Hudson overfly Big Creek. Photo courtesy Jim Hudson

Valley Fly-in and Breakfast later in this edition; be sure to read his Density Altitude Review (below) if

you're planning this, or other aircraft travel this summer. Our new Facilities Director shares his observations, a we have another Membership Contributor story.

# From the Membership Director

### **Density Altitude Review**

This is a repeat of last year's article and always a good time to do some review on DA. Last year it had almost reached 100°F Wednesday (June 24<sup>th</sup>,2009). At that time, Caldwell was reporting a Density Altitude of 5200'. McCall reached 77°F at 6 PM, resulting in a DA of 7150'. Summer is late this year, but it will be here soon

and with it, the nemesis to us pilots - Density Altitude.

Here are some things to keep in mind as Density Altitude goes up:

- Power is Reduced
- Lift is Reduced
- Prop performance is reduced

#### Resulting in:

- Longer Take off Distance.
- Climb performance reduced
- Longer Landing distances
- Lighter loads.

A normally aspirated engine loses approximately 3.5% BHP per 1000' increase in DA from Sea Level. So yesterday if you were leaving McCall



Landing at Johnson Creek. Photo Courtesy Jim Hudson

at 6 PM, the 230HP C182 would be putting out 75% available HP on take-off or 173HP. Our new powerful 160HP C172's would be at 120HP. That assumes that you are leaned for maximum performance.

#### Takeoff Rules of Thumb:

- > A 10% increase in gross weight results in 20% increase in takeoff distance.
- > A 10 % decrease in power will increase takeoff distance by 20%
- > At a given gross weight, each 1000' increase in DA will cause a 10 % increase in takeoff distance.
- > If you have not reached 70% of Vx IAS by 50% of the runway ABORT

#### Landing Rules of Thumb:

- > A 10% increase in IAS will cause a 20% increase in landing distance.
- > Landing distance increases approximately 5 % per 1000' increase in DA above Sea Level.

Don't be fooled by what looks to be the "right" ground speed for rotating on takeoff and fairing on final. As DA goes up, true air speeds/ground speeds go up and can be deceiving and possibly result in a stall if you do not pay attention to IAS – Indicated Air Speed. You need to take off and land at the appropriate IAS.



Bert Osbourn with Cessna 686 at Joseph, Oregon.

Vx and Vy change as DA goes up and change with weight. Some POH's indicate this in their performance tables, some do not. For every 1000' increase in altitude Vx increases approximately 0.5 mph and Vy decreases 0.66 mph. Also remember Vx & Vy speeds decrease as weight decreases. Vx and Vy can be reduced ½ of the percent of weight reduction. If weight is reduced by 5% from gross weight, Vx and Vy can be reduced 2½ %. Consult the respective POH for exact numbers when published.

The Vx and Vy numbers in the checklists are for Sea Level and Gross weight conditions. Performance will be affected if you do not use the appropriate Vx and Vy for the respective weight and DA conditions. When pitching for Vx – don't focus on the air speed indicator – it lags actual airspeed – know the pitch attitude that results in Vx

Don't forget tire inflation – every little bit helps. We have a compressor in the hanger and a tire gauge near the key lock box. (I've had inflate tires on 3 birds in the last couple of weeks, they were all quite low)

This is the time of the year to dig out the POH and review takeoff, rate of climb and landing performance numbers and the appropriate takeoff and landing speeds, especially at higher elevation strips. Were all getting old enough – lets not be bold also.

Fly Safe and Have Fun,

Jim Hudson

T-Craft Safety & Membership Director



Incident at Sulfur Creek. Photo courtesy Jim Hudson

Membership: We currently have 79 members.

We lost one member this month, Dave Smith.

#### July Training/Events:

**July 17<sup>th</sup> - Garden Valley Fly-In Breakfast.** If you would like to take one of the birds up to the fly-in, contact Jim Hudson so the aircraft can be scheduled in your name. As in the past, some club instructors will be giving free instruction at Garden Valley and possibly other close strips; Jeff Beers, Gordon Hall, Jim Hudson, and possibly Jim Hayden have agreed to join us. Some members will be camping out Friday night. This is always a fun event, so come join the fun. [Note: Members pay for their use of aircraft. Instructors in the past have agreed to ride up and back with our membership to help them with the experience of landing on a back country airstrip. Incstructors must be at least Level I Back Country approved. Watch your e-mails for more details.]



[Cessna 375 waiting for company at Garden Valley, Idaho. Photo courtesy Jim Hudson]

#### **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 28 September 2010, 7:00p.m., in the EAA/CAP Building, Nampa airport.



Jim Eyre's cell phone is ph: (208)794-667. Call him with squawks, and use the squawk feature found on-line in Schedule Master to notify pilots intending to use impacted aircraft. Write the tachometer time on the Squawk Sheet. Sign your name, and include a phone number where you can be contacted. Document Hobbs time for all other recordings. Report leaks immediately.

# FROM THE BOARD

As I have been around the hangar as the new facilities director, I have observed a couple of different things I would like to mention to you, the T-craft owners. Over the course of the last six weeks or so, I have noticed that the some of the pins holding the hangar doors shut have not been lowered into position to properly secure the doors. I believe I have found this to be true on all the aircraft, multiple times. Generally, it is one or two pins, but once, in the case of 0YD, only one pin was secured. Please be careful to securely fasten the doors when taking/returning aircraft. If a gust of wind would grab a hanger door, it could potentially swing the doors into the props of the aircraft causing damage and downtime.

Also, just as a reminder, when the "rolling" doors are open, please secure the doors so that a gust of wind will not grab the door and hit the wing tips. All the hangar doors (rolling and swinging) should be secured by lowering the pin into the hole in the concrete.

One other item... We have a lot of glass/window cleaner cans that are almost empty, but not completely empty. I am told that, while this cleaner is really good stuff, it is also very expensive. So, in order to be good stewards of our finances, I have set some of them out by the posts. If you could, please use them until they are completely empty and then just throw them in the trash.

Other than the above, things generally look pretty good. If anyone has any hangar related problems, please write it on the hanger squawk sheet. If you feel it is a safety issue, please call me (or any board member) right away.

Thanks and have fun flying this summer!

Gary Lindstrom T-Craft Facilities Director

Note: **The secretary** would like to apologize for an error in the last newsletter. Ben Brandt traveled with a friend to Alaska (pictured with Ben and the Beechcraft in our May edition).



Scott Armstrong, Gordon Hall and the Seven Devils. Photo courtesy Gordon Hall

### Upcoming Local and Regional Events

- July 17<sup>th</sup> Garden Valley Fly-In Breakfast, Garden Valley, Idaho
- July 23-24 Wings Over Baker Air Show/Fly-in, Baker, Or (BKE); Mel Cross (541)519-6018, or melc@eoni.com
- 7/26-8/1 **EAA AirVenture**, Oshkosh, Wi.
- 9/11 Ontario Air Faire, Ontario, Oregon Municipal Airport; Roger Smith (208)739-3979, or OntarioAirFaire@AOL.com
- 8/15-8/19 Reno Air Races, www.airrace.org



Jeff Vanhoozer, Jim Hudson, and John Baglien at the Flying B. Photo courtesy John Baglien.

Flying rates effective June 26: 375 - \$52.00/hr, 64R - \$77.00/hr, 686 - \$79.00/hr, 91X and 0YD - \$109.00/hr, and 93S - \$112.00/hr (all hours "wet").

<u>Please review your receipts</u> and confirm \$.25/gallon is recorded. Report any discrepancies **ASAP** to Dennis Wheeler.

Fuel re-imbursement for June 2010: \$4.13/gal.

Next Board Meeting: 13 July 2010, 7:00p.m., T-Craft Hangar training room.

Next General Membership Meeting: 28 September 2010, 7:00 p.m., EAA/CAP Hangar, Nampa, Id.

### Websites of Interest

www.cubgearstore.com - survival, and back country gear www.shortfield.com www.backcountrypilot.org http://www.flyidaho.org – Idaho Aviation Association http://www.itd.idaho.gov/aero/ See Calendar of events http://www.aviation.state.or.us/ Oregon State http://www.nampaairport.org/airport/Category/news http://www.aopa.org/letsgoflying/ - AOPA's "Let's Go Flying!"

## 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.

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

**Properly sign out your aircraft**, including the correct designation; for example, Local, Cross Country, Maintenance, Replacement Aircraft Search, etc. If an aircraft moves, breathes, or sneezes, it MUST be correctly documented for maintenance and billing.

**Delete** the remainder of any unused flight time from Schedule Master 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 Schedule Master. To check or update your information, login to Schedule Master, click the "User" tab at the top, then click the link that says "Click here to edit your user info".

Ask any Board Member for a copy of any of the Minutes, or you can e-mail the Secretary (jlvanho@msn.com), and have a copy sent right to your home.

Got something aviation **you want to sell**? Post it in the T-Craft Newsletter. Send your advertisement to the Secretary, jlvanho@msn.com.

### **Member Contribution**

Even with professional line services at McCall Aircraft servicing company planes, it is the pilot's responsibility to personally check aircraft fuel quantities and secure fuel filler caps! This past week I went to check fuel on a 206 after placing my fuel order, and had to get a ladder to do it. The fuel quantity was correct, but the left fuel cap was left totally off! Since I am not tall enough to see the top of the wing on a 206 walk-around, if I had not gotten the ladder to personally check fuel, I could have taken off with fuel rapidly siphoning out of the tank that I normally use for take-off. In another instance, on a trip a few years ago with a club bird, I watched the line boy at Auburn, WA fill tanks and secure fuel caps on my request to top off. I assumed he actually filled the tanks. Wrong! Two hours into my trip home gas gauges seemed a little low, so I checked my gas receipt against the fuel burn I calculate for my trip from Nampa to Auburn. I took the prudent out and landed at Baker City for fuel. The line boy had shorted me about 8 gallons on my request to top off. Assume nothing! It is your responsibility as pilot! -- John Baglien

Thanks to all of you sending in your photos and stories. We hope you'll continue sending more (forward to the Secretary at jlvanho@msn.com). We wish you a safe and happy summer of piloting!



The End