

IAC 38 NEWSLETTER

May 2011

Aaron
Dwyer,
Jeff
Boerboon
and Mike
Eggen at
Borrego



Prez Post

Not a huge amount of news to report this month but, on the other hand, we have an exciting few weeks lined up ahead of us.

A few intrepid chapter members headed down to Borrego for the April contest just a couple of weeks ago. Sounds like a good start to the year and Mike Eggen has kindly done a full write-up for those of us that didn't make it. Looking slightly ahead the LA Gold Cup at Apple Valley is (continued next page)



Martin Price
President, Ch 38

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upon us and we have a good number of chapter members heading down there. It's going to be my first contest of the season so it'll be interesting to see if I can remember how to fly Intermediate! It'll be more interesting still if Apple Valley treats us to more 30KT winds.

Back at Livermore we had an excellent April chapter meeting at Attitude as Dave Watson gave a presentation on sequence design, mainly focused on Frees but also on Unknowns. There's a huge need for Unknowns at the IAC level as they need about 60 Frees per category for all of the contests across the US. If you feel like trying your hand at design Brian Howard will be happy to receive any Unknowns and will provide helpful feedback on any early efforts that don't quite work.

Since both Apple Valley and Paso conflict with our regular meeting dates, and a lot of members will be at those contests, we'll skip the May and June chapter meetings and pick up in July, probably with some kind of post-Paso celebratory event. Meanwhile if you're planning on attending Paso then please take the time to pre-register because it saves our poor contest officials a ton of work if they don't have to print, photocopy and complete dozens of pages for you when you arrive.

That's all for this month. I hope you're enjoying the fantastic weather as much as I am and I'll probably see a number of you at Apple Valley shortly.

-Martin

WESTERN 2011 CONTEST SCHEDULE

| | |
|-------------|--|
| March 18-19 | Redlands Minifest |
| April 14-16 | Borrego (5 category contest) |
| May 5-7 | Apple Valley |
| June 9-11 | Paso (of course) |
| June 23-25 | Ephrata, WA |
| July 22-23 | Cut Bank, MT |
| Aug 11-13 | Pendleton, OR |
| Sept 2-4 | Delano |
| Aug 25-27 | Ephrata, WA (Nor-Am Team Championship) |
| Oct 13-15 | Borrego |
| Nov 3-5 | Marana, AZ |

Borrego Hammerhead Roundup Report

By Mike Eggen

California's first 5 category contest of the season is in the books with the completion of the Hammerhead Roundup at Borrego Springs Valley Airport. I flew down in the Lazer from OAK along with Aaron Dwyer in his Super D. I had asked Aaron two weeks before if he was going to the contest and he said probably not since he hadn't flown the Sportsman

sequence yet. I convinced him that after a couple of critique sessions he'd be fine and besides there's no better practice than a contest. So Thursday AM we're off. After a small mechanical problem on the way we arrived at L08 late afternoon to find fellow 38er Toshiro Tanikawa and his friend Takaki Hamasaki looking for an airplane to fly. Aaron graciously let them

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Aaron and myself

fly his plane with him as safety pilot. Aaron aced all three of his flights and Decathloned the rest of the field to take first place in Sportsman in his third contest!

Jeff Boerboon the National Unlimited Champion was there and flew Unlimited and an awesome 4 minute free on Friday evening. As is the custom at Borrego folks from the community were there as Chapter 36 continues their successful positive PR program. On top of all of that Jeff flew for a patch in each of the other four categories

then left Sunday morning to start a camp at Marana, AZ! Talk about a week full of Acro. Reinaldo Beyer flew Advanced and took First Place which shouldn't surprise anyone. He also flew for a patch in Primary and in the the third flight performed an experiment he had planned by flying it inverted until he exited the 180 degree turn upright humbling (fooling) four out of five judges proving his point that the judges see what they want or expect to see. So all you judges pay attention. I know I'll be on my toes at the next contest. ■



Jeff describing the 300SC



Aaron brings home wood



Lane Lisser and Mitch Robinson



Mike Maley, new owner of Cecilia and Che's S1T



The Japanese contingent with Aaron



Friday AM with the mountain



Airport mascot

All photographs courtesy of Mike Eggen

Anti-G-straining-maneuver

The current USAF approved Anti-G Straining Maneuver (AGSM) is the L-1

It combines a regular, 3 second strain (Valsalva) against a closed glottis, interrupted with a rapid exhalation and inhalation (< 0.5 seconds), with tensing of all major muscle groups of the abdomen, arms, and legs.

Properly done, it buys a pilot about an additional 1.5 G's, the same as the current standard anti-G suit, thereby giving an average 3 G protection above resting G tolerance levels (around 6 G's for most aircrew). The old M-1 was essentially the same, but against a partially open glottis, causing the pilot to audibly grunt during the strain (lower intrathoracic pressures achieved so no longer recommended).

The US Navy teaches a slight variation of the L-1 called the Hook Maneuver in which the pilots initiate the strain phase by saying "hook" as they begin to strain. This helps ensure a completely closed glottis. Otherwise, no significant differences from the USAF L-1 that I'm aware of. The Chinese teach a Qigong Maneuver that I admit I still don't fully understand despite reading the articles.

Positive pressure breathing systems such as the USAF COMBAT EDGE offer no additional protection to higher levels of attainable G, but do significantly decrease the level of straining effort required for a given level of G, thereby reducing workload and fatigue, and hence improving sustained G tolerance to repeated G exposure.

Numerous sources abound on the topic. A literature review will reveal an abundance of published articles in the *Aviation, Space,*

and Environmental Medicine journal. The current 'bibles' of aerospace medicine, *DeHart's Fundamentals of Aerospace Medicine* and *Ernsting's Aviation Medicine* also offer good discussions on the topics.

In putting together briefings for aircrew on GLOC avoidance, you must also include adequate discussion of an appropriate conditioning program which combines 20-30 minutes, 3-4 times per week of both weight training (both of upper and lower body muscle groups (pilots frequently overwork upper body at the expense of lower body) and aerobics. Wt training increases muscle mass and provides a more powerful strain and hence increased venous return from the extremities. Aerobics increase aerobic capacity and thus G endurance in cases of prolonged/repeated G exposure.

One myth worthy of dispelling is that excessive aerobic conditioning will decrease G tolerance. In extremely, aerobically well-conditioned athletes (distance runners and triathletes), all that has ever been demonstrated is a decrease in resting G tolerance. However, with an adequate AGSM, no decreases in total G tolerance were seen. In reality, the needed for such excessive training offers little additional benefit to pilots (law of diminishing returns) and their limited time is better spent balancing their aerobic conditioning program with some wt training. ■

**Mark Mavity, Maj, USAF, MC, SFS
Resident, Aerospace Medicine
USAF School of Aerospace Medicine**

Reprinted from the website of the Fighter Tactics Academy

<http://www.sci.fi/~fta/physiolo.htm>

Ask Allen



Allen Silver, master rigger and owner of Silver Parachute Sales, has been serving aerobatic and glider pilots worldwide since 1972. Questions regarding your parachute should be sent to: Allen@SilverParachutes.com.

Q. I just practiced pulling my rip cord. How do I package the spring-loaded pilot chute for shipping?

A. It's a great idea to practice pulling your rip cord before sending your parachute for repack and recertification. The challenge is in packaging up that giant jack-in-the-box (aka, pilot chute) that just popped out of your parachute. This was addressed briefly in my April 2007 column, but I want to expand on it (no pun intended). Your shipping box fits the parachute just fine when the pilot chute is compressed, but it's a different story once the rip cord is pulled. Some owners have asked if it's okay just to cram the pilot chute into the box. This is not the best solution since it could bend the spring and ruin the pilot chute. (They are expensive to replace.) You also run the risk of setting a booby trap for your rigger when he or she opens the box. It's a fun prank, but remember that your parachute rigger will always get the last laugh. To quote Charles Plumb, the naval aviator whose story has made its way around the Internet several times,



“Remember who packs your parachute!”

There are several ways to package the pilot chute for shipping. One method is to compress it into some plastic bags from the supermarket and tape it shut. You may require a third hand to help you accomplish this feat, or at least someone to record your attempts on video.

You may not get the pilot chute compressed, but you will be a hit on YouTube. Just be careful and protect your face and breakables while you're doing this. If you use tape, be very careful not to get any on the pilot chute material. For that matter, make sure tape doesn't get on any part of your parachute, including the harness. Glue from the tape will damage nylon material over time. You can also close the bags with string or plastic ties, or you can wrap the bridle (the long, 1-inch-wide piece of nylon that attaches the pilot chute to the top of the parachute) around the bag. A similar method is to use a small box in place of the plastic bags.

Some people have even managed to compress the pilot chute back into the open parachute container. Then just close the side flaps of the container back over the pilot chute and tie the container shut with string or rope.

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You may decide not to do battle with the pilot chute at all and just get a bigger box, laying the pilot chute on top of the parachute. Be careful because this leaves a lot of empty space in the box and makes it vulnerable to crushing during shipment. This can damage the spring of the pilot chute or even the parachute itself. Never fill the empty space of the box with loose Styrofoam chips. They cause all sorts of problems, not the least of which is aggravating your rigger who will have to spend hours fishing Styrofoam chips out of

every nook and cranny of your parachute. If you do use Styrofoam chips, put them into a separate sealed bag first. All of these methods work well. Whatever you decide to do, be sure not to snag or pinch any of the material. ■

For other excellent articles, go to Allen's website:
www.silverparachutes.com/index.html

IAC Chapter 38 Membership Application/Renewal Form

Name: _____ Spouse: _____

Address: _____

City: _____ State: _____ Zip: _____

Home Phone: _____ Work Phone: _____

E-mail 1: _____ E-mail 2: _____

IAC #: _____ EAA #: _____

Certificate #: _____ EAA Expiration Date: _____

Judge: Regional National

Competition: None Basic Sportsman Intermediate Advanced Unlimited

Aircraft: _____ N #: _____

Referred By: _____

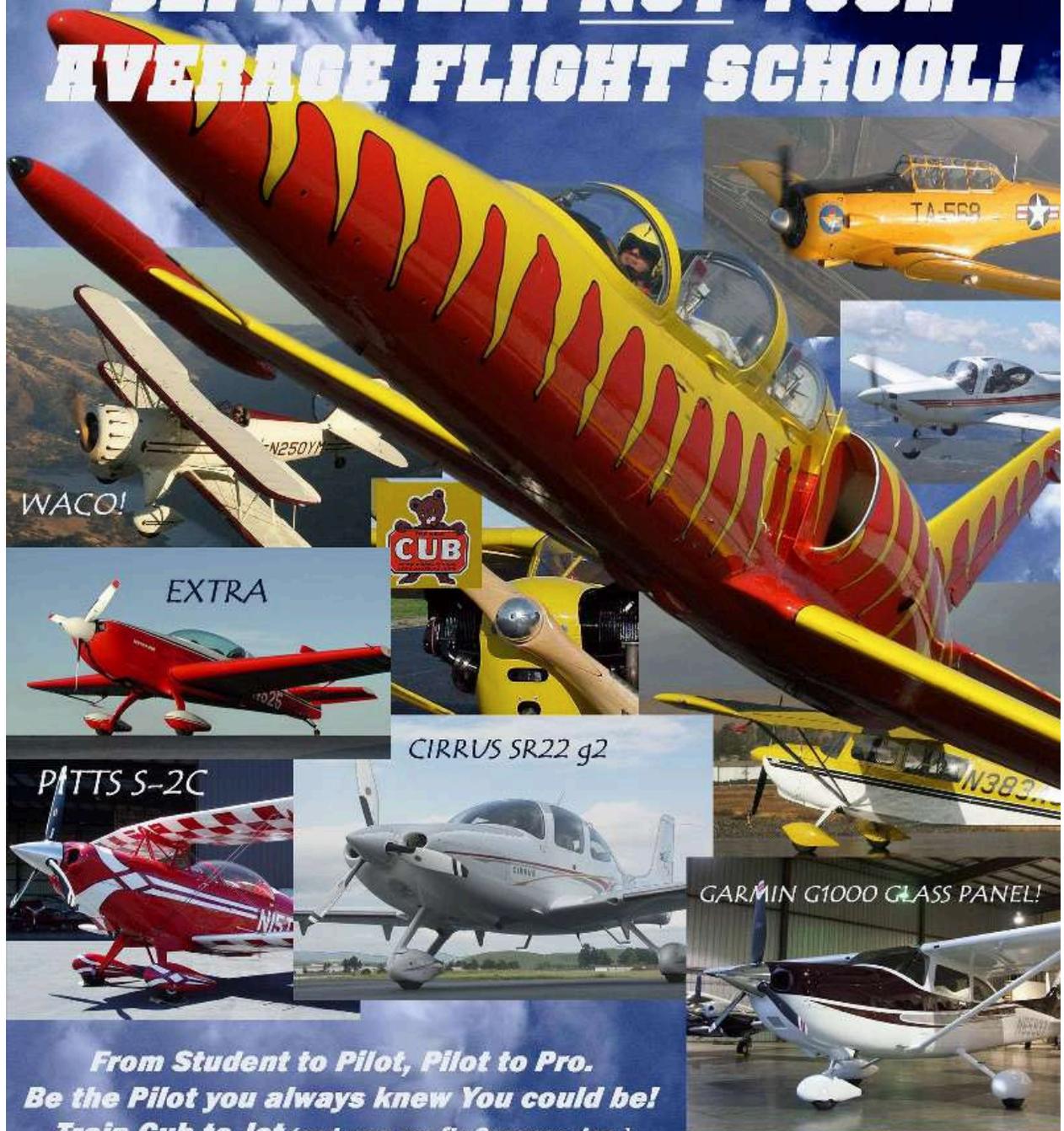
Dues: Single Membership (\$25/year) Family Membership (\$30/year)

Send with check, made payable to "International Aerobatic Club Chapter 38", to:
Howard Kirker, IAC38 Treasurer - 2279 Ocaso Camino - Fremont, CA 94539

Please Note:

No Chapter meeting in May

DEFINITELY NOT YOUR AVERAGE FLIGHT SCHOOL!



*From Student to Pilot, Pilot to Pro.
Be the Pilot you always knew You could be!
Train Cub to Jet (and, yes, we fly Cessnas, too.)*

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