

# The Intrepid Airmen



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#### In this Issue

Editor's Note	2
Chapter Contacts	2
EAA 403 raffle	3
August Young Eagles	3
Air Drops on Khe Sanh	5
Letter from Bob Meuse	6
Help Wanted	7
Membership notes	8

### UPCOMING EVENTS

#### **September Chapter Meeting**

**Thursday, September 5.** Reid Hillview Terminal building.

**September 8**. Willits Airport Day & Kinetic Fly-In. Please see http://www.willitsairport.com/.

#### **Chapter 62 Board Meeting**

**September 12** at 7:30 PM in the Terminal Building, all welcome.

**September 21-22.** Salinas Air Show. Details may be found at http://salinasairshow.com/.

**September 29.** Young Eagles, Palo Alto (KPAO).

**October 5**. Aircraft Spruce Customer Appreciation Day. Fly to Corona for excellent deals!

**October 8.** General Meeting. Speaker wanted.

# **September Event Chandler Lougée and Clarissa Hoffman**

Chandler and Clarissa, our Air Academy candidates, will report to us on their experiences at Oshkosh. We're looking forward to hearing what they have to say!





Chandler

Clarissa

EAA Chapter 62's September meeting will be at the Reid Hillview Terminal Building at the airport. Guests are welcome.

6:30 PM General Meeting / BBQ begins, 7:30 PM presentations.

www.eaa62.org

## Editor's / VP's Notes by Mark Wainwright

am feeling slightly sorry for myself:
I haven't flown in anything but an
A-320 since I traveled with Rusty,
Don, and Niner to the Young Eagles
event in South County a few months
ago. Part of the problem is that our
planned fly-out to Catto Props was
put off once again, this time by the
company's president. I may have
run out of gas trying to make this
happen, although it seemed like a good
idea, and they are rumored to have all



Note the Chapter 62 shirt and the backcountry hair

kinds of interesting milling machines. Instead I made a trip to Maine, where

Mimi and I visited with our daughter and son-in-law. If you like to sail and are interested in wooden boats, Eggemoggin Reach and Brooklin Maine are hard to beat. If you'd like them to build you a nice sailboat, make sure to bring a fat wallet.

I later met Max Wainwright in Glacier National Park where the 29 year-old made sure that his dad endured maximum physical output; this, after having left Los Gatos on a Thursday and showed up at a backcountry campground on Friday evening. It's a big country. We completed our tour with a swing through Waterton Lakes National Park in Alberta and drove through British Columbia before reentering the US in Idaho.

As some of you may know, ANA Japanese Airlines is flying the Boeing 787 into San Jose once a day from Tokyo. It happens that the aircraft approaches over our house on the inbound flight, and two things are notable: it is extremely quiet and the sweep and dihedral of the wings is very apparent. Take a look to see if it flies above you.



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www.eaa62.org 2

#### EAA 403 raffle

#### sent to us by Terri Gorman

Hi fellow EAA Member,

Our chapter EAA 403 Carson City, NV, is holding a Raffle to expand our Chapter Facility. We have run out of room for our Young Eagle projects.

One of our Young Eagle programs is building a Zodiac 601 aircraft. We are presently building a wing in a 12' X 18' room. We are hoping to generate enough money to construct a small hangar so we will have room to build this project.

We would appreciate it if you would support us in this effort by purchasing tickets and forwarding this e-mail to your friends and fellow EAA members.

The Raffle prize is \$5000.00. The Tickets are \$20.00 each. Purchase 6 for \$100.00. The drawing will be held October 2, 2013 at our October Chapter Meeting. To purchase a ticket Call 775-882-1237. Leave message if no answer.

Check out our Web Page EAA403.org The rules for the drawing are listed at EAA403 Rules or http://www.eaa403.org/newsite/rules.asp.

Thank you for your support.

Robert Dickinson President EAA Sierra Chapter 403 Carson City, NV 89706 775-882-1237

## August Young Eagles by Don Von Raesfeld

On August 17, 2013 our chapter held its fifth Young Eagles event of the year. Our Young Eagles coordinator, Russ Todd, was out of town for this event; however, he had asked Joel Williams to take over in his place. Joel, his wife Arlene, Louise Lane and John Castner did an excellent job registering Young Eagles and lining them up with pilots for their flights. Several volunteers from LULAC were there helping kids build wing ribs.

We had seven pilots who flew 56 Young Eagles. They made a total of 23 flights. Below is a breakdown of the number of Young Eagles by each pilot and the number of flights they made.

Pilots	Total Young Eagles flown	Number of flights Number of seats	
Paul Donahue	10	4	3
David Goodin	5	3	3
Bob Leuten	4	2	3
Paul Marshall	11	4	3
Wolfgang Polak	5	3	3
Bob Tucknott	12	4	3
Russell Wells	9	3	3
Total	56	23	21

Thank you to those pilots who volunteered their time and aircraft, and also thank you to all the ground volunteers who helped make this a successful event.

(cont' on page 4)

Our sixth Young Eagles event of the year will be held on September 29 at the Palo Alto Airport in conjunction with their Airport Day. We will need lots of pilots and ground volunteers for this event because when our Young Eagle events are combined with Airport Days we tend to have more kids interested in flying. Mark this date on your calendar and Niner and I hope to see you there. Thanks again.









#### Air Drops on Khe Sanh

by John Castner

(Editor's note: Khe Sanh was a Marine Corps base just south of the DMZ between North and South Vietnam. It saw extensive action during the Vietnam War.)

Khe Sanh was a bit of pain to keep supplied. Much of the resupply was done by airlift and the weather on occasion did not co-operate. If the field remained below approach minimums, ammunition and food supplies could become critical.

So, a new aerial delivery procedure called GCA/DADS was developed on the fly (no pun intended). The US military loves acronyms and this one is for Ground Controlled Approach/Doppler Aerial Delivery System. GCA it what the military calls Precision Approach Radar. I should note that this description is how things were done in the period 1968-72 flying C-130s and it may be done rather differently now.

GCA/DADS describes how the approach to the release point was made. The loads made it to the ground using the CDS (Container Delivery System) airdrop method. I'll describe that first.

C-130s of that period have a system of rollers and a locking mechanism bolted to the tiedown rings designed into the floor of the cargo compartment to allow rapid unload and offload of standard AF cargo pallets. Normal pallet width is about eight feet.

CDS bundles are built up on approximately four by four foot squares of three-quarter inch plywood. My forty-year-old memory says that the minimum bundle weight was about 600 pounds and the maximum about 1500 pounds. The cargo was attached to the plywood and topped with a parachute opened with a static line. The parachutes were of red, blue, yellow, or white cotton.

Loading started with a buffer board locked in a position to accommodate the number of bundles on the particular drop. It could be a single bundle or up to twentytwo-by-twos. Aft of the bundles, a webbing net was secured across the cargo compartment. Electrically fired squibs wired to the green light (paratroop go-ahead light) cut the net. No one ever went behind



C-130 at Khe Sanh

the load once the ramp and door were opened for the drop.

The bundles went out by gravity. To make sure that happened, there was a chart that gave a flap setting based on aircraft weight to calculate the proper deck angle. Sometimes it felt like you weren't all that far from stall speed.

(cont' on page 6)

5

So, your load is secured and rigged and you are ready to go. Today the field is below minimums so the procedure will be GCA/DADS. Both you and the GCA controller have to be on the same page for this to work.

You fly toward Khe Sanh tactical VFR and call approach control requesting a GCA/DADS. You will be vectored through a normal approach to a GCA final and proceed with a normal GCA, with one exception: configuring for the drop. There is a checklist (of course) but the main item is getting the ramp and door open. Five hundred feet above drop zone elevation you level off. The controller notes your level off and proceeds with azimuth guidance. The navigator will has his doppler's second channel set up with the track and distance from a known position on final to the Calculated Air Release Point (CARP). The controller calls approaching this point followed by something like "Ready, ready, mark". At that point you turn to head for the CARP and the nav flips his doppler over. When the doppler runs out, he calls "Green light" and the co-pilot flips the paratroop light switch to green.

The loadmaster calls the load clear and you go into the post drop procedures probably climbing to VMC on top.

I heard that over ninety percent of the bundles were landing within the Khe Sanh perimeter. Those sort of statistics were usually inflated, but still. And this was usually used when the base was low on food and/or ammo.

#### **Letter from Bob Meuse**

Howdee Mark old bean,

Bob Meuse here, now in Boston Mass.

Hoping that all's well back there.

Mark I wonder if you can e-mail me Jon Garliepp's mailing address. I want to send him a DVD that's of interest and I lost my Chapter 62 roster in my move last September. If you can send me a copy of the roster that would be appreciated and if there's a charge, I'll be happy to pay it.



Things are fine here. I'm in a gigantic senior center in Peabody Mass called Brooksby Village. There's about 2000 folks here in 10 six story buildings on 90 acres. We have absolutely everything here.

We have 2 full-size banks, barber shop, beauty parlor, 2 stores, marvelous gym, marvelous indoor pool, doctor's outpatient office, pharmacy, dentist, four restaurants, (one of which is a buffet), printed menus each meal with waiters, (no tipping) dinner or the daily meal of your choice is included in the monthly fee. If you happen to be musical like me, there are four grand pianos which are tuned quarterly, digital pianos. There's a computer room opened 24-7 FREE, our own big TV studio and TV station, a chapel with a big Allen organ, shuttle buses which run every 15 minutes constantly all day until 9:30 at night to take you between buildings, shuttle buses which leave hourly to take you to the big shopping center,

supermarket, or doctor, covered walkways & bridges between the big buildings so you don't get rained or snowed upon . TV is free.....much more.

Brooksby Village is NON PROFIT! and there are programs here that assure that you will never be kicked out in the snow if you should lose all your money

My new apartment is beautiful. I even have room for my grand piano which I'm contemplating having shipped from California. It's presently on consignment at a friend's piano store in Palo Alto.

All of the appliances in the kitchen are brand new.(dishwasher, washer/dryer, microwave oven, electric range with induction glass top, granite counter tops). There are no taxes or utility bills. The only thing I have to write a check for is my phone and internet.

I left California on September 8th and moved in here on September 19th.

Now it's bedtime, Mark so thank you and cheerio,

Fond regards,

Bob

PS I wish that someone in Chapter 62 might give Don Wiggin a call. He's frail, he's 97, and with me gone, he's kinda lonesome.

### **Help Wanted**

#### by Don Von Raesfeld

I'd like to ask all current members of our chapter for a little help. We have a good chapter but at this time membership has dwindled. We have a core of about a dozen members who make most of the General Meetings and also most of our Young Eagles events. I know most of our members are working and I understand how hard can be to make time for hobbies. If any of you have suggestions on how we might improve our membership and participation in chapter events I would welcome your input.

One thing I thought might help improve attendance at our General Meetings is to move them from Thursday nights to a Saturday morning. We could possibly have our Board Meeting at 9 AM followed by our General Meeting at 10 AM. After our General Meeting we could then possibly have a fly-out to go have lunch somewhere. Members who have access to an aircraft could take a passenger or two with them who could then help split the cost of the aircraft. I think it might be a way to help increase participation in the chapter and it would be fun. Holding the Board Meeting on the same day as the General Meeting would require one less trip for the Chapter Officers and Board Members.

Let me know what you think and if you have any other suggestions that might help our Chapter. I welcome your input.

Thank you,

Don Von Raesfeld

408-507-0951

#### Membership Notes by Donald Von Raesfeld, Jr.

### Membership Chairman 408-507-0951

ur last general meeting was held on August 8 at my home in Santa Clara. The terminal building at Reid Hillview airport was being used that night so we needed to find nother location. We were going to try to set it up at Aerodynamic Aviation and Zdravko offered us the use of his classroom for that evening. However, our guest speaker for the evening was Alec Proudfoot and he had some rather large and fragile pieces that he was bringing with him. I offered the use of our backyard for the meeting.



We had about 13 members show up for the meeting. We started at 6:30 PM with a hamburger and hot dog dinner and the meeting started about 7:40 PM. VP Mark Wainwright introduced Alec Proudfoot, our guest speaker for the evening. Alec is building a human powered aircraft. The project is known as DaSH PA - Dead Simple Human Powered Aircraft Project.

Alex began his presentation by telling us how he began this project, giving us some history of human powered flight, and showing us how he is building this aircraft.

Alex started this project about 2 1/2 years ago while working at Google. When asked "Why do it?," his answer is, "For the fun of it." In addition to the fun of it he also thought it would be a cool kickoff project for the new Google Workshops, a fun designing and building experience, and a fun flying experience. All of these were factors in starting this project.

He then talked about the History of Human Powered Aircraft (HPA) beginning with the story of Icarus and Daedelus. He touched on the Peugot Prize which was offered in the early 1900s. Essentially bicycles with wings, these "man powered machines" came to the Bois de Boulogne, France and attempted to take to the skies to secure the cash prize of 10,000 francs. The first such competition was held in 1912 but it was a full nine years until someone was able to win the prize. Gabriel Poulain managed to fly the required 10 m distance at 1 m above the ground in his dual winged HPA on July 9, 1921.

He briefly mentioned the Bungee Launched Flights in the 1930s. He then talked about the Kremer Prize established in 1959, open to all and whose prize was raised to £50,000 in the early 70s. This first prize was won by Dr. Paul McCready when his Gossamer Condor, piloted by Bryan Allen was the first HPA to fly a figure 8 around two markers 1/2 mile apart starting and ending the course at least 10 feet above the ground on August 23, 1977. The second Kremer prize of £100,000 was won on June 12, 1979 once again by Paul McCready when Brian Allen flew the Gossamer Albatross from England to France. There were also other prizes offered for speed. Alec showed pictures of several different HPAs involved in these competitions.

Alec then proceeded to get into his project. He described some of the challenges involved in designing an HPA. Among these challenges are:

- Low power
- Light weight
- Long wings (structural challenge with light weight)

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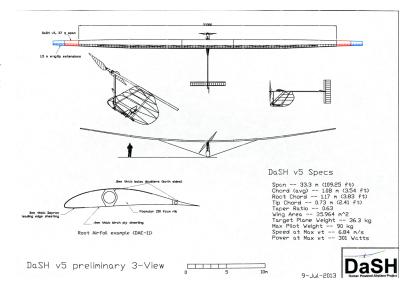
#### Membership Notes, cont'

In considering his design he has decided to go with the Keep It Simple philosophy. These include the following:

- constant wing chord for all or most of the wing, so only one type of wing rib
- simple 90° twist chain or belt transmission
- rudder and dihedral to turn (no ailerons)
- uncomplicated 2D pilot fairing
- as simple as possible wing spar and fuselage spars (cylinder with additional spar caps)
- simple rigging one or zero wing support cables to midspan
- mechanical design in SolidWorks and communicated via eDrawings

Another consideration was to make it slow and draggy, or fast and sleek. If you want an easy-to-fly airplane, it will be slow and draggy, but if you want decent performance you don't want a huge maze of wires. Carbon fiber seemed to be the answer. Alec had several pieces on hand which he passed around for all to see and handle. It is amazing how light and fragile these pieces are. However when finally assembled they support a person and allow him to fly under his or her own power.

Result: make a decent performing HPA using carbon fiber and minimal lift wires; that's a compromise between the big and slow



Gossamer HPA, and the speed HPAs like the Bionic Bat/Monarch. In the end, Alec's HPA will be a bit bigger and slower than Daedelus.

From Wikipedia, the free encyclopedia: The MIT Aeronautics and Astronautics Department's Daedalus was a human-powered aircraft that, on 23 April 1988, flew a distance of 71.5 mi (115.11 km) in 3 hours, 54 minutes, from Iraklion on the island of Crete to the island of Santorini. The flight holds official FAI world records for distance and duration for human-powered aircraft.

The craft was named after the mythological inventor of aviation, Daedalus, and was inspired by the Greek myth of Daedalus' escape from Crete using manmade wings.

Three aircraft have been constructed:

Light Eagle (originally Michelob Light Eagle): a 42 kg (92 lb) prototype.

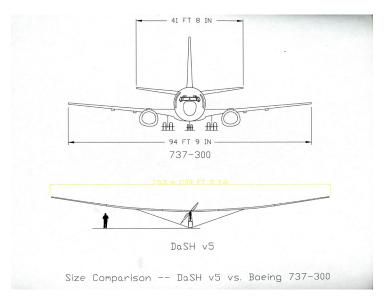
Daedalus 87: Crashed during testing at Rogers Dry Lake (NASA Dryden Flight Research Center) on 17 February 1988, and was rebuilt as a backup.

Daedalus 88: Flew from Crete to just off the beach on Santorini.

Both Daedalus 87 and Daedalus 88' weighed 31 kg (69 lb).

#### Membership Notes, cont'

All three aircraft were constructed at the MIT Lincoln Lab Flight Facility at Hanscom Field outside Boston, Massachusetts, by a team of undergraduate students, faculty, and recent graduates of MIT.



If interested you can check out this site for a list of all HPAs to date: http://en.wikipedia.org/wiki/List\_of\_Human-powered\_aircraft.

Alec and his team of volunteers have made great progress on this project. They are in the process of building the aircraft after having overcome many obstacles. They have conducted a lot of trial-and-error to find the best way to do things. Alec has talked to the people at MIT and they have exchanged ideas. Alec has all of the raw materials on hand and they are now beginning to build. He also has tested cyclists and has a number of them who may one day fly this aircraft. Alec, a pilot himself, plans on making the first flights. He also mentioned that they are not trying

for a prize, they are just trying to build something for fun that the average fit pilot could fly.

I would like to thank Alec for taking time out of his busy schedule to talk to us and show us his project and wish him the best of luck. This was a very interesting presentation.

Alec is always looking for volunteers to help out with this project. If you are interested, you can contact him at:

408-905-7134

alec.proudfoot@gmail.com

dashpa.blogspot.com





Andy and Sam Werback's Legacy

Don Von Raesfeld Membership Chairman 930 Monroe Street Santa Clara, CA 95050

Address Label is RED, time to pay your dues.



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