



# Mile High Flyer

The Official Newsletter of  
The Experimental Aircraft Association Chapter 43

Established May, 1958

Volume 42, Issue 9

On the web @ [www.eaa43.org](http://www.eaa43.org)

September, 2015

## Next Meeting

Saturday, September 12, 2015

**6 PM @ 3015 Piper Drive South,  
Erie, CO (on the East side of the  
Erie Airport). This is our  
annual Pizza Party/ Oshkosh  
Review. Bring your pictures (a  
usb flash drive is best), stories,  
and a salad or dessert if you  
wish.**

**See map on Page 3.**

## Editor's Corner

*I'm looking forward to our annual Oshkosh review meeting at Lynn and Pat Miller's home. The chapter will provide Pizza & beverages. Come and share the experience with us!*



*There is a brief update on long-time member & friend, Chuck Graf on page 2. Please keep him in your thoughts & prayers.*

*Last month's meeting was a very interesting presentation by member Jim Loyd. Some of the info & data from Jim is on pages 5 & 6 of this issue. Thank you Jim!*

*I crossed a good milestone when I completed the covering of my Kitfox project, and ordered an engine & propeller recently. Fun times!*

*Keep building & flying!*

*John*



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# ***Upcoming Events Calendar***

Submitted by ***Don Smith***

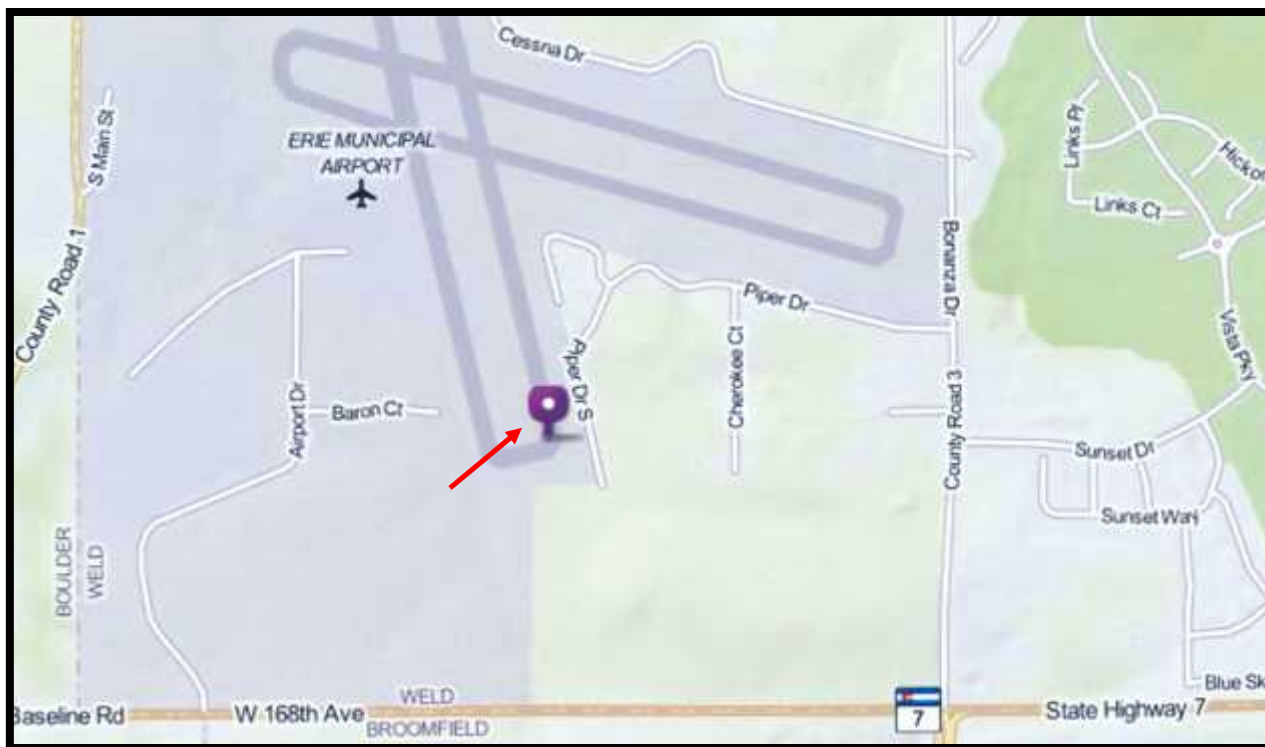
## **2015 EVENTS**

### **SEPTEMBER**

- 2-7 Antique Airplane Assn./Air Power Museum Invitational Fly-In, Blakesburg, IA  
<http://www.antiqairfield.com/flyins/2015-join-the-record-breakers.html>
- 10-12 7<sup>th</sup> Annual Midwest LSA Expo, Mt. Vernon Outland Airport (MVN), Mt. Vernon IL  
<http://www.midwestlsashow.com/index.html>
- Sat 12 **EAA Chapter 43 Young Eagles Rally, EIK 7:30 a.m.**
- Sat 12 **EAA Chapter 43 Annual Pizza Party/AirVenture Debrief, Lynn Miller's home, EIK, 6:00 p.m.**
- 16-19 51<sup>st</sup> Reno National Championship Air Races, Reno Stead Airport (RTS), Reno, NV
- Fri 18 EAA Chapter 301 Membership meeting, 7:00 p.m.
- Sat 19 Colorado 99's Poker Run
- Sat 19 EAA Chapter 72 Young Eagles Rally, FLY 8:00 a.m.
- Sun 20 Wings and Wheels Expo 2015, KHGR, 9 a.m. – 4 p.m. (T)
- Mon 21 AFC/FAA Team Wings Safety Seminar, Ramada Hotel, Centennial Airport, 6-8 p.m. <http://www.wingsandwheelsexpo.com/>
- 25-26 AOPA Fly-in, Colorado Springs Municipal Airport, Colorado Springs, CO (COS)
- Sat 26 Rusty Pilots at the AOPA Regional Fly-In in Colorado Springs, CO, 07:30 - 11:00 a.m.
- Sat 26 The Rifle Garfield County Airport (KRIL) hosts its fourth annual Rocky Mountain Fall Fly-in (T) <http://www.rifleairport.com/>
- Sat 26 Fremont County Airshow/Fly-In, 1V6, EAA Chapter 808 Breakfast 7-10 a.m., Airshow 10 a.m.-1 p.m. (T) <http://www.fremontco.com/airport/index.shtml>
- Sat 26 Leadville-Lake County Airport (KLXV) 6<sup>th</sup> Annual Pancake Breakfast Fly-In from 8 a.m.-11 a.m. <http://www.lxvairport.com/newsandevents.html>
- Sun 27 Telluride Fly-In (KTEX) Hamburger/Hot Dog Lunch 11 a.m – 1 p.m. (T)  
<http://www.tellurideairport.com/>

***Update on Chuck Graf: Following an operation on August 25th to repair his heart valves, he is still in ICU at Lutheran Hospital as of the 31st, recovering and doing pretty well according to the family - just some relatively minor post-operation issues. We all wish him the best of luck, and send our good wishes and prayers! Get well soon!!!***

Next Meeting on Saturday, September 12th at 6:00 PM—3015 Piper Drive South.



Want Ads & articles for publication may be sent to the editor - [newsletter@ea43.org](mailto:newsletter@ea43.org)



# Young Aviator Update

## September 2015

The Erie Air Fair was on the 8<sup>th</sup> and the B-25 was there with some of the mentors and kids. There are now a few new kiddos in the ranks, ready for the next project.

On Friday the 28<sup>th</sup>, we had a celebratory picnic in the Erie Community Park where Scott and Pat talked with the kids about what they would like to see/do in the coming year. The consensus was that they would like to meet twice a month. One as a work session and another to make some enhancements on the B-25 but also dedicate some time for much needed repairs on the other two simulators. The second will be used for guest speakers, field trips, ground school, etc.

The first field trip was on the 29<sup>th</sup>. Ian Dahlke, one of the B-25 mentors, arranged for us to visit NEON in Boulder (National Ecological Observatory Network). NEON has a Twin Otter that is used to gather data on specific land and aquatic sites across the country. It was fascinating. Visit them at [Neoninc.org](http://Neoninc.org)

A team of employees gave up their Saturday afternoon to be there with us. They took the group through four stations where they explained what they do, how the equipment works, what the data they collect is used for, and showed them how the plane which is equipped. We saw high powered cameras, lasers, GPS, and computers used for data collection. The Otter is going to have the equipment taken out next week for maintenance this winter, so the opportunity to see it fully equipped only happens for a couple days a year. Many thanks to those who made this possible.

Future potential field trips include Jeppesen, Vaisala, and special events at Wings Over the Rockies. We would like to have some speakers visit and share their experiences in aviation. If you have suggestions for guests, please email us or get in touch with Pat Miller.

We have updated our Facebook page. Please visit and "like"! Thanks, Jamie Kellogg! Search Young Aviators 43 to find us!

## From Jim Loyd -

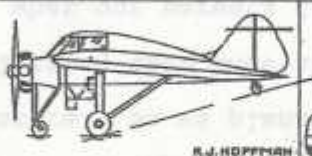
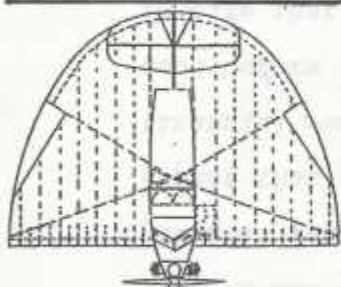
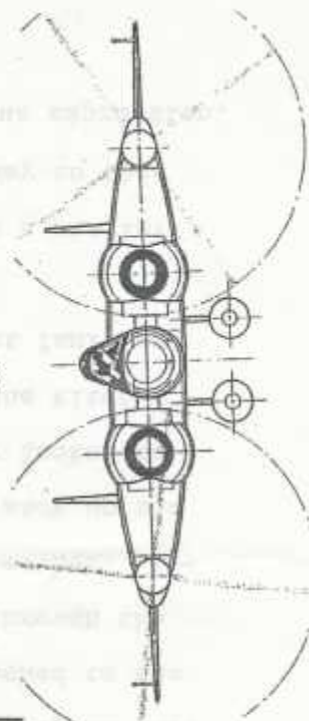
### ADVANTAGES OF LOW ASPECT RATIO CONFIGURATION

#### STRUCTURE

1. Small size ( $L=17'$ ,  $W=14'$ ) with large lifting area -161 sq ft.  
With folded wings fits 1 car garage
2. Form and structure is simple and compact. Can be built in small area.
3. Structure can be very light because thick short wing allows light spars, ribs, etc.
4. Large internal capacity - fuel, baggage, wheels, radiator, etc.
5. Large CG envelope.

#### AERODYNAMICS

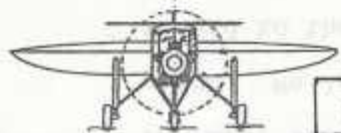
1. A curved trailing edged wing with an aspect ratio of 1.27 to 1.50 performs the same as a typical 6 to 1 aspect ratio wing.
2. The Reynolds Number of the air flowing over the wide chord wing is higher, resulting in a higher Lift/drag ratio.
3. A thicker boundary layer exists over the long chord of the wing that prevents the tripping of the air flow and loss of lift. It also means that bumps, dents and rough surfaces on the wings do not have near as much effect on lift and drag as on a long narrow chord wing.
4. The curved trailing edge allows the air to leave the wing smoothly with very small or no tip vortices. Air stays attached at even at high angles of attack (30-34 degrees). This wing is very difficult to stall. The nose mashes down to flying angle of attack.



K.J. HOFFMAN

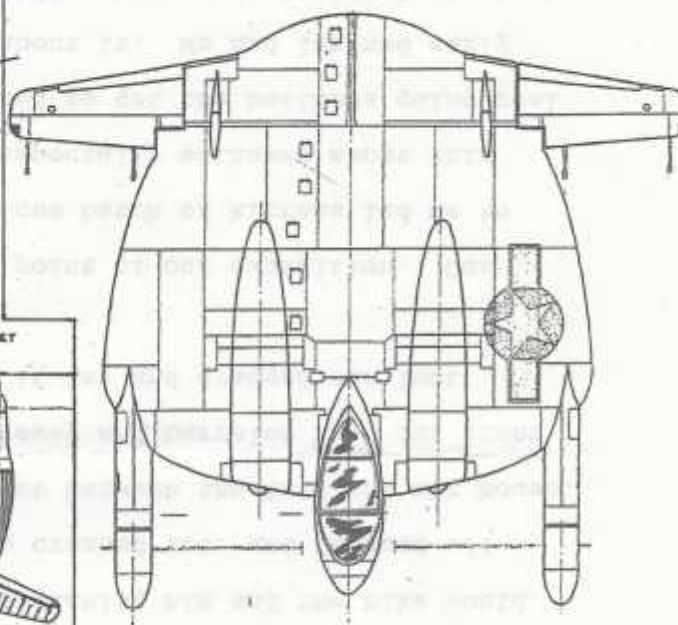
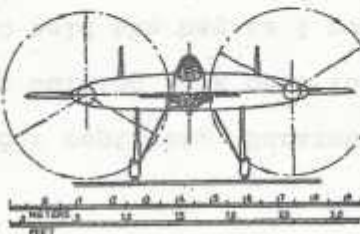
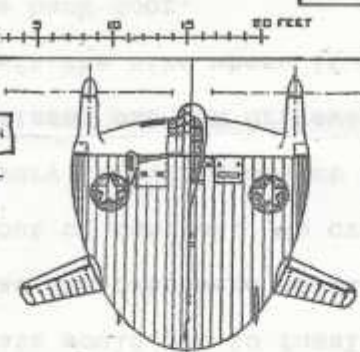
#### ARUP No. 10+

TWO SEATER - DUAL CONTROL  
 SPAN 22 FEET  
 OVER-ALL LENGTH 18 FEET  
 PROJECTION 18 FEET  
 WING AREA 276 SQ. FT.  
 HORIZONTAL AREA 53  
 WEIGHT, EMPTY 575 POUNDS

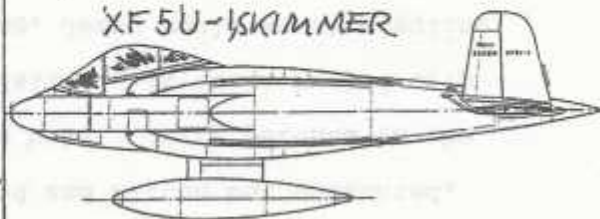


Scale drawing of the Arup No. 10+

A LOW POWERED EXPERIMENTAL MODEL THE V473, WAS FLOWN FOR THE FIRST TIME ON NOV. 27-42 WITH TEST PILOT BOONE BUYTON AT THE CONTROLS. POWERED BY TWO 80 HP CONTINENTAL ENGINES IT HAD A SPEED RANGE OF 30-150 MPH AND THE YELLOW-PAINTED PLANE LOGGED A TOTAL OF 131 FLYING HRS. BEFORE IT WAS GROUNDLED AND STORED FOR THE SMITHSONIAN INSTITUTE.



XF5U-SKIMMER



More from Jim Loyd -

SPECIFICATIONS FOR LOYD Low Aspect Ratio Airplane

Dimensions & Weights

Wing Span	14'
Chord	14'
Aero Chord	12'
Wing Area	141sq ft
Aspect Ratio	1.39-1
Wing Ldng	6#/sq ft
Ttl Length	17'
Hgth Spinner	6'
Hgth Rddrvator	7'6"

Airfoil	12% reflexed 5% at 75% chord
CG Limits	15% to 35% chord (31")

Airframe wt	300 lbs
Engine wt	200 lbs
Fuel (20gls)	120 lbs
Misc	40 lbs
Pilot&Pssngr	360 lbs
<u>Baggage etc.</u>	<u>100 lbs</u>
Gross wt	1120 lbs

Power	100Hp -2700RPM
Prop disc	72" dia.
Power loading	11 lbs/ HP

Estimated Performance

Take off speed	25-30 MPH
Landing speed	24-28 MPH
Cruise Speed	(65%) 130 MPH
Top Speed	(100%) 172 MPH

Reynolds Numbers at 8,000' ASL

Reynolds Number at 50 MPH =4,608,000

Reynolds Number at 100MPH = 9,216,000

Reynolds Number at 150 MPH = 13,824,000

# POKER RUN

Hosted by

# THE COLORADO 99s

INTERNATIONAL ORGANIZATION OF WOMEN PILOTS

Saturday, September 19, 2015

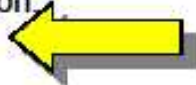
Terminus at Rocky Mountain Metropolitan Airport



Stops include:

- Greeley (GXY)
- Fort Morgan (FMM)
- Fort Collins (FNL)
- Longmont (LMO)

For registration information:  
[colorado99s.org](http://colorado99s.org)



Start at any of the designated airports in any order and pick up a card between 9 and noon. Must be at BJC by 12:30 p.m.

LUNCH at the TERMINUS, between 1-3 p.m.—may be purchased at Blue Sky Bistro!

## SUPPORTS THE COLORADO 99s SCHOLARSHIP FUND

All Are Welcome! Anyone can play. Must stop at all airports.

THIS EVENT WILL TAKE PLACE IN VFR WEATHER ONLY!! Information phone number is 303-503-0147  
In the event of inclement weather, the Poker Run will be held the following day, September 20, 2015.

# TELLURIDE FESTIVAL OF CARS & COLORS

AND THE TELLURIDE REGIONAL AIRPORT PRESENTS



# KTEX 3-DAY REGIONAL FLY-IN

**PART OF TELLURIDE FESTIVAL OF CARS & COLORS**

**SEE CESSNA'S CITATION AND BEECHCRAFT KING AIR STAGED ALONGSIDE SOME OF THE GREATEST WWII WARBIRDS & JFK EXHIBIT**

**SEPT 25-27 FREE TO PILOTS\***

FRIDAY 9 AM - 5 PM

SATURDAY 9 AM - 5 PM

SUNDAY 9 AM - 3 PM

\*INCLUDES COMP 4-DAY TICKETS

AND TFCC's VIP RECEPTION 9/26

FOR DETAILS, CALL: 970-519-3015

For more information visit [CarsAndColors.com](http://CarsAndColors.com)



TELLURIDE AVIATION



## 2015 Chapter Officers

President	John Reuterskiold	303-881-3517
Vice President	Ken Scott	303-674-7846
Vice President	Greg Hall	303-424-4216
Secretary	Roxie Juul	303-466-2600
Treasurer	Myles Lee	720-295-8778

### Board of Directors

John Reuterskiold (Chairman)  
 Cliff Hasenbalg\*  
 Don Smith\*  
 Lynn Miller\*\*  
 John Juul\*\*

(Note: \*- 2 year terms expire end of 2016, \*\* - 2 year terms expire end of 2015)

### Volunteer Officers

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Technical Counselor	John Reuterskiold	303-881-3517
Technical Counselor	Bill Truax	303-249-2578
Flight Advisor	Bill Mitchell	303-427-4025
Newsletter Editor	John Evens	303-420-2724
Young Eagles Coordinator	Terri Bazacos	559-618-0159
Young Aviators Advisor	Pat Miller	303-666-8233
Young Aviators Advisor	Scott Serani	303-358-2858
Data Base Editor	John Reuterskiold	303-881-3517
Web Master	Brian Cabebe	303-748-5570
Safety Officer	Stephanie Wells	303-503-0147
Refreshments	John & Roxie Juul	303-466-2600
Audio/Visual	Herrill Davenport	303-460-7789
Scholarship Chairman	Lynn Miller	303-666-8233
Scholarship Fundraising	Stan Specht	303-232-8474

### CFI's in Chapter 43

Cleon Biter	303-709-9312
Richard Brown	303-558-0793
Mark Davis	303-425-4080
Jeff Hinkle	303-550-2291
Bill Mitchell	303-427-4025
Tom Shaw	303-275-0904
Stephanie Wells	303-503-0147

## Mile High EAA Chapter 43

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*Broomfield, CO 80038-1725*

First Class



Meetings are normally held on the second Saturday of each month at 7:00 P.M.—Location determined monthly. See Page 1 for details of the upcoming meeting.