



October 2013

Volume 55 Issue 10

Inside this Issue

Presidents Cockpit	2
Name the Plane	2
Bulletin Board	4
Scrapbook	5
Tech Notes	10
Builders Corner	12
Country Store	15
Contacts	16
Calendar	17
Classifieds	18
Sponsors	19

Next Event
October 12th

**Chapter Gathering
and Program**

11:30 Lunch

12.30 Program

**Chapter 35 Clubhouse
at 8T8**

Runway 35 is published monthly by
EAA chapter 35.
Ed Seurer: Publisher
Chuck Fisher: Editor
ea35news@gmail.com

Mysterious Arrows and Lights

Chuck Fisher

Why are airports lighted with a white and green beacon when they are open for use? This month instead of featuring a particular member or project, I am going to write a little about one of the most important projects in all of aviation, yet one that few younger pilots may recognize today.



Hudspeth arrow from the air (Google)

Concrete arrows at the former Hudspeth Aux Field along Highway 62 (http://www.airfields-freeman.com/TX/Airfields_TX_W.htm#hudspeth)

Recently I was fascinated by a short article by Ken Jennings was published on the Condé Nast traveler site (<http://www.cntraveler.com/daily-traveler/2013/06/transcontinental-air-mail-route-maphead-ken-jennings>)

and widely distributed on e-mail. It featured photographs of huge concrete arrows in fields, pastures, along highways and

often in very remote locations that seemingly have little explanation. Most seem to be in the wide open spaces of the Western US including Western and Northern Texas. Here is one near the site of the old

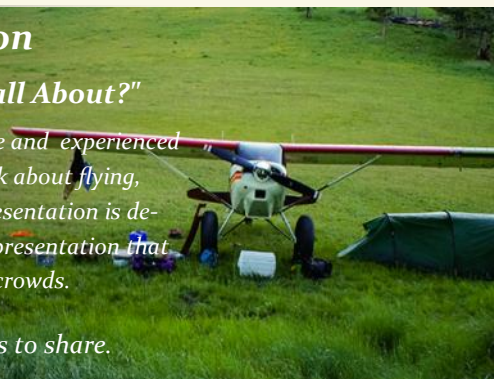
(Continued on page 6)

Featured Speaker: David Larson

"Flying Idaho Back Country: What's it all About?"

David Larson, retired Texas oil engineering executive and experienced short takeoff and landing air-craft pilot, he will speak about flying, landing and enjoying remote areas of Idaho. The presentation is designed to appeal to pilots and non-pilots alike. This presentation that was given at Airventure 2013 to standing room only crowds.

Menu: Grilled Sausage! Please bring side-dishes to share.



PRESIDENTS COCKPIT

October is here which means we now have some beautifully cooler and clear days to enjoy. It is also the time of year that major T-storm cells can roar through at a moment's notice. Keep the best near-term forecast handy (that's what you see out the front!) and avoid skirting those thunder-bumpers too close.



During my 16 years up in Alaska I stayed on the ground many times during marginal weather. My fellow pilots would sometimes comment that I was not a very good "bush pilot". My response - - - "thanks".

Remember those days when someone in the neighborhood would buy a new car and all the kids (and parents) would come over and look at it, oohh and ah, and check out the interior? And if it was a new family car at your house, it was a big event! Well, I got that special experience all over again last month. My next door neighbor here at 8T8 took delivery of a "new" airplane and gave us all in the neighborhood a great new toy to look over, oohh and ah. Is this a great country or what ? !!!

Keep smiling,

Nelson Amen

Runway 35 wins 2013 McKillop Award!

For at least the third time EAA 35's Runway 35 has been recognized for excellence at the national level. Each EAA Chapter is unique, but there are a few things that are consistent. One of those is a Chapter newsletter. The main communications link for a Chapter, newsletters are also a repository of the Chapter's history and accomplishments. Yet, composing a monthly Chapter Newsletter that is informative, easy to read and interesting is the sometimes daunting task of the Newsletter Editor.

EAA Chapter 45 in Pittsburgh, Pennsylvania, established the McKillop Award. Chapter 45 wanted to recognize their first Chapter Newsletter Editor, Mr. McKillop. The Chapter Office took over the judging efforts several years ago. Previous winners help the Chapter Office to accomplish the huge task of judging approximately 1000 different Chapter Newsletters from all over the world. The Newsletters are judged on consistency, appearance, layout, and content. This year's award winner is EAA Chapter 35, San Antonio, Texas, Chuck Fisher editor.

From the editor—This was announced at Oshkosh, but I forgot to print a note! Anyway, thank you to all who have contributed....now please write some more!!

NEW MEMBERS**Ron O'Dea**

EAA Chapter 35 continues to grow! Please welcome:

Wesley and Melanie Brown

Wesley and Melanie live in San Antonio. Wesley has a Sonarai II and a Hipps Sportster. Wesley may be contacted at: 52k1974@yahoo.com

Bill and Lanell Kellner

Bill and Lanell live in Utopia, TX, and can be contacted at: kellnerbill@hotmail.com

Duane and Tracy Hillis

Duane and Tracy live in Utopia, TX. Duane has a Zenith 701 and may be contacted at: duanehillis@yahoo.com

NAME THE PLANE**Doug Apsey**

This month's mystery plane has something in common with our September mystery plane. Any guesses what that might be?



So, who will be the first to tell me:

What does this plane have in common with the XB-19?

What company built it?

What is its designation? i.e. C-172, PA-24, etc.

What role was it built to fulfill?

Within 5 years, what year did it first fly?

SEPTEMBER MYSTERY PLANE REVEALED

Doug Apsey

Our September mystery plane seemed to be a hit with our members. I received several emails and even a phone call



about it. Charlie Brame responded shortly after the newsletter was sent out with the correct answer, followed by Ira

Wagner and David Baker. Gen Julius Braun phoned me to tell me not only did he know what the mystery plane was but, as a child, he witnessed it in flight near his high school in California. Thank you again to Ed Seurer for coming up with another great "mystery plane" - the Douglas XB-19!

The XB-19 project was intended to test the flight characteristics and design techniques for giant bombers. The huge airplane made its maiden flight on June 27, 1941, out of Clover Field in Santa Monica, California. It was three years behind schedule and already considered obsolete by the time it made its first flight.

The Army Air Corp paid Douglas Aircraft \$1.4 million for the prototype XB-19 but the company invested nearly \$4 million into the project by the time it was released to the Army in June of



1942. Initial flight testing was done at March Field, California but in January, 1942, it was moved to Wright-Patterson Field, Ohio to move it well out of reach of any possible Japanese attack. While at Wright-Patterson, the huge bomber was converted to a cargo/transport aircraft but also served as a test bed for future aircraft design, construction and flight characteristics. This conversion included replacing the four original 18 cylinder, 2000 hp Wright R-3350 air cooled radials with four 2600 hp Allison V-3420-11 turbosupercharged twenty-four cylinder liquid cooled engines. The conversion increased the cruising speed from 135 mph to 185 mph and in-

creased the service ceiling from 23,000 to 39,000 feet. Its top speed was 265 mph.

The XB-19 was the largest US aircraft ever built until the Convair B-36 came along in 1946. The mammoth bomber was 43 feet high, 132 feet long and had a wingspan of 212 feet. The XB-19's empty weight was 86,000 lbs. with the R-3350's and 92,400 lbs. with the V-3420's. Normal loaded weight was 140,230 lbs. and maximum takeoff weight was 164,000 lbs. It was designed to carry a minimum crew of 11, maximum of 18, in its bomber configuration. It could carry up to 18,700 lbs. of bombs and was equipped with five 12.7mm Browning machine guns, six 7.62 mm Browning machine guns and two 37 mm autocannon. Normal fuel capacity to feed those huge engines was 10,350 gallons giving it a normal range of 5200 miles with the original R-3350 engines and 4200 miles with the Allison's. Additional tanks could be fitted in the bomb bays if the range needed to be extended. The XB-19 made its



last flight on August 17, 1946 when it was flown to Davis-Monthan Field in Arizona. It sat in storage until June, 1949 when it was scrapped. The huge main wheels/tires are all that remain today, one on display at the Hill

AFB Aerospace Museum, Ogden Utah and the other at the National Museum of the US Air Force, Dayton Ohio. While the XB-19 never saw production, the lone prototype provided valuable data for design features that were later included in future large aircraft such as the Boeing B-29 and Convair B-36.

To see more about the XB-19 including videos of the initial test flight, check out these two youtube links.

<http://www.youtube.com/watch?v=MKnnNjfVz7s>

<http://www.youtube.com/watch?v=XmhevFSctXg>



CHAPTER BULLETIN BOARD

LUNCH MENU:

GRILLED SAUSAGES

Please **BRING** your very best **SIDE DISHES** to share. We will also need salads and deserts.

Come hungry!

AIRSHOW NO. 7

OCTOBER 4-5-6, 2013

FLY-IN & CAMPOUT COMMEMORATING 102 YEARS OF

RANGER AIRFIELD



- **FRIDAY:** Hamburgers (\$5) 5:30 P.M.
Evening Airshow 7:00 P.M. (Airfield closed 7:00p-7:30p)
- **SATURDAY:** Breakfast (\$5) 7:00-9:00 A.M.
BARBECUE Lunch for Pilots/Passengers
Airshow 1:00 P.M. (Airfield closed 1:00p-2:30p)
- **SUNDAY:** Breakfast & Dawn Patrol 7:00 A.M.

VISIT: www.rangerairfield.org Identifier: F23 Elevation: 1470 ft.
CTAF: 122.9 Runway 01-19: 3415 x 75 ft. Turf, In Good Condition



WE NEED YOU!

The EAA Chapter 35 Nomination Committee invites nominations and volunteers for:

President, Vice President, Secretary

Please contact Nelson Amen or Doug Apsey to volunteer or nominate your buddy!



Elm Creek Airpark's
17th Annual Fly-In
Saturday, November 2, 2013

10am to 3pm
Lasagna Lunch starting at 11:30
\$9.00 per person
Raffle at 12 pm

FAA Identifier: OTX6
Multicom Frequency 122.9
2280 x 80 ft. turf
Elevation 550 ft MSL
4 mi. SSW of Seguin

AIRCRAFT PARKING

Monitor 122.9
Look for "Follow Me" golf carts
WX ASPS at BAZ
119.325 (830)629-7979

TRAFFIC PATTERN

RUNWAY 14 LEFT
RUNWAY 32 RIGHT
LAT/LONG: 29-30-18N/097-59-49W

Fuel @ New Braunfels 12 nm N
Aviation related questions?
Call Steve Sewell - 210-844-2156 or
email at sisewell@gmail.com

Sponsored by Elm Creek Homeowner's Assoc. Social Committee
For info and prior year photos see www.elmcreekairpark.com
Carol Sewell - Publicity - ? or carolamesewell@gmail.com

FREE VERY COOL BOOK
'B-2 Spirit of Innovation'

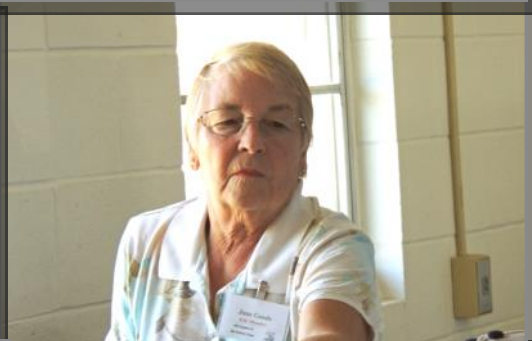
<http://www.northropgrumman.com/Capabilities/B2SpiritBomber/Documents/pageDocuments/B-2-Spirit-of-Innovation.pdf>

YOUR Articles Needed

This Newsletter is YOUR newsletter. I put the articles in it, but **you** have to write 'em! Your chapter needs YOUR contributions. Please share your experiences, skills and wisdom, photos, humor and announcements with our membership. What may be common knowledge to you, may be priceless for a new pilot or builder. Even if you are not a Pulitzer level author—send me your words, I'll buff up the grammar if needed. Send input to: ea35news@gmail.com

SEPTEMBER EAA 35 GATHERING AND A FEW VIEWS OF LAKE MEDINA THAT MORNING

Photos by Peggy Fisher. Thank you !!



MYSTERIOUS ARROWS AND LIGHTS (CONTINUED)

(Continued from page 1)

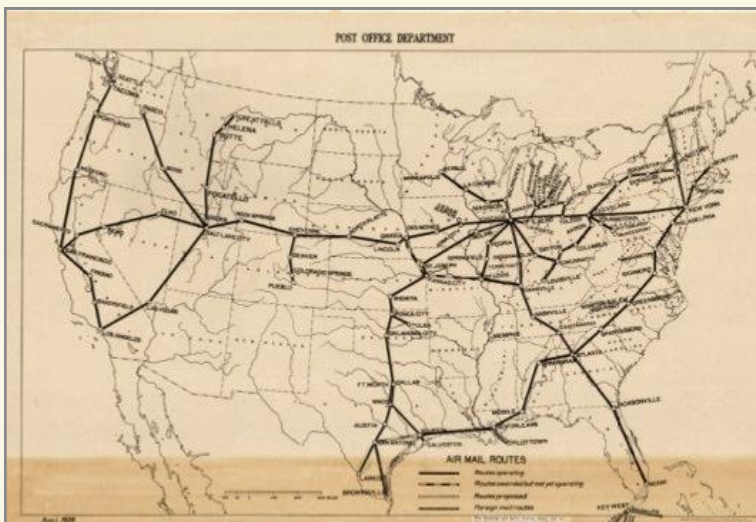
Hudspeth Auxiliary field northeast of El Paso. So why are there 75-100 foot long concrete arrows out in pastures in the middle of no-where? It wasn't for UFO's or Area 51 operations.

Shortly after WWI the airplane was seen as a possible way to deliver the mail more rapidly than train or other conveyance. At the time the US had a developing rail system that had only recently spanned the nation. But rail had limits in accessibility to rural areas, the US was growing rapidly and had entered a period of technological fascination. So mail delivery by air was proposed. And in 1921, to answer critics who viewed air-mail as an expensive unreliable luxury, a team of 6 pilots and 6 open cockpit biplanes led by Jack Knight who flew 3 night legs in a blizzard, demonstrated that it was possible to deliver mail from San Francisco to New York in 24 hours as opposed to the 3 days currently required by rail.

The night portion of this amazing feat was accomplished by navigating to bonfires set by volunteers and mail employees and hence the idea was born to create a lighted path across the united states. Developing on that concept, in 1923 the Army Air Corps developed a very bright rotating beacon powered by electricity or fueled by acetylene and demonstrated that pilots could navigate at night by them.

The postal service almost immediately launched an effort to develop an airmail route across the nation using those beacons. The first leg completed was the Chicago to Cheyenne leg, assuming it planes could make it westward to Chicago and eastward to Cheyenne in the daylight. "Beacons were

positioned every ten miles along the airway. At the top of a 51-foot steel tower was a 1 million candlepower-rotating beacon.



http://digitalvaults.org/images/assets/000/019/849/19849_dt_detail.jpg

Pilots could see the clear flash of light from a distance of 40 miles. Also at the top of the tower were two color-coded 100,000 candlepower course lights. These pointed up and down the airway. They were colored green, signifying an adjacent airfield, and red, signifying no airfield. The course lights also flashed a Morse code letter. The letter corresponded to the number of the beacon within a 100-mile

segment of the airway. To determine their position, a pilot simply had to remember this phrase – "When Undertaking Very Hard Routes, Keep Direction By Good Methods" – and know which 100-mile segment they were on."

The responsibility for establishing and maintaining the routes quickly became the responsibility of the newly established Airways Division in the Commerce Department's Bureau of Lighthouses due to the similarity in function. Under their



leadership a nationwide network of air-routes were developed and marked with beacons. Remember that in that time most of the United States was wide open space, there were no interstates and relatively few paved roads. This was especially true across the western US including West Texas. Stories abound from highly accomplished aviators

ending up totally lost and eventually landing somewhere in Mexico trying to navigate the endless open space even in daylight.

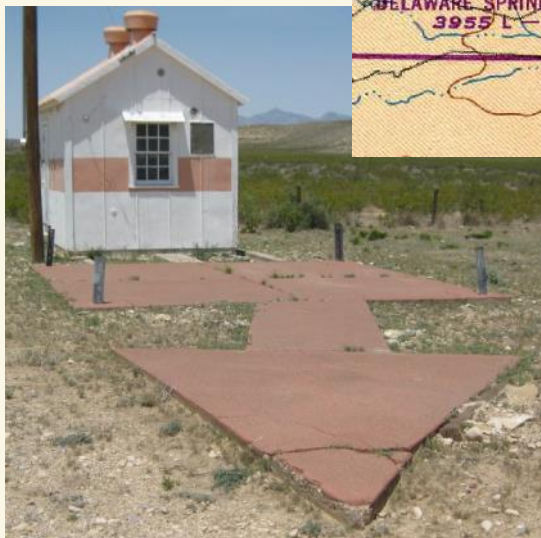
So the Department of Commerce created airways on the ground that would be useful for daytime and nighttime navigation. To do so they poured a large concrete arrow, most

(Continued on page 7)

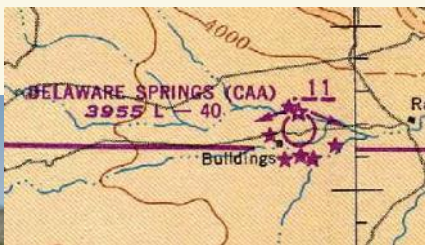
MYSTERIOUS ARROWS AND LIGHTS (CONTINUED)

(Continued from page 6)

around 70 feet in length, pointing to the next beacon at the base of each beacon tower. These huge concrete arrows were painted bright yellow. On the "feather" of the arrow they built the generator shed and painted it in bright orange and white with the number of the beacon and the name of the airway on the roof. They typically had a waistline band of black or orange. By 1933, the Federal Airway System included 18,000 miles of lighted airways with 1,550 rotating beacons and 236 intermediate landing fields.



The Arrow at the Delaware Springs airfield site in remote Northwest Texas along the El Paso to Fort Worth air route.



routes were important throughout Texas.

Dallas was a major East-West intersection as it linked the major east, west and southern routes and intersected the north-south routes from Houston, Galveston, Kansas City and to a lesser extent Laredo and Brownsville. The routes from the East via Houston travelled to Temple bypassing San Antonio. San Antonio was on secondary air routes from Brownsville and Laredo to Dallas, and a San Antonio-Houston route was also eventually established. Highway 281, Interstates 10 and 35 now travel roughly the same routes and studying the geological survey coordinates of the markers many of them were probably destroyed as those roads were constructed.

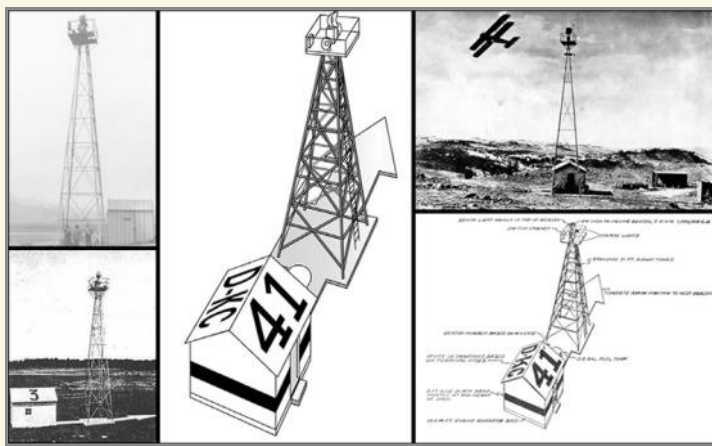
The beacons and arrows along the Brownsville-Dallas route are depicted on the 1934 aviation sectional on the next page. Of these, the beacon at George West airport (now Live Oak County 8T6) seems to still be standing, but I can find no other beacon or mounting pad/arrows around San Antonio. There are, though, still beacons and arrows in North and west Texas.

As air mail use expanded the Department of Commerce began to contract with civilian companies to provide services. These were Civil Air Mail (CAM) contracts and air mail carrier companies were created nationwide for these lucrative contracts.

As aircraft became larger and more capable, some CAM carriers began to carry passengers if space and weight permitted and hence companies like Western Airways, Eastern Airways and American Airways were founded and eventually became major passenger lines.

Pre-WWII, Texas was a vast wilderness for the most part. That is in large part why the Army Air Corps planted dozens of airfields all across Texas – there was no one to disturb, and if a plane crashed it wouldn't hit anything. Even Kelly field and the new modern Randolph field were way out in the middle of nowhere. So marked air

The Landing Field in San Marcos looked promising as it is so clearly demarcated by the rivers. In fact it was the San Marcos Intermediate field and later Thompson Field, and the site of beacon #30. According to information on Abandoned and



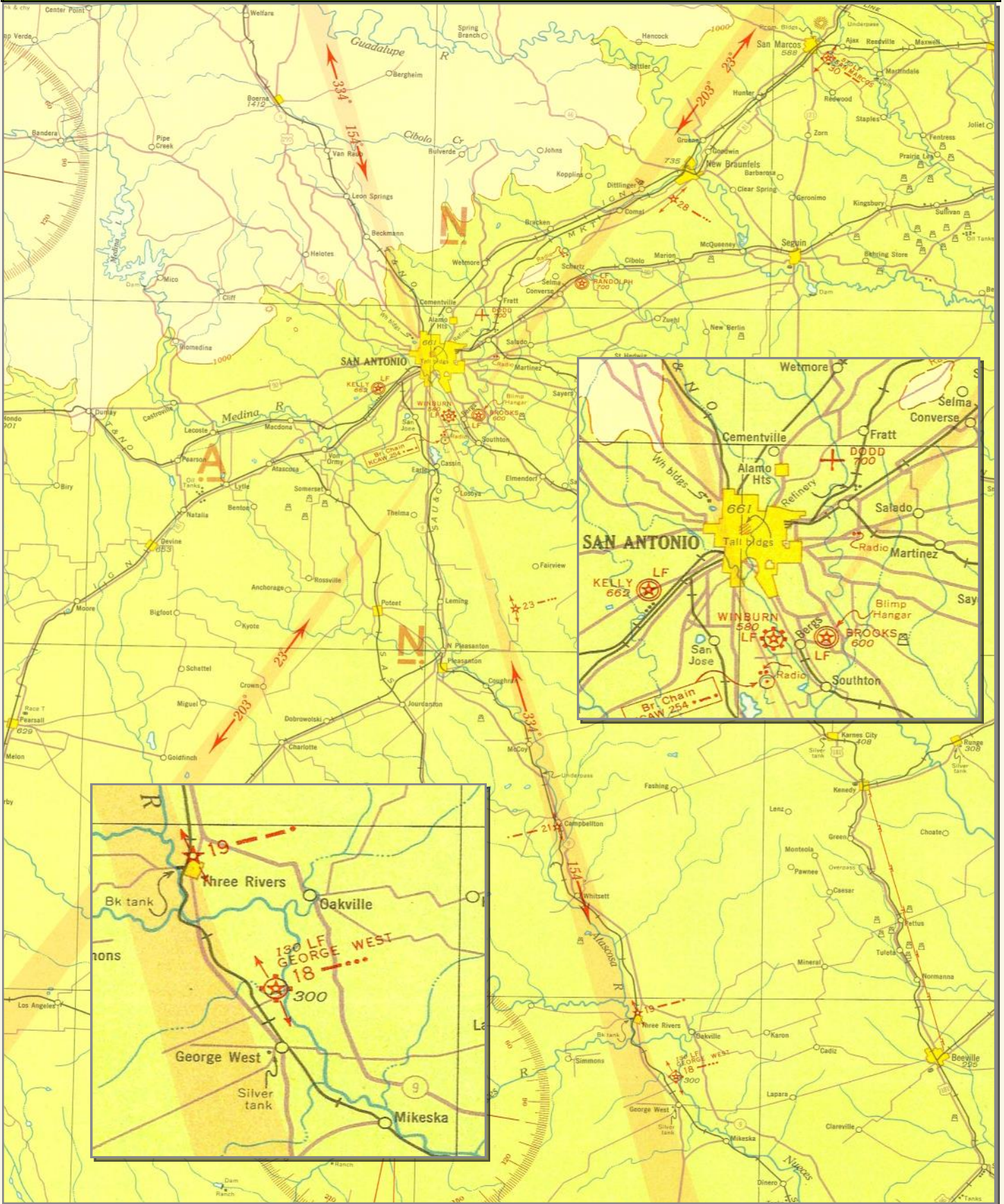
Little Known Airfields.com (http://www.airfields-freeman.com/TX/Air-fields_TX_Austin_W.htm), which I highly recommend, the airfield was used for training including some students at Southwest Texas State Teachers College under the War Training Service (WTS). The airfield was abandoned sometime

between 1953-55 and since that time all traces of the hangars and markers have vanished. The photos depict then and now.

Eventually the lighted air routes were replaced by radio. By

(Continued on page 9)

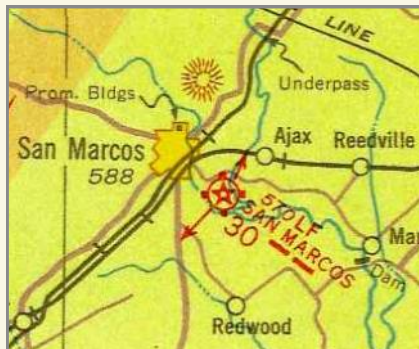
MYSTERIOUS ARROWS AND LIGHTS (CONTINUED)



MYSTERIOUS ARROWS AND LIGHTS (CONTINUED)

(Continued from page 7)

the 1930's San Antonio had a radio beacon just south of Stinson Field (then called Winburn Field) that enabled aircraft to stay on one of 4 prescribed vectors. And with subsequent development of omnidirectional radio systems there was little need for the high maintenance intermediate beacons. Many beacons were dismantled and some moved to airports beginning in the 1940's. Some sources suggest that during WWII the bright yellow markers were often camouflaged or destroyed fearing they would guide invading forces and surplus beacon towers became scrap metal sources. As late as 1965, though, the federal government still maintained lighted air routes across open spaces of the country and some beacons remain in operation in those areas today. Most, though, exist only as unexplained relics whose importance is only recognized by students of aviation history.



1934 sectional depiction of the San Marcos Intermediate field. (L) upper an aerial photo from 1945. L bottom Google earth imagery from the present

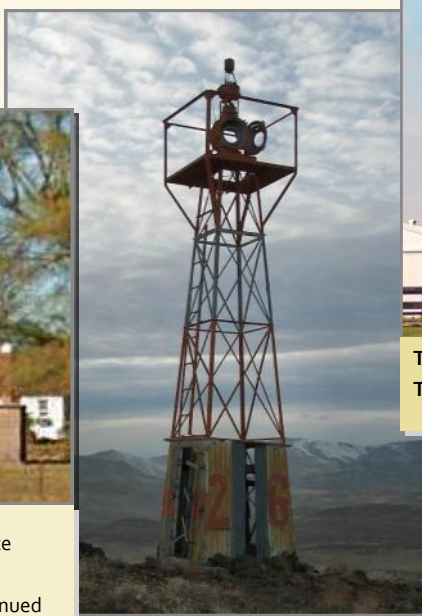


explore, take a look along the old air routes. There are still signs of an amazing history of pioneering aviation all around us if we look. The lighted air route of the United States was a monumental achievement and one of the most significant events in aviation history. Its vestiges are well worth finding and preserving. So, if you find any of these artifacts please share them with the rest of us. Perhaps we'll have to take a chapter exploring trip!

And finally, the answer to the question is in the text above. Beacons that were located at a landing field were lighted with a green route beacon and the white Morse code beacons. Route beacons not associated with a landing field were red – “don't land here”. So, the beacons that remain, with few exceptions, are green beacons signifying



This is a beacon on the Shreveport to Dallas route (along SR 259 north of Judson). One internet contributor says the owner/maintainer has continued to keep this beacon lit. (Image from Google Earth)



This week, while driving

across a stretch of Missouri I'd driven a hundred times before, I glanced to the side of the interstate and there, indeed, was an old Airmail tower. So, the next time you have a hankering to



This beacon tower marks a former landing field near Truxton Missouri along I-70.

they are on an operating/open airfield, and military fields still flash a white “ - - “. I suspect but can't confirm this was for “M” in Morse code.

1. John Schamel: The Development of Night Navigation in the U.S. By <http://www.atichistory.org/History/nightnav.htm>
2. Brendo J. Spivey: Airway Beacons, on Integral Port of Montana's Night VFR Navigational System: Past History, Present Service, and Present Value. <http://www.eaa517.org/newsletters/AirwayBeacons.pdf>



TECH WATCH

ANR HEADSET for UNDER \$200

Doug Apsey

Many of us are old enough to remember the days of relying on the ceiling mounted speaker and a handheld microphone to communicate with the tower or other aircraft while communication between instructor and student usually involved a lot of yelling and gesturing. I got so I was pretty good at reading my instructors body language back then. Eyes wide-open, hands slapping mine off the control yolk and a high pitched scream coming from my right usually meant I was doing something really stupid. His other body language was often more subtle but equally informative.

Reading an instructors body language is probably becoming a lost art because today, with modern headsets and intercoms pretty much standard equipment, the instructor can get his/her message across with far less effort. Cockpit communication has vastly improved over those good old days of aviation. In fact, I can now listen to my favorite tunes on my iPod plugged into the intercom, talk to ATC, and carry on a conversation with my passengers all at the same time. One other major advantage to our modern headsets is we are no longer causing permanent damage to our hearing – unless of course you have that Heavy Metal music coming from your iPod cranked up too loud.

In an attempt to make cockpit communication even better, and preserve our hearing in the process, several manufacturers have come up with Active Noise Reduction (ANR) headsets. These units are very impressive and really do make flying more comfortable. However, as most of you know, they are also quite pricey with the top of the line models going for almost a grand or more. But there is an option available to you if you already own a passive noise reduction (standard) headset. A company called Headsets, Inc. out of Amarillo makes an ANR conversion kit for most brands of headsets that will convert your standard headset to an ANR headset.

Check out their web site at www.headsetsinc.com. The web site has a list of headsets that the ANR kits will fit and it is quite extensive so chances are they make a kit that will work for your headset.



Figure 1. Peltor 7004's converted to ANR

I converted my David Clark H10-40 headset using one of these ANR kits a couple of years ago and just recently converted a set of Peltor 7004's (FIG 1). The cost is \$169 for David Clark kit while the Peltor kit is \$189. The kit includes the ANR modules, gel ear seals, battery box with power cable, wire and even the solder (FIG 2). I chose to go with the optional integrated headset/power cable (AMP cable) for an additional \$20 which gives a cleaner finished product.

I also purchased the battery box with auto shut-off option that added another \$10 to the kit cost. I figure I've easily spent that much in 9 volt batteries



Figure 2. The kit includes the ANR modules, gel ear seals, battery box with power cable, wire and even the solder

(Continued on page 11)

TECH WATCH (CONTINUED)

(Continued from page 10)

from leaving the unit on so highly suggest you consider that option. Installing the kit can be a little challenging but certainly a reasonable endeavor for most. The company provides nice instructions and wiring diagrams to step you through the process. If you can follow a schematic and strip and solder fine wires, you're going to be fine although it can



Figure 3. it can look a little overwhelming when you first look at all those wires

look a little overwhelming when you first look at all those wires (FIG 3). And, like most things that say they will take X hours to complete, just multiply that number by 2 and you'll be much closer to reality.

Now, you're probably wondering how these perform compared to the \$1K ANR headsets that are out there. I've only tried the Lightspeed Zulu's and must say they were awesome but my modified DC's and Peltors certainly do a great job for a lot less money. If you are interested in modifying your headsets and would like to take mine for a test flight, I will be happy to let you give them a try.



NOVEMBER FLY-MART!

Hey fellow EAA Chapter 35 members, it's been over a year since our last fly-mart and if you are like me you have collected more stuff that someone else needs more than you do. So, it's time to look through the hangar to find those items left over from your project or search the closet for those aviation items you forgot you even had and bring them out to San Geronimo to sell.

Our fly-mart will be on November 9th from 0900 to 1100. Set up will start at 0800. We are doing away with the bid sheet concept we used last year so this year you will need to man your table during the sale. The location will either be on the patio in front of the clubhouse or in one of the hangars if the weather does not cooperate.

Please contact Doug Apsey at 210-913-2539 or email at dapsey@satx.rr.com if you plan to bring items to sell or have questions. If you have a table you can bring for your items, please plan to do that since the chapter does not have many extras. We are not charging anything to participate in the fly-mart but \$\$ donations to the chapter are always appreciated.



(from Redbird website): How does fuel price really influence aviation activity?

The data is clear: the General Aviation fleet is flying less and less, but what these reports don't tell us is why. This October we invite you to fly to Skyport, top off your tanks, and give us your insight into what keeps you on the ground when you could be flying. This study is the result of a partnership of GA companies and organizations that have a deep appreciation for aviation and pilots. As an industry we need to identify the reasons, fuel price or otherwise, that influence aviation activity – then use this data to make a change.

What: 100LL- \$1.00 per Gallon

When: October 1st to 31st, 2013

Where: Redbird Skyport, San Marcos Airport- KHYI

Who: Any piston engine aircraft that can fly to Skyport under its own power

Still not sure it's real? Check out our FAQ's at <http://redbirdskyport.com/flymore/#FAQ>

THE BUILDER'S CORNER

DOGS AND CATS

Mark Julicher

This month I don't have a particular traumatic event to relate, but as I work around the airport some of the darndest things happen. So I thought I would present a handful of "dogs and cats" that should be of interest. Perhaps one of these short items will help you.

Nose Wheel Shimmy

My good friend Jim Hurd has been flying his RV-12 for about a year but he had a nagging problem. While cruising in smooth air he had a small but persistent vibration which could be seen on the nose bowl and spinner. In order to troubleshoot the problem Jim asked other RV-12 owners about their experience but no one else was experiencing his problem. He asked every airplane owner/builder at the airport and got several ideas. So started a sequence of test-fix-test until the problem was solved.

First Idea: Something in the engine is shaking.

Jim ran the engine with every conceivable accessory tightened, loosened, on, off, but the problem did not appear! Many of his friends stood around and watched the engine with the cowling off and everything just ran smoothly on his Rotax 912.

Second idea: There is an aerodynamic imperfection in the nose wheel fairing causing the vibration.

Jim began a series of short hop flight tests in various configurations.



RV-12 nose wheel with fairing

First, Jim removed the fairing on the nose gear leg

and flew the plane. The vibration was present. Next, Jim removed both the wheel pant and the gear leg fairing – the vibration went away. AhHa! We are getting somewhere! Finally, Jim re-installed the gear leg fairing but left off the wheel pant – no vibration! The bad actor appears to be the wheel pant – but why?

Third idea: Change the CG and moment of the wheel pant and the vibration frequency should change/disappear.

Jim put the fairing and wheel pant back on, but he tie-wrapped a 7/16 wrench inside the trailing edge of the wheel pant. Jim thought a 7/16 had just the right heft to make a decent CG change – Hey! It is an experimental aircraft and this was certainly in the best spirit of experimentation.

On the next flight the vibration returned. Hmmmm, probably not a CG/mass balance problem. Now what? As Jim was devising various ideas to mutate the aerodynamics of the wheel pant, one of the other airport bums suggested getting a look at the problem using a Go-Pro camera. Brilliant! No need for special approvals here – just lash a Go-Pro to the cockpit entry step and go fly.

When Jim reviewed the video he discovered to his amazement that the nose tire was spinning in flight. Air friction on just the lower half of the tire was sufficient to get the wheel spinning and the wheel assembly was just enough out of balance to cause a side-to-side shimmy. Amazing.

Jim's fix was to tighten the axle just a little and put a bit of a load on the wheel bearing. It worked! No more vibration. The spinner and nose bowl hold smooth and steady.

Deviant Compass

What could be more innocent and normal than your daughter



(Continued on page 13)

BUILDERS CORNER (CONTINUED)

(Continued from page 12)

asking if her Minion doll could ride up on the glare shield? There ought not be any problem in allowing the little stuffed creature from have a good ride. And who doesn't like the little dudes from "Despicable Me"? Harmless ... almost. One of our local pilots discovered that the autopilot and DG were behaving strangely when the Minion was allowed to ride on the glare shield. Wow. Somebody moved Boerne to where San Antonio used to be! And the sun is now setting in the South. Oops. Sorry little Minion, no more glare shield rides for you. But why? A quick check with a bit of iron showed that there was no magnet in the doll. Ahhh, but there did not have to be a magnet in the doll because the magnet is in the COMPASS!

Somewhere buried in the little critter was enough ferrous metal to attract the compass. The evidence is the tilted compass in the photo. You might not notice the compass being tilted on a slightly turbulent day, but sitting still on the ramp the story was obvious.

Sanded fitting

The AN fitting shown below appears to be a perfectly ordinary, albeit dirty, elbow. This little guy was directing oil into an oil cooler – and doing a very fine job of it – until one day the oil cooler began to leak.



AN elbow – This side appears to be OK

Of course the new oil cooler did not come with elbows, so the old elbows had to be transferred to their new home. However, something was not quite right. The underside (read that, the hard to see side) of one elbow had a large flat spot on it. In fact, the metal was being rubbed

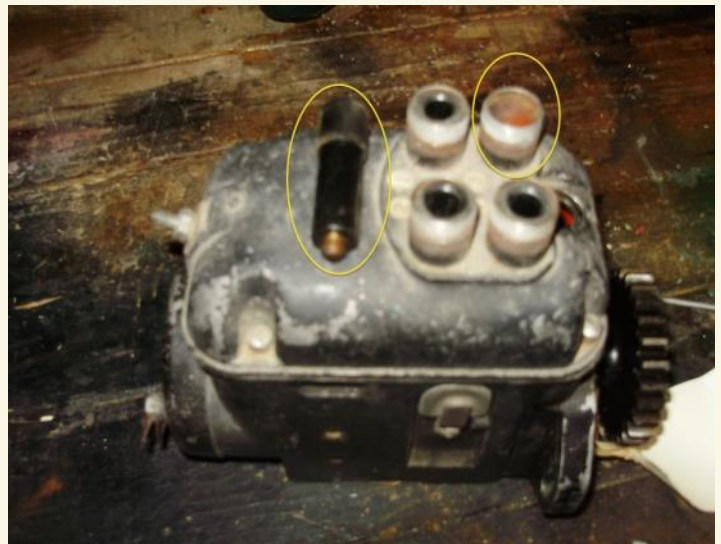
by vibration against the fiberglass nose bowl and had been abraded until a considerable amount of metal was gone. I estimate that less than .020 inches of metal remained before this elbow would have become an oil nozzle. That can't be good.



AN elbow on the other side is nearly worn through.

Ignition Woes

Several of us have been chasing an ignition problem on the "Mighty L-5" Stinson Sentinel that belongs to the Tex Hill wing of the CAF at Hondo. I'm from the school that when something breaks, try the cheapest possible solution first. So when we got a magneto drop of 200 on the left mag, and one cylinder was obviously not firing, we changed the spark plugs and started the engine again. But the problem was not solved. After several more hours trying various fixes, the problem turned out to be twofold.



Bendix magneto with a Bakelite cigarette removed and its empty hole highlighted

(Continued on page 14)

BUILDERS CORNER (CONTINUED)

(Continued from page 13)



Frayed ignition shield wire exposes soft silicone

First, one of the Bakelite inserts, aka "cigarettes" in the left magneto was cracked.

Those of you with the ancient Bendix lunchbox mags know of what I speak.

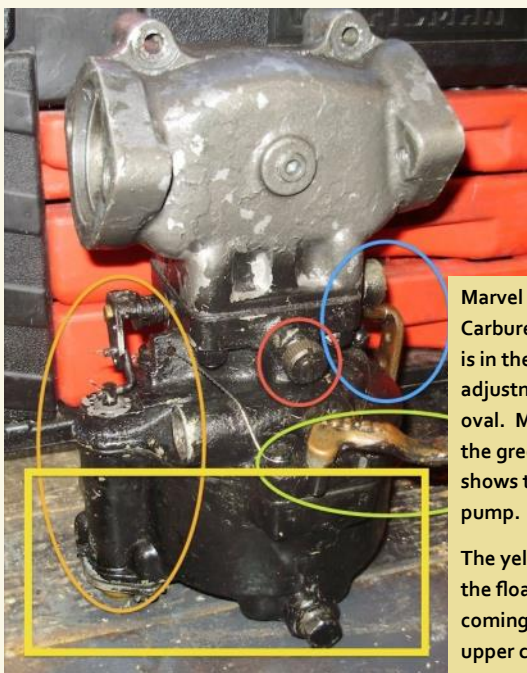
These parts are delicate and scarce. Unfortunately, no sooner had we replaced the cracked cigarette than an ignition lead broke – this time on the right magneto. Ouch. Unfortunately, this is all part of owning antique airplanes.

Most of us change spark plugs regularly, and most of us are aware of the periodic inspections required on our magnetos, but there is very little in the service manual about the ignition harness. If your harness looks like this photograph, you may be in for some problems real soon. By the way, when ordering an ignition harness, ONE harness is enough wire for hooking up TWO magnetos. If only one magneto has bad wires then you need a HALF HARNESS.

Carburetor

A month or two back I was shutting the engine down after a flight and it just would not quit.

The engine sputtered and chugged and continued to run albeit poorly.



Marvel Schebler Carburetor. Throttle arm is in the blue oval. Idle adjustment is in the red oval. Mixture control is in the green. Orange oval shows the accelerator pump.

The yellow rectangle is the float bowl which was coming loose from the upper carb.

I shut the engine down with the ignition switch and removed the cowlings to have a look. Nothing looked out of the ordinary. The throttle was connected, the mixture was connected, and both cables exhibited full throw. This could not be good! I removed the carburetor and upon closer examination I discovered that the lower float bowl half of the carburetor could be wiggled independently of the upper half of the carburetor. Amazing. I am not sure how or why the body screws backed off, but they did, and vibration destroyed the integrity of the gasket. I doubt that this engine could have run another ten hours before failure or fire.

I took the old Marvel Schebler to the accessory shop and had it overhauled (cha-ching) It runs oh so much better now!

Mark Julicher is an EAA technical advisor and frequent contributor to this newsletter for which the editor is immensely grateful. He can usually be found at Bulverde Airpark and would love to help you with your technical issues. His contact information is in the back of this Newsletter.



WEBMASTER UPDATE

Dave Baker

From your website editor: <http://35.eaachapter.org>. The hosting service for our website is experiencing some problems with the app that they use for documents which is what I use to post our newsletters on. So in order to keep posting our newsletters they have created a "work-around" system to use.

When you go to the website now you will see a new sidebar on the left that states "Newsletters (and more)".

Click on that sidebar and it will bring up the newsletters starting with the September issue.

You can still access the older newsletters through the original Newsletter sidebar.

We still have a lot of our members who have not joined the "Members" page. We created this page so everyone could post their mug (so we can see what you look like and remember you!) and also you can post a chronicle of your aviation history if you desire. This helps some of us "senior" members with our memory recall, huh?! While you are browsing through the website check out the "Photo Gallery-Planes-Events" page. You can submit pictures / videos to post on the website by sending them to me at iflyaerosport@sbcglobal.net.

Thanks, Dave Baker



Country Store

NEW CHAPTER 35 FUND RAISER FOR THE 2013 CHRISTMAS SEASON

Brian Goode

Your Country Store has been searching for a nice quality piece of logo merchandise to offer EAA Chapter 35 members and friends for several months. We have finally decided on a current trendy item, one that every pilot should have a couple of in their wardrobe.

They are known as "Fishing Shirts" as they have four pockets in the front for stashing things, such as lures and leaders. They also work for cell phones, small led flashlights, pencils and sunglasses for flying. They have a vented back for air circulation and button down collars. The men's long sleeve version has a button tab so when the sleeve is rolled up, you can keep it from inadvertently rolling back down. They are cool in the summertime. They are also "cool" dude.

These shirts are Tiger Hill Brand and are available in men's and ladies short and long sleeve versions. Made of 52% cotton and 48% polyester, they are reported to have great wrinkle and stain resistance. The standard sizes are XS, S, M, L and XL. Five basic colors have been chosen for the Chapter. They are Royal Blue, Sky Blue, Yellow, White and Khaki, for everything but the ladies' long sleeves and these are only available in Lavender, Pink and



Sky Blue.

The shirts are \$39.00 for the short sleeve ones and \$43.00 for the long sleeve version. Larger sizes are available for another \$2.00. Prices include 8.25% combined state and local sales taxes. Even though we are a tax exempt organization, our Treasurer has assured us that we must collect this tax as it is a "fund raiser" activity. We don't have to pay taxes when we purchase items.

An order form is located on [page 21](#) of the digital newsletter and from the Country Store, so just fill it out and get it to Brian or June Goode at either the address in the directory, by stopping at Hangar 53 on San Geronimo Airpark, or by calling 210-688-0420, or 727-709-1159. If that doesn't work, give your order and money to any of the board members.

Operators are standing by. We need to turn in a nice sized quantity order so they will be available in time for Christmas presents. We also still have the usual ball caps, bumper stickers, wheel chocks, and a couple of Tervis Tumblers left in the Store, so stop by and buy something.

All proceeds go to your EAA Chapter 35 general operating fund.

EAA CHAPTER 35 CATALOGUE

Caps:

Cloth Chapter 35 and EAA Notional caps	\$10
Mesh Chapter 35 logo caps	\$5
SWRFI caps (collector's item)	\$8
Denim Shirts: Only 2 Large Short sleeve left	\$20
Tervis Tumblers	\$16
Chapter 35 cloth logo patches (sew on)	\$3
Bumper stickers	\$2
Chapter 35 logo stick-on stickers (Per inch)	\$2

These stickers are only available by special order. It is the same logo that is used in the tumblers. They can be made for you at \$2.00 per diameter inch. They can be made as small as 2.5" and as large as 48" in diameter. In order to have some economics of production, we need to have at least a dozen orders before they will be produced.



2012 EAA Chapter 35 Contacts List



President: 210-834-1991	Officers Nelson Amen nelson.p.amen@gmail.com	Builders Academy 210-688-9072	Lew Mason lewnan@sbcglobal.net
Vice President: 210-913-2539	Doug Apsey dapsey@satx.rr.com	Young Eagles 210-380-2025	Brad Doppelt brad_doppelt@yahoo.com
Secretary 210.540.8926	BJ O'Dea iknit8t8@gmail.com	Flying Start 210-380-2025	Brad Doppelt brad_doppelt@yahoo.com
Treasurer 210-493-5512	Dee Brame DeeB@satx.rr.com	Tool Crib 210-382-9658	Don Woodham dhw_2@yahoo.com
	Board of Directors	EAA Hangar: 210-382-9658	Don Woodham dhw_2@yahoo.com
	Past Presidents	Public Affairs 210-494-7194	Bill Bartlett bbartlett5t@satx.rr.com
John Latour	860-612-2232 latourjohn@att.net	Membership 210-488-5088	Ron O'Dea r2av8r@gmail.com
Lew Mason	210-688-9072 lewnan@sbcglobal.net	Website 210-410-9235	Dave Baker iflyaerosport@sbcglobal.net
Dave Baker	210-410-9235 iflyaerosport@sbcglobal.net	Country Store 727-709-1159	Brian Goode ladybgoode@msn.com
	At Large		June Goode junegoode@msn.com
Brad Doppelt	210-380-2025 brad_doppelt@yahoo.com	727-439-1159	Flight Advisors
Brian Goode	727-709-1159 ladybgoode@msn.com	RB 'Doc' Hecker	210-391-1072 tcflyingdoc@yahoo.com
Ron O'Dea	210-488-5088 r2av8r@gmail.com	Mark Julicher	210-382-0840 mjulicher@earthlink.net
	Chairpersons		Technical Counselors
Facilities 210-688-3210	Gail Scheidt gailps@att.net	Brad Doppelt	210-380-2025 brad_doppelt@yahoo.com
Newsletter 210-878-5561	Chuck Fisher eaa35news@gmail.com	Mark Julicher	210-382-0840 mjulicher@earthlink.net
Air Academy 210-256-8972	Maarten Versteeg maarten.Versteeg@sbcglobal.net	RB 'Doc' Hecker	210-391-1072 tcflyingdoc@yahoo.com
Garden & Grounds 210-688-9072	Nancy Mason lewnan@sbcglobal.net	Lew Mason	210-688-9072 lewnan@sbcglobal.net
Board Advisor 830-438-9799	John Killian jmkilliani@gmail.com		

The FINE PRINT: Please note that, as always, in the past, present, or future, any communication issued by the Experimental Aircraft Association Chapter 35, regardless of form, format, and/or media used, which includes, but is not limited to this newsletter and audio/video recordings, any digital formats including any EAA Chapter 35 website, is presented solely for the purpose of providing a clearinghouse of ideas, opinions, and personal accounts. Anyone using the aforementioned does so at their own risk. Therefore, no responsibility or liability is expressed or implied and you are without recourse to anyone. Any event announced and/or listed herein is done as a matter of information only and does not constitute approval, control, involvement, sponsorship or direction or any event local or otherwise.

CHAPTER CALENDAR

OCTOBER	12	<u>DAYTIME MEETING</u> David Larson "Idaho Backcountry Flying."	EAA Chapter 35 Clubhouse Lunch 11:30 am Meeting/Program 12:30 pm
NOVEMBER	9	ANNUAL CHILI COOKOFF AND FLY-MART Annual Membership Meeting	EAA Chapter 35 Clubhouse EAA 35 Fly-Mart 9:00 am to 11:00 am (POC Doug Apsey at 210-913-2539) Chapter 35 Annual Membership Meeting/ Election of officers 11:00 am to 12:00 pm Chapter 35 Annual Chili Cook-off 12:00 pm to 1:00 pm or until gorged!
DECEMBER	14		EAA Chapter 35 Clubhouse Social Hour 12:00 pm Lunch 12:30 pm Gift Exchange 1:30 to 3:00 pm

Upcoming Events (200 mi of 8T8)

Aviation Calendar of Events websites

Aero Vents <http://AeroVents.com>

EAA <http://www.eaa.org/calendar>

Fly-ins <http://www.flyins.com>

Fun Places <http://funplacestofly.com>

FRI - SUN OCT 4 - 6 RANGER FLY-IN & AIRSHOW No.7

Campout and Barbecue

F23 Ranger Municipal Airport Ranger, Texas, USA

Commemorate 102 years of Ranger Airfield. Visit the airfield's web-site <http://rangerairfield.org/> for more info

Distance: 176.8nm

Sat 12 October 1200 noon

Anderson Aviation BBQ

Bulverde Air Park (1T8)

22 .7 NM

Saturday, October 5, 2013 8:30 AM - 12:00 PM

Young Eagles!

Coulter Airfield, Bryan, TX, USA (KCFD)

<http://www.eaa1531.org/>

147 nm

Saturday, October 5, 2013 8:30 - 11:00 a.m.

McGregor Executive Airport - Waco, TX (KPWG)

Fly-In, EAA Chapter 59 cooks it up!

141nm

Saturday 12 October, 2013

Young Eagle Rally

New Braunfels - New Braunfels, TX (KBAZ)

Free pancakes coffee and discount fuel.

41.nnm

Saturday, Oct 19, 2013 10:00 AM. -- 4:00 PM

Hearne, Texas (KLHB)

Camp Hearne Living History Event

WWII re-enactors, B-25J Mitchell Bomber, the Yellow Rose, and a Douglas C-47 Skytrain transport.

160 nm

Saturday, Oct 19, 2013 11:00 AM - 2:00 PM

KHYI San Marcos Municipal Airport

Brisket Fly In & \$1 a gal 100LL

You will have to Taxi to Redbird and fill out a survey for the special fuel pricing. Then come over 1000' to the right of Redbird and enjoy Brisket, Beans and Potato Salad. Working Engine Monitor displays from JPI, E.I. and Alcor will be set up for you to look and learn. Also on display will be specialized equipment we use that a lot of shops don't have. Brisket plate for \$5 and 100LL for \$1 a gal

Distance: 53.9nm

Saturday October 19, 2013

Fly-In BBQ

Jasper County Airport - Jasper, TX (KJAS)

260nm

Saturday, 26 October, 2013 0800-10:30

Granbury Municipal Airport (KGDJ)

Fly In Breakfast (rain or shine)

Phone: 817-579-8533

183.nnm

Saturday, November 2, 2013 8:00 AM - 4:00 PM

The Great Southern Sonex Gathering

Coulter Airfield, Bryan, TX, USA (KCFD)

<http://gssg.robbarber.com>

147nm

WANTED AND FOR SALE

FOR SALE: Complete RV-8 Quick Build Kit with O/H Lycoming IO-360 engine (minus starter/mags/prop) - \$50K Contact: RB "Doc" Hecker at www.assenddragonaviation.com or tcflyingdoc@yahoo.com (expires Nov 2013)

FOR SALE: Early RV-3 kit. Tail; feathers, flaps and ailerons finished and primed. Wings are finished but are the old version and only useable for parts. Have cowling, windshield structure, gear parts, wheel pants, engine mount, etc. All sheet metal and formed bulkheads for fuselage. Zero time Lycoming O-320-E3D engine with all new parts. Include engine log book and builder's log. Health forces sale. Tom Gould 830-663-4448 or nazca9t@hughes.net (expires NOV 2013)

FOR SALE: Subaru EJ-22 engine, Ser. # 589390. Includes single 4-barrel carburetor, Mallory ignition, planetary reduction drive. Proven system, removed from flying aircraft. \$3100 Chuck @ 979 218 6153 (expires Nov 2013)

FOR SALE: Hegar brake master cylinder. 7" single control, Bore size - 5/8" (0.625). Includes brake bleeding kit, misc. fittings. \$95 Chuck @ 979 218 6153 (expires SEP 2013)

FOR SALE: Main wheels for UL or light experimental. One pair Matco Model MH6B wheels, with brake calipers, new brake pads, new wheel bearings, new Air Trac 15X6.00X6 4-ply tires. \$295 Chuck @ 979 218 6153 (expires Nov 2013)

FOR SALE: One unused Air Trac 15X6.00X6 4-ply tire. \$40 Chuck @ 979 218 6153 (expires Nov 2013)

NEW HANGARS FOR RENT @SAN GERONIMO AIRPARK

Available soon - construction is almost complete. 40 FT. Wide x 32 FT. Deep



Reserve one now by contacting either:
Brian Goode
(210)-688-

0420 (727)-709-1159 n9785b@gmail.com -or- Ron O'Dea
(210)-488-5088 r2av8r@gmail.com (expires NOV 2013)

HANGAR SPACE FOR RENT (8T8): I will have a t-hangar (30A) available 6-1-2013 Contact. Doc Hecker. 210-391-1072. (expires Nov 2013)

FOR SALE: Hangar at Boerne Stage Airfield, 5C1. 30' x 40', elevated office and storage, shop, storeroom, and, toilet. Airport fee \$540 per year, includes water, trash disposal and runway access. See at HangarHunter.com



Contact Bill Bartlett 210-865-4591 Email: bartlettsat@gmail.com (expires Nov 2013)

For Sale: C-85-12 fresh overhaul with log. Std crank, .015 fresh ground cylinders, new rings, bearings, valves and pistons. \$7000. Dan Martinez. 210-269-1920 (expires Nov 2013)

Airpark Property For Sale: One acre lot at San Geronimo Airpark. Water and electricity, buyer installs septic. Plenty of shade on this treed lot with large open area for hangar. Asking \$109K, contact Gary at (210) 722-2977 or gary@zwheelz.com (expires Nov 2013)

For Sale: ROTAX 582 BLUE HEAD • \$4,000 • YOU SNOOZE, YOU LOSE • 582 Blue Head 120 hrs. Runs perfect. Jet Hot Coated exhaust, Stainless Clamps, Warp Drive 3 Blade 68"pusher prop, C box 3:1 with RK400 Clutch, Grand Rapids EIS with all senders .Rotax electric starter. Will include Motor Mounts If needed. Will be on plane a couple weeks if you want to hear run. Contact Chuck Sharrar Sharrc10@hctc.net 210-861-9331 (expires Nov 2013)

To post an ad—contact the editor at ea35news@gmail.com.

- **You must be an EAA 35 member.**
- **Ads will run for 3 Months from the last date you re-verify that the item is still for sale. If I do not hear from you the ad will be deleted**
- **PLEASE Notify me when your item sells!!**



Wash Wax All
 All surface non-stick cleaner
 Leaves a non-stick protective coating on every thing you clean
 Aircraft, Auto, Marine, RV

Hgr 64E - San Geronomo Airpark
 (210)-710-6063
 email: joe@killough.us



9503 Middlex
 San Antonio, TX 78217
 Sales Hotline 800-324-2359
 Tel 210-820-8101
 Fax 210-820-8102
 www.eci.aero



ECI is recognized for Quality Management System Registration to ISO 9001:2000



The Pilot Shoppe
 JANET SHIRES
 President

(210) 524-9525
 (210) 524-9526 (Fax)
 1-800-205-9525
 (210) 367-3477 (Cell)

600 Sandau Rd., Suite 100
 San Antonio, TX 78216
Mon-Fri 10am-6pm
 pilotshop@aol.com

Tony Seurer
 Owner (210) 656-3839
 Fax(210) 656-4012

Seurer Electronics
 Sale - Service - Rentals



- Dealer of Canon (Copier & Fax) 
- Printers
- Paper Shredder
- Dictation Units
- Calculator

4514 Walzem
 San Antonio, Texas 78218
 tony@copiersalesnservice.com



Richard B. Hecker, D.O.
 Senior Aviation Medical Examiner

29890 Bulverde Lane
 P.O. Box 279, Hangar 38
 Bulverde, TX 78163

CP: (210) 391-1072
 Fax: (830) 980-8866
 Email: tcfllyingdoc@yahoo.com



Clint Cook
 Branch Manager

Office (210) 227-8333
 Toll Free (800) 451-7282
 Fax (210) 227-8337

Distributor of Aircraft Parts
 Paint and Accessories

TEX-AIR PARTS, INC.

www.texair.com
 cook@texair.com

135 Braniff Drive
 San Antonio, Texas 78216



STARSHIP DESIGN LLC
 AVIATION GRAPHICS

Kris Niswonger 210-857-6008
 starshipdesignllc@gmail.com



2376 Bulverde Road, Suite 112
 Bulverde, TX 78163-4593
 (830) 386-4236
 (210) 745-1750
 Fax (830) 515-5941

GERALD SABOE, DO MPH, COL USAF RET
 MATTHEW WAACK DO MPH, CAPT USN RET
 CHARLES R. FISHER JR. MD MPH, COL USAF RET

Specialists in Aerospace Medicine
 FAA Senior Aeromedical Examiners (AME)
 www.saboeavmed.com

This space could be yours!

To place an ad, please contact Dee Brame at
 DeeB@satx.rr.com

Paste Address Label Here

Ron O'Dea, Membership Chairman
15464 FM 471 W., #14
San Antonio, TX 78253

The Official Newsletter of EAA
Chapter 35, San Antonio, TX

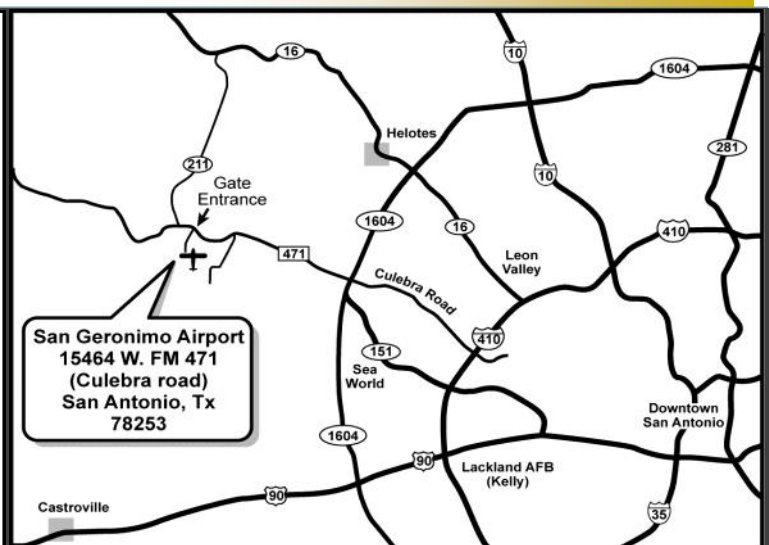
*Chapter 35 meets
Each Second Saturday of the Month*

**October 12th
Chapter Gathering
and Program**

11:30 Lunch

12.30 Program

Chapter 35 Clubhouse at 8T8



EAA Chapter 35 is part of the worldwide network of EAA chapters. EAA embodies the spirit of aviation through the world's most engaged community of aviation enthusiasts. EAA's 170,000 plus members enjoy the fun and camaraderie of sharing their passion for flying, building and restoring recreational aircraft. Our clubhouse and building facilities are located at San Geronimo Airpark (8T8) located off FM 471 (Culebra Rd) West of San Antonio.

For over 50 years Chapter 35 has represented aviators of creativity who share a passion for flying. Come join us!

Runway 35 OFFICIAL NEWSLETTER OF EAA CHAPTER 35 – SAN ANTONIO, TEXAS

www.35.eaachapter.org

EAA CHAPTER 35



Fishing Shirt Order Form

Name: _____ Date: _____

Mark the appropriate selections below

			SLEEVES			
Qty	Men's	Lady's	Short	Long	Size	Color

Short Sleeve Price: \$36.03 +\$2.97 tax= \$39.00 ea.

Long Sleeve Price: \$39.73 +\$3.27 tax= \$43.00 ea.

_____ x \$39 = \$_____

_____ x \$43 = \$_____

Total Order = \$_____

Paid by: Cash \$_____

Sizes: XS, S, M, L, XL

Paid by Check: #_____, Amt. \$_____

Men's Long and Short Sleeve & Lady's Short Sleeve selected colors



Lady's Long sleeve colors – Only 3 colors available

