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# EAA Chapter 32 News

The official publication of Experimental Aircraft Association Chapter 32 - St. Louis, MO (Jim Bower, Editor)

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**April, 2013**

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**As an experienced flyer himself,  
Robin Hood the parrot approves of his dad's project.  
See inside this issue for a report on Art Zemon's BD-4C.**

**We'll see YOU at the EAA Chapter 32 meeting.  
Be at the ARC at 10:00 am on April 20, 2013.**



Happy Springtime!

It's much easier to go fly when the weather's warm.

I've been looking forward to warmer weather for some time now. My little T-Craft doesn't like the cold weather, and tends to give me a workout when I prop it in the cold. I'm solving that problem though, with the addition of a primer system. It's recently been installed, just in time for the fair weather flying season. We're in the midst of an upgrade to the interior too. The headliner I purchased at Oshkosh 2011 is finally getting installed. With a little luck, it'll be installed in time for the April meeting. There are also several other things that needed attention. My wing tank shutoff valves have been relocated to just under the control panel, and the headliner won't have to have cutouts to accommodate the fuel valves. My non-functional cylinder head temperature gauge is being fixed too. The thermocouple and wire to the cylinder has lost continuity, and it's on the list to fix. The baggage area behind the seat will have a new hat shelf with a lift up door for access to the baggage area. I'm also installing a rear bulkhead close out the cabin. With all that going on, I couldn't do without new carpet, so guess what? Yep, there's new carpet to install. Oh, and new 4 point shoulder harness and seat belts are on the way. They should be here this week, and installed by the weekend.

One of my doors had a crack in the door frame, and that's been repaired. The doors have both been reworked with newly fabricated latch keepers and some tweaking, and they operate much better. To make getting in and out of the plane easier, I've ordered a step that most BC-12's have. I'm excited to be getting the improvements made, and even more anxious to go fly as soon as all the mods are done. As with most planes, this is a work in progress. There are a number of other things I want to do, but first I want to get the above all done and go fly. That's what I bought it for in the first place. I figure I'll eventually get it the way I like it, then the fabric will need to be replaced and we'll start all over again. That should be years from now, so we'll enjoy the experience of putting air under the tires for the foreseeable future.

## President's Corner

by Dave Doherty

EAA Chapter 32 did participate in 'Aviation Day' at the St. Louis Science Center last month (March 9). We had great participation and had a chance to meet Steve Hinton Jr, pilot of the 2012 Unlimited Gold race winner Strega. We asked him what it's like to fly such a thoroughbred. He replied they did some film shooting for the movie "AIR RACERS", and it was 'A dog' during the shoot. They were only flying at 250 mph. He also said, it was rock solid when it got to race speed in the 450 - 500 mph range. Throughout the 12 mile course, the plane is never level. It's almost always in a 6G turn (to the left). Steve was gracious to everyone, and signed a poster for the movie they had handed out. Mike Saettele had three flight simulators, and our volunteers spent hours teaching kids about flying. We had a table to answer questions and hand out magazines. Also, we brought the Sonerei II and set it up in the lower level of the planetarium. The Greater St. Louis Aviation History Museum brought their BD5J for display, and they made quite a pair at the event. Thanks and a job well done to all who volunteered their time to help promote aviation in the area.

This month kicks off our Young Eagles program, with our first event to be held on April 13 at SMARTT Field (SET). Volunteers are needed. We can always use pilots and ground crew. Additional help is needed to keep everyone safe. There will be a merit badge clinic in the morning starting around 9 AM. Pilots briefing is at 8:30 AM. We'll serve BBQ hamburgers, dogs, bratwurst, chips and soft drinks. Pilots, there will be a fuel discount for those giving Young Eagle flights. This is our first Young Eagles event of the year. Let's make it enjoyable for everyone.

The regular Chapter meeting will be held on April 20, also at the EAA Aviation Resource Facility (ARC). 1610 Grafton Ferry Rd (SMARTT Field – SET). Our guest Speaker, Mr. Joe Gurney will give a presentation about the history of the Blue Angels, whose existence spans the time frame from June 1946 to present. Mr. Gurney will have a slide show with his presentation, and will tell many little known facts about this demonstration team. We'll have a handout at the meeting that discusses some

of the highlights of his presentation. Did you know the original Blue Angels team consisted of 3 pilots? Find out what kind of plane they flew in their early days (no, it was not the F8F-1 Bearcat). This should be a wonderful educational experience for all of us. I hope to see you there.

At the end of this month, on April 27, we will have our "MOVIE AT THE ARC". This month, the feature will be: 6 DAYS, 7 NIGHTS. Prior to the movie, we'll have an episode or two of the TV serial "SKY KING". We were going to start the Sky King series last month, but due to certain events, the video didn't reach our staff in time. Did you know Sky King flew his own plane during the series? The first "Songbird" was a surplus Army Air Corps Cessna T-50 Bobcat. I just love those round engines... See episode 1 this month. Also, see the movie promotional ad elsewhere in this newsletter for more movie info. As usual, there will be a POT LUCK DINNER starting around 6:00 PM with the movie starting around 7:00 or sundown, whichever is more convenient. Location is at our ARC facility at 1610 Grafton Ferry Rd (St. Charles County Airport – Smartt Field). Let's have a fun social time. The ladies should like this movie.

Let's expand our EAA family and bring our better halves out and enjoy the show. See you there!

Next month, we have our regular meeting at Creve Coeur Airport. It's our second annual FLY-OUT event. After our brief meeting, we'll take a tour of the Aviation Museum, and see what else is at this airport. Pilots are encouraged to fly out to the meeting, weather permitting. Bring a friend.

Thanks to everyone. I hope to see you at our Young Eagles event on April 13, and chapter meeting on April 20.

*Blue Skies to all,*

*Dave Doherty*

## For Sale - Blu-Link

BluLink enables you to use your Bluetooth cell phone and any music source wirelessly in the cockpit. No more tucking your cell phone under your headset or using cell phone adapters with various cords and additional adapters. The BluLink will work with any cell phone with Bluetooth.

Great for filing a flight plan, checking weather, calling for fuel, getting a clearance at an uncontrolled field, calling for a taxi. Primary communications for experimental and ultralight pilots. An adapter is available for using an MP3 player with this device.

Cost \$200.00...on sale for \$100.00.

Contact Jim Bower at (314) 750-1613 or at [jimbower@hotmail.com](mailto:jimbower@hotmail.com).



# March Meeting Minutes

Dave Deweese



*(Editor's note: Our esteemed secretary had another obligation this month so these minutes are a conglomeration of President Dave's agenda and your friendly editor's failing memory.)*

The meeting began with the Pledge of Allegiance, Dave Doherty presiding.

Meeting minutes from February were accepted.

Don Doherty gave the Treasurer's Report.

We welcomed Visitors. No new members this month.

## **New Business:**

Signed copies of By-Laws need to be sent to HQ, IRS, state of Missouri.

It's not too late to pay Dues for 2013. \$36.00 payable now. Please let us know of any updates to project, address, e-mail, etc.

Lifetime Membership: \$450.00 onetime payment. Can be made with 3 easy payments of \$150.00. This includes Chapter 32 membership for life (non-transferrable) and a chapter accessory. Current thinking is a fleece jacket with the EAA32 logo sewn on the back with a monogrammed name on the front.

St. Louis Science Center – IMAX Movie – AIR RACERS – March 8. Chapter 32 participated for Aviation Day at the Science Center. We brought the exhibition booth and the Sonerei, and staffed a table with info about EAA and General Aviation. Mike Saettele's Porta Sim flight simulators were a big hit.

We voted to lease the Flight simulator from Mike Saettele for \$200/month. Next step is to make up papers and finalize the lease.

Young Eagles

We received notification of 905 Young Eagle Credits

The April 6 Young Eagle rally at CPS (St. Louis Downtown airport) was discussed. They say about 300 Young Eagles are signed up. Chapter 64 needs help.

Sign-up sheet – see Rick May.

We also discussed our April 13 Young Eagle rally at SET.

Let's get started on our projects:

- IT cabinet
- Sound System, Microphone, etc.
- Sonerei – rework areas to provide accessibility?
- Fly-Baby project – Jon Thayer
- New refrigerator – Status? (Jim Bower volunteered to shop for a new refrigerator.)
- EAA32 sign on ARC – repairs and new sign on ARC Front – Templates – We need volunteer to make letters/numbers

Movie of the Month at the ARC: - March 30.

Pot Luck dinner, social time – 6:00 – sunset.

Episodes of SKY KING followed by feature movie: DOCTOR STRANGELOVE.

Next month – Blue Angels – history of this aerobatic group by Joe Gurney

The meeting was adjourned.



# BD-4 Project For Sale – Price Reduced

- Plane is 70% completed
- Original BD 495 kit
- Fuselage stretched 18 inches to accommodate Subaru SVX 6 cylinder engine with custom intake manifold and partial custom motor mounts. Larger tail empennage modifications.
- Dynafocal motor mount for Lycoming engine.
- Project includes: instrumentation, turn bank coordinator, vertical speed indicator, altimeter, air speed indicator, fuel gauge, suction gauge, electronic management system.
- Glass wings 400 hours flight time/previous owner completed with heated pitot tube
- Adjustable front seats, Piper style
- Rear seats – Cessna, modified
- 2 plus full sets blueprints, original BD4 builder's guide, 27 newsletters from Roger Mellema, BD4 expert engineer.

**PRICE IS NEGOTIABLE**

Contact: Bob Reynolds at 636.634.1700



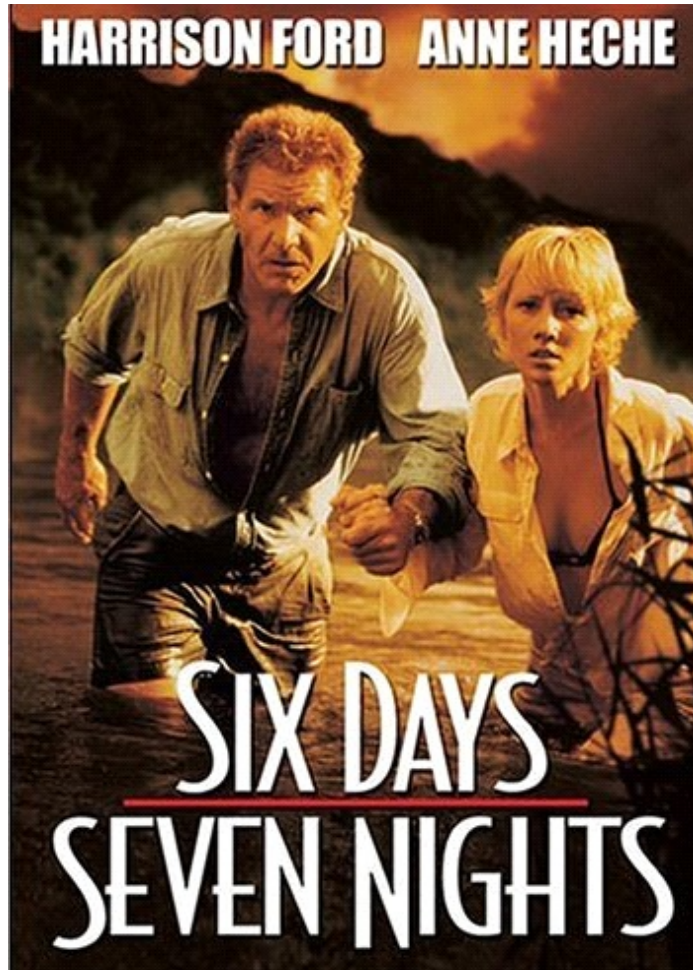
# April MOVIE AT THE ARC

## EAA Chapter 32

### Proudly Presents:

Taking a romantic tropical island week off with her boyfriend, an ambitious, decisive New York girl agrees to help her magazine out by covering a story on a neighboring island. The only plane available is piloted by a laid-back heavy drinker with whom she shares a mutual dislike. But she has no choice and he can't refuse the money. When the plane crash-lands on an uninhabited island with little chance of rescue they both wish they had made other arrangements - at least to start with.

Robin Monroe and her fiancé Frank Martin are on a South Seas vacation when she's called away on business. She buys a flight from Quinn Harris, a rough-around-the-edges pilot, but they crash on a deserted island. There, they discover danger and romance while they endure the elements and each other's company.



Big-screen favorite Harrison Ford stars in this adventure about a dream vacation that turns into a tropical nightmare! A gruff, rough-hewn cargo pilot living in the islands, Quinn Harris hates tourists . . . though he's not above making a fast buck from a sharp-tongued New Yorker, Robin Monroe, when she's desperate for a quick flight to Tahiti! But this already uneasy relationship suddenly takes a nosedive when his weather-beaten old plane is forced down in

a storm! Now, stranded together on a deserted isle, Quinn and Robin quickly discover all the perils of paradise, as this mismatched pair finds themselves facing danger at every turn.

***Little known fact – Harrison Ford owns the DeHavilland DHC-2 used in this movie (N28S), and did some of the flying scenes. He had it restored and uses it regularly. Of course, it looks nothing like what it appeared in the movie.***





**Where? EAA Chapter 32 Aviation Resource Center, 1610 Grafton Ferry Rd  
(Smartt Field, aka St. Charles County Airport [KSET])**

**When? Saturday, April 27, Pot Luck Dinner starts at 6:00 PM.  
A meat dish will be provided by the Chapter. Bring a side dish.**

**What Else? Episode I of the SKY KING TV serial will be shown prior to the feature presentation**

# Learning As We Go

## “My New Pilot Flight Kit”

by mr. bill

The EXPERIMENTAL world has had some really cool glass cockpit displays to choose from. The latest and greatest glass panels are in all the cool EXPERIMENTAL airplanes in the Sport Aviation magazines. It also seems that every Oshkosh there is another neat improvement to these screens. Several years back the “Cozy GIRRRRLS” updated the Blue Mountain displays to have only four buttons on the base of the unit instead of the 10(?) buttons around the whole display that it originally was designed with. Two years ago the latest improvement was touch screens. This past year the latest greatest was the “voice activated” commands for the displays. How cool is that!

The term GLASS COCKPIT has finally taken on a whole new meaning now at the airline. It is kind of hard to believe that the FAA has signed off on it but we at the airline are the first to use a “glass iPad” for navigation use. This is a picture of my old flight bag which weighs 33 pounds!



**Huge, hernia-inducing flight bag**

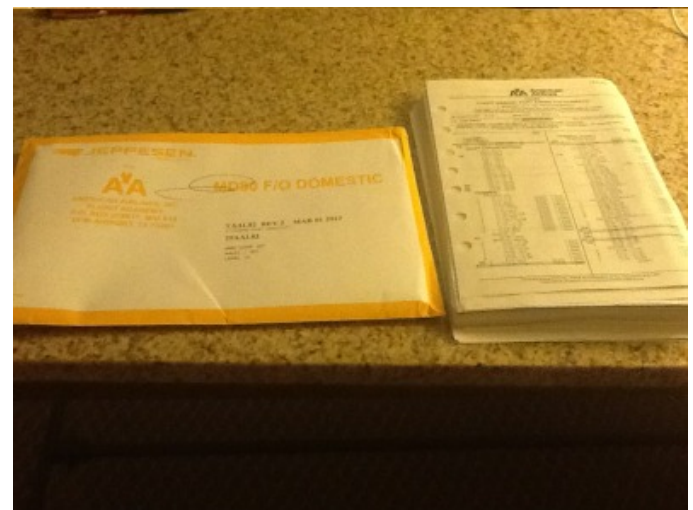
Wow, now that I write all that I realize that maybe me using an iPad in the cockpit for my approach and departure plates is still Old School! But here it is in its RAM mount, in all its glory and display in the flying machine!



**iPad: way cooler and lighter!**

The iPad has all our airline approach and departure procedure plates and the instrument approach plates for all the approved airports we can use. The iPad weight: 1.5 pounds.

So gone are the Jeppesen revisions that took about 20 to 30 minutes to do every two weeks. And just in case there was a missing approach sheet it is quite likely the pilot



**Jeppesen revisions...not heavy but still a pain!**



would never know until they needed it for that phase of flight. Not a problem with the iPad.

We still are required to have the QRH, our safety vest, and our headset.

Well the end of an era is here. With 8,000 pilots and the price of one Jeppesen Revision package costing the airline \$5.00 bucks each, you can see the cost savings.

The old weight of our flight bag that we had to pull out of the aircraft flight bag holder, located to the left and

right of the cockpit seats caused many pilots injury their backs and arms lifting the flight bag out of the cockpit. Now with the iPad injuries should be fewer.

Also, we can now download the USA Today Newspaper, if you have that "app," and then we do NOT have to go strolling thru the cabin looking for a free newspaper. Not sure how people do the puzzle with the electronic version, but I am sure there is an "app" for that too!

A: The longest of their four flights that day was 0:59 seconds long for a distance of 852 feet (284 yards)

## Safety Tip of the Month

**We are about to lose the tower operation at Alton, which I believe is to take place next month. This is not an issue with us at KSET (Smartt) as we operate in a non-towered environment. Never tell the flying public, it's an uncontrolled field !!!!**

**The old argument always surfaces about entry and exit into a non-towered field. Here is the way I normally operate: I always fly over the field above pattern altitude and monitor not only the CTAF but approach 124.2 as well. This way I can see below all aircraft including NORDO (no radio) in the pattern, as well as looking at the wind sock to establish wind direction. Oh ... and yes, I always monitor AWOS for weather conditions. Also I can hear where the aircraft are as well establishing any incoming traffic flying an instrument approach into the field.**

**I broadcast my intentions; "descending to pattern altitude entering downwind, number 2 for landing" as an example.**

**Do not state, ANY TRAFFIC PLEASE ADVISE. This is not an acceptable phrase by the FAA. Be careful on extended downwind legs, as they invite other aircraft to slide ahead of you that you may not see.**

**I also ensure that I state: full stop landing, touch and go, stop and go or I will execute the option. Option meaning any of the aforementioned with an addition as I may go around.**

**On take off, state your intentions as to the direction of your flight, and depart accordingly. Monitor 124.2, and state if required that you will "line up and wait" or "you are departing runway 18."**

**REMEMBER KEEP YOUR HEAD ON A SWIVEL AND KEEP YOUR HEAD OUT OF THE COCKPIT/FLIGHT DECK....**

***Bob Kraemer***

# People and Planes

## Art Zemon's BD-4C

Art Zemon decided he wanted to replace his 1968 Piper Arrow with a homebuilt. After considering several possibilities, he settled on a Bede BD-4C. Since its introduction in 1968, the BD-4 has always been Bede's most successful design. Reportedly, about 700 original BD-4s are flying as of 2011. Art chose to build the Bede largely because it's one of a very few 4-place homebuilt kits and very easy to get into and out of (as opposed to a cockpit design such as an RV).



The wings are bonded together...look ma, no rivets!



Forward fuselage, including sticks and rudder pedals. The huge door openings can be seen.

The signature Bede tubular spar is very much in evidence here, looking like a component from a battleship. The wing ribs are made from aluminum honeycomb sandwiched between two pieces of flat sheet, making them incredibly light and strong. The entire wing (spar, ribs, and skin) is bonded



together, making rivets unnecessary. Art participated in his wing construction with guidance at Bede's facility in Ohio, and he will be glad to share photos of that event.



Fuel pickup locations are definitely at the lowest part of the tanks.

An interesting feature of the wing design is the protrusions on the bottom sides. These are actually part of the fuel tanks and contain the fuel pickups and sump drains. Due to the nature of the tubular spar, there is no dihedral. **In the original BD-4 design**, this sometimes caused the fuel in partially filled tanks to move away from the pickups resulting in fuel starvation during climb when the pilot did not keep the ball centered. In this new design, no matter where the rest of the fuel in the tank goes, there will be enough remaining in these areas to ensure continued movement of the propeller until the maneuver is completed.

An IO-360 engine and fixed pitch prop will keep the BD from being a complex airplane and qualify it for continued use if the new rule eliminating the 3<sup>rd</sup> class medical is approved by the FAA.

Art reports extremely responsive factory support from Bede.

He welcomes project visits any time.



**We have here a very happy guy who is justifiably proud of his project.**

## Got Junk?

In the process of obtaining a new refrigerator to replace the one that freezes sodas, we had to dispose of TWO old ones. One was totally dead; the other didn't work properly. Your friendly editor was in charge of these duties, and in the course of buying a new box I was given contact information for someone who would haul away the old ones. I don't endorse products or services very often, but in this case I would like to recommend a gentleman who provides a very necessary service in a friendly and professional manner.

Mark Mueller calls his business "**Scrap-N-Junk**", and he will take away just about anything you have cluttering up your lives (with an emphasis on metal). The list of what he will come and get is too long to publish here, but give him a call and he will probably come and get it. The thing that impressed me the most is that he arrived at our somewhat remote location dead on time and took both old refrigerators with brisk efficiency. He is a very nice young guy and I think you will be satisfied with his work, as I was.

If you have old dead appliances you want gone, give him a call at **(314) 780-6105**.





Check out our fantastic Web Pages at  
**WWW.EAA32.ORG**  
 Laura Million, Web Designer  
 While you're there, take time to join the  
 Yahoo Groups to help you stay abreast of  
 Chapter happenings!

TO:



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