

# The Lippisch Letter



Experimental Aircraft Association Chapter 33

April 2000

**The Lippisch Letter** is the monthly publication of the Dr. Alexander M. Lippisch Chapter (33) of the Experimental Aircraft Association, Cedar Rapids, Iowa.

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Greg Zimmerman

## April Meeting: Ladies Night by Tom Olson

Please mark the evening of Friday April 7 on your calendar. This will be the date of our Ladies night out. It will be held at the Long-branch Supper Club at 90 Twixt Town Road NE in Cedar Rapids. Phone 377-6386 in case you get lost finding it. It is located one block NE of Collins Road across from Lindale Mall and behind the Taco Bell on First Avenue. The dinner will be held inside the entrance that is on the left side of the building when viewed from the front of the building which faces Twixt Town road.

There will be a cash bar from 6:30 to 7:00. The meal will be buffet style, cost \$16.00 per person at the door, and you must

RSVP by Sunday Evening April 2. **Please call me (Tom Olson) at 319-393-5531 to RSVP**, I have an answering machine and you can leave a message if I am not home.

The meal will feature Alaskan Cod and Baron of Beef for the main courses plus the Salad Bar, Au Gratin Potatoes and Green Beans Almondine.



After the meal, our very own Don Gurnett from the University of Iowa will provide an interesting presentation of Mars exploration through the years and some insight on the recent setbacks. Those of you who were fortunate enough to hear Don's presentation last year know that it is something you won't want to miss.

See you there!



## March Meeting Report by Tom Olson

For those who missed it, we had an interesting meeting in March. Unfortunately, we failed to get the meeting room at the North Liberty bank opened for us as planned. However, thanks to the North Liberty Community Center we were able to make last minute arrangements there to have our meeting. I hope that anyone arriving late noticed our message on the front door of the Bank. The Community Center is truly a great asset for North Liberty.

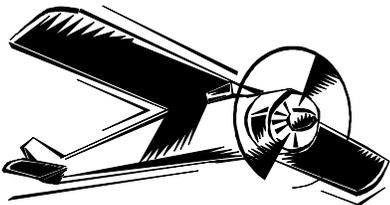
Marv Hoppenworth once again shared a portion of his vast aviation knowledge with us. Now we not only fully understand how and why a compression tester works but have the information to build a calibrated unit and use it. The tester uses a calibrated hole of 0.40 inches in diameter through a 0.25 inch long restriction with a 60 degree bevel on the input and output. Air pressure at 80 PSI is fed to the input and the output is fed into the cylinder with the prop carefully

*(Continued on page 2)*

(Continued from page 1)

held at top dead Center. The pressure on the Cylinder side of the orifice then tells us how well the rings and valves hold compression. A good cylinder will be near 80 PSI in this test. Lycoming indicates that if the reading is 60 or below it is high time to pull the cylinder and check it out.

Marv also shared some of the finer points of engine maintenance and diagnostics such as determining if the engine is running too rich or too lean. One item I hadn't thought too much about is the importance of checking that the full throttle prop static RPM meets specified limits before take-off. Those that have taken off in a loaded C152 on a hot day and short runway know that even a small loss in overall power can put the success of the mission in jeopardy.



## Blakesburg Flyout

Don't forget to reserve Saturday May 13 for the Blakesburg flyout. The May newsletter will provide the details for this outing. Blakesburg is the headquarters of the national Antique Aeroplane Association and has a large museum on site with its 2300 foot north south grass runway. It is located a few miles southwest of Ottumwa Iowa.

### Sun-N-Fun Volunteers Needed - Security Personnel - April 9-15

Sun-N-Fun is quickly approaching and there is still a need for Volunteers to help man checkpoints throughout the event site. Volunteer Security Personnel are depended upon to cover areas not covered by the contracted security company. Even if you already have a volunteer position during the fly-in, please consider also scheduling some time to work in the security area. Any time you give would be helpful and would offer you another unique viewpoint of the convention. If you are interested in helping in security please call 863-644-2431 or fax 863-644-9737.

## Temporary Home for Chapter 33?

Greg Zimmerman recently attended an Iowa City Airport Commission meeting where the Commission voted to give possession of a rather large hanger building to the Chapter. Anyone willing to help provide ideas on how to use the building please contact Greg Zimmerman or Tom Olson. We need an expert on non profit tax organizations to help us understand the implications of the chapter renting out portions of the hanger to chapter members. Some form of revenue generation will be desirable since the chapter will have to pay for liability insurance if we take possession of the building. It is also a temporary situation in that the building must be torn down some time in the next 2 to 10 years to make way for ILS approaches slated for a nearby runway.



## LOCAL KIDS EXPO

Earlier this year, the EAA participated in the Annual Kids' Expo in Oshkosh. Held at the community fairgrounds, the EAA staff set up a booth for displays, demonstrations of a hot air balloon kids could make out of tissue paper and a model of the world's smallest airplane. Over 5,500 people attended the event which included hands on activities, informational booths, health and safety displays and contests for prizes all sponsored by area businesses and organizations. It was an excellent opportunity to get out

in the community and share information about EAA and its various programs (Young Eagles, camps, ...)

### .....You Can Do It Too!!!

Many communities hold Kid Expos throughout the year at convention halls, fair grounds, and malls. Wouldn't that be a great place to set up a display and get some kids interested in aviation. Obviously, you would have a tremendous opportunity to get some kids interested in Young Eagles events but it is also a great way to spark their interest in aviation

through models, art projects, photos, videos ... not to mention the opportunity to talk with their parents. Many Chapters have expressed the need to bring in some younger members. These expos are a great chance to talk with the parents and possibly get the attention of their "inner child." So make sure you have some materials on hand for the adults too (newsletters, member forms, calendar of events...). It could be a great way to get more exposure for your Chapter in the community. Give it a try!

# Feature Project

## Mustang II

by *Tim Busch*

Our feature project this month is a Mustang II under construction by Tom Meeker of Robins. Before there were fiberglass wonders, there was aluminum. The Mustang II is a two seat speedster, with a 210mph cruise.

Tom is a private pilot who is actively working toward his instrument rating at Greencastle Airport. He hopes to complete his practical test within the next few weeks.

The Mustang "kit" has very few prefabricated parts, so the home-builder has a lot to accomplish in the 2500 hours most builders take to complete the project. Tom has spent 1400 hours and 2 1/2 years so far in construction and it shows.

At first glance, it looks like Tom



**Tom Meeker, proud Mustang II builder.**

has most of the time-consuming parts of the project already done. Many of the systems are complete and functional.

Looking into the cockpit, Tom has a completely wired and working IFR panel with two VORs, Glideslope, and ADF. Terra radios were

used for their small size and weight. An integrated engine monitor keeps track of all conditions.

Tom made wiring of the panel easier



**The finished instrument panel, already installed and tested.**

by waiting to install a bottom panel and sitting under the fuselage to do the avionics work.

Because there is little panel depth in the Mustang, Tom had to do a careful planning job to fit everything so it would not interfere with the 25 gallon fuel tank behind the firewall.

Besides the 25 gallon fuselage tank, the inner wings hold six gallons per side and fiberglass wing tips will hold four gallons each. Tom has the whole arrangement completely worked out

for the 45 gallon total system.

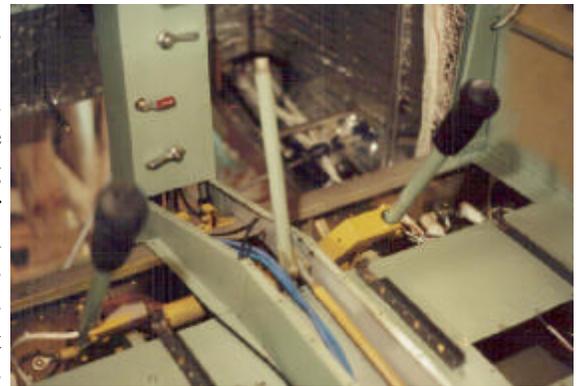
The cockpit section of the fuselage is on its gear and the Dyanfocal engine mount is ready to accept a 180 horse O-320. Tom says the engine is on order and should be delivered any day.

Hiding in the basement of his house are a pair of nearly complete wings. Having the wings out of the garage frees up room for the fuselage work.

With the wings were the wingtip fuel tanks. Tom said his work with the fiberglass convinced him that aluminum was the right building material for him. He almost immediately discovered a sensitivity to epoxy and figures he couldn't have completed a glass plane.

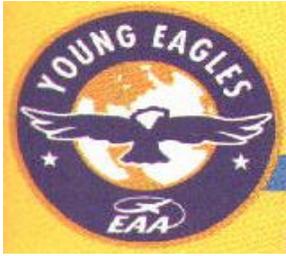
Tom has his family priorities in order and gives a lot of credit to his wife Carolyn for her patience during his work on the Mustang. Keep up the good work Tom!

Having grown up on a farm in Northeast Iowa, I couldn't help notice the setting of Tom's acreage North of Robins. Directly behind his land was a large, flat, runway-looking parcel that seemed very tempting for a pilot. Tom said B.L. Anderson keeps it as a buffer zone for their quarry. It really would be a perfect location for



**Under the panel dual control sticks, the flap handle, and linkages are installed.**

a runway. Hmm, someday...



**Wanted:** Young Eagle volunteers for the 2000 season. Qualifications: Enthusiasm, ability to work with people of all ages. Pilots and non-pilots alike are needed to share the flying experience. Reward: Unlimited.

We have a request to do a Young Eagle event at the Washington airport on June 4 from 1-5pm. Please let me know if you are willing to volunteer in any capacity for the event.

We really need help coordinating these events. It isn't a major consumer of time, but it takes a little effort to make phone calls. Please call me if you would be interested in coordinating a Young Eagles event at Tipton, Belle Plaine, Vinton, Monticello, Iowa City, or Cedar Rapids.

- Tim Busch

## The Electronic Lippisch Letter

For those of you with email capability, The Lippisch Letter is now available direct to your email account in PDF format. If you wish to receive the newsletter via email, please email Tim Busch at [t.busch@www.mebbs.com](mailto:t.busch@www.mebbs.com) and specify whether or not you wish to continue your paper copy of the newsletter as well as the electronic version. Hopefully, this will save on the postage and printing bill for the chapter. If you wish to continue to receive both, that's ok too, but hopefully someday we can eliminate paper copies altogether.

## Fly Market

Send your buy and sell items for publication here to the address on the back of the newsletter or: [t.busch@www.mebbs.com](mailto:t.busch@www.mebbs.com).

### Wanted:

Beg, borrow, or rent any RV building aids, tools, jigs, patterns, plans, radios, etc.

Jim Neagle 319-298-9068

I am looking for individuals who are interested in owning property on a rural Air Park in Eastern Iowa or simply persons interested in buying land for a private airstrip.

Walter Rich 319-364-3733

### For Sale:

RV-6/6A Empennage Kit (Prepunched), plans, videos, numerous tools.

John Fowler Estate 319-351-7240

One set of RV6-6A plans with manuals & newsletters.

Merrill Knouse 319-732-2861

Acro Sport II, fuselage on gear, wings nearly ready to assemble, fittings cut out, most material to finish. \$8500.

Warren Lacy 319-462-4009

Sentry Aircraft Cylinders, Inc. We are an aircraft engine cylinder overhaul shop in Fort Worth, Texas. We have a full line of overhaul services for cylinders and also sell new cylinders. Visit us at: <http://www.sentryacccylindersinc.com>, Dave Stovall Please call our shop at (817) 531-2729 If you don't live close by, you can use our toll free line at 1-800-433-7647. Our business hours are M-F 7:00am - 5:00pm.

## Attention Homebuilders: EAA's AVIATION SERVICES NEEDS YOUR HELP!

EAA's Aviation Information Services department is compiling a database of EAA members willing to share their homebuilding experience with other EAA members. Each year Aviation Services gets hundreds of calls from EAA members looking for inside "skinny" on the homebuilding project they are thinking of starting or currently working on. Our goal is to provide them with someone who has built or is building that model aircraft so that they can get the information they need.

If you are a homebuilder willing to be a part of this database please e-mail Aviation Information Services at [infoserv@eaa.org](mailto:infoserv@eaa.org) with the following information:

Name

EAA#

Address

Day Phone

Home Phone

E-Mail Address

Please specify how you would prefer to be contacted (e.g. email, phone, and/or letter)

If Kit, Kit Mfg:

If Kit, Kit Model:

If Plans, Model (e.g. Steen Skybolt):

Date Started:

Date Completed:

Registration ("N") Number:

Engine Make, Model and HP:

Remember, it is EAA's policy not to sell or distribute personal information to any other companies or organizations. This information is for EAA & EAA member's use only. Thank you for your help.

## EAA Chapter 33 Application & Questionnaire

Name: \_\_\_\_\_

EAA #: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Daytime Phone: \_\_\_\_\_ Evening Phone: \_\_\_\_\_

Email Address: \_\_\_\_\_

Copilot's Name: \_\_\_\_\_

Pilot Ratings: \_\_\_\_\_

Aircraft Owned & Flying: \_\_\_\_\_

Aircraft Under Construction: \_\_\_\_\_

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 Dues are \$15/year.

Make check payable to: EAA Chapter 33, c/o Terry Scherman; 1203 16 St SW; Cedar Rapids, IA 52404

### Aviator Philosophy

1. Speed is life, altitude is life insurance.
2. Never let an airplane take you somewhere your brain didn't get to five minutes earlier.
3. Too many pilots are found in the wreckage with their hands around a microphone. Don't drop the aircraft in order to fly the microphone.
4. Fly it until the last piece stops moving.
5. Any attempt to stretch fuel is guaranteed to increase head winds.
6. Remember, you're always a student in an airplane.
7. The only time you have too much fuel is when you're on fire.
8. A terminal forecast is a horoscope with numbers.
9. Takeoffs are optional. Landings are mandatory.
10. The first thing every pilot does after making a gear up landing is to put the gear handle down.
11. A "good" landing is one which you can walk away from. A great landing is one which lets you use the airplane another time.
12. Good judgment comes from experience. Good experience comes from someone else's bad judgment.
13. An airplane may disappoint a good pilot, but it won't surprise him.
14. Learn from the mistakes of others. You won't live long enough to make them all yourself.



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 c/o Tim Busch  
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**In This Issue...**

Don't forget to RSVP for the Banquet by Sunday April 2. See details inside.



### Mustang II: Our April Feature Project

**Things which do you no good in aviation:**

- Altitude above you.
- Runway behind you.
- Fuel in the truck.
- Half a second in history.
- Approach plates in the car.
- The airspeed you don't have.

## Chapter 33 Calendar

April 7 Chapter Meeting Longbranch Supper Club Marion 7:30pm. Program: Don Gurnett presentation on Mars Ex- ploration RSVP: Tom Olson	June 10-11 FLY IOWA 2000 Statewide Fly-In and aviation fair. Waterloo
April 9-15 Sun-N-Fun Lakeland, FL	July 14-16 Quad Cities Air- show - Davenport, IA
April 21 Chapter 33 May Newsletter Deadline	July-26 - Aug. 1 OSHKOSH!
May 6 Chapter Meeting	Aug. 20 SERTOMA Flight Breakfast - Iowa City
May 13 Chapter 33 Fly-Out Blakesburg	Aug. 27 Greenfield Wings, Wheels, and Whis- tles Fly-In Omelet Breakfast 7:30-11:00
June 4 Washington, IA Young Eagles 1-5pm	