

THE OFFICIAL VOICE OF GP-4 BUILDERS ALL OVER THE WORLD

VOLUME 25

Second issue of 1999



*Bill Berrick's beautiful GP-4 at his home base.*

I have some bad news that I must share with everyone.

Bill Berrick of Omaha, NE. died in a plane crash in his GP-4 on May 1st.

Information is sketchy at this time. In talking to Steve Bennett who is member of the same EAA Chapter as Bill said the initial comments

from the people that were at the airport is that the aircraft went into a stall/spin shortly after take off and there was an explosion on impact.

There is mixed reports as whether Bill was having engine problems.

Jack Stiles, a local resident reported that he heard the plane missing and then rev up.

It was very windy that day and other people speculate that Bill always slowed the plane a little bit to retract the landing gear. They feel he may of got the airplane slowed up to much and a wind gust aggravated the situation and caused the stall/spin.

All this is speculation. I know George is working very closely with the NTSB and soon as there is solid information we will give it to you here in the newsletter. I felt a little information was better than no information.

We have lost a good friend. He was true gentleman and asset to our sport of aviation.

### William Henry Berrick

Sep. 15, 1926 - May 1, 1999

William H. Berrick was born September 15, 1926 in Merino, CO to Laurine Elizabeth' (Propst") and John Fredrick Berrick. He offened and graduated from Merino High School an achieved scholar and athlete.

Academic degrees awarded from: Colorado State University, Fort Collins, CO; Northwestern University, Chicago, IL 1951 with Degree of Doctor of Medicine, United States Air Force School of Aerospace Medicine, Brooks Air Force Base, TX 1976; and Iowa Western Community College, Council Bluffs, IA 1990 with Associate in Applied Science.

Bill served as an USAF cadet at the end of WWII ON May 29,1951,Åstanding at the surgical floor windows of the Passivant Hospital, medical resident Bill encountered surgical nurse Helen Elinore Griffin as they watched Gen. MacArthur's Homecoming Parade down Michigan Avenue in Chicago, IL. They married 13 weeks later in Denver, CO on August 20, 1951. They were happily married for 48 years.

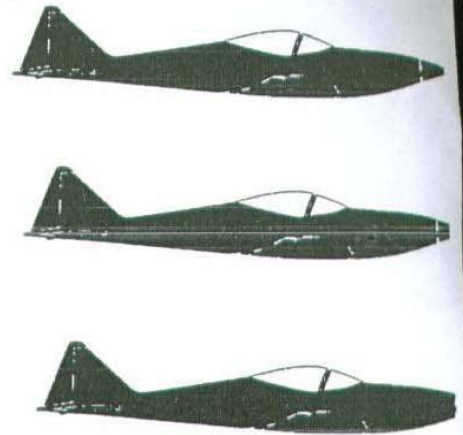
Bill was an accomplished surgeon and dedicated family physician. He served as medical doctor for

Madison, NE and the surrounding area from 1955-1975. Bill's contributions to the Madison community were not limited to the medical care he provided. He also built the Taylor Creek Golf Club in Madison in 1967 and served on the School Board.

Bill's lifelong interest in aeronautics led him to join the USAF in 1976. He was stationed at Cannon AFB in Clovis, NM; Bitburg AFB in Germany; Chanute AFB in Rantoul, IL and Offutt AFB in Omaha, NE. Throughout his career he was a right-seater on F-111B and F-15 fighter aircraft. Bill served as the Hospital Commander at Offuff AFB from 1985 until his honorable discharge in 1988 with the rank of Colonel.

Ever the adventurer, Bill's quiet retirement was short lived. He quickly pursued furthering his interests in aeronautics and returned to school focusing on airplane construction. Bill became a certified A&P mechanic. He completed his fact homebuilt plane an Acro Sport in 1991.

Our Condolences to Bills family and friends.

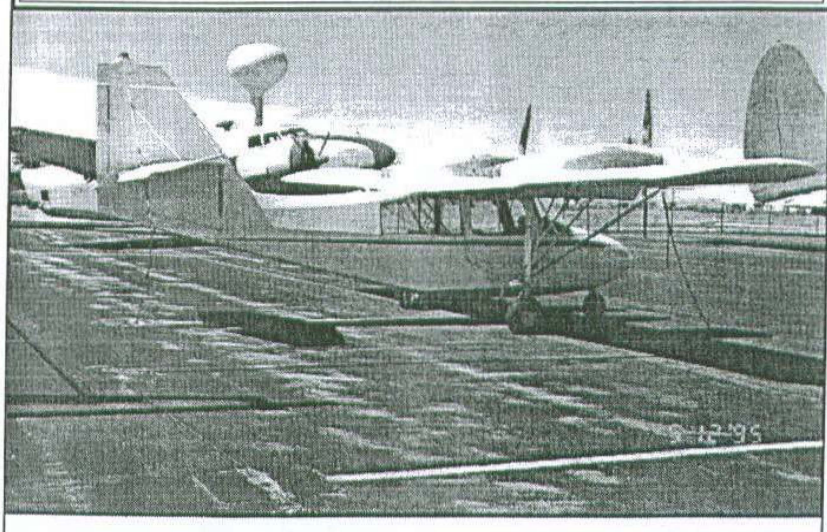


### What is it!

Congratualtions go to Matt Null of Ann Arbor, MI. Matt was the first person to guess it right!

C.J. Reinhart had sent in this photo. It sits outside at Las Cruces, NM and has never been flown.

### *It's a twin Aeronca!*



## Tardy Newsletter

I apologize for this tardy newsletter. Between numerous personal and business challenges I have been totally neutralized over the last several months.

Then with the the Bill Berrick accident, I must admit took the "wind out of my sails" for a while. I wanted to wait and see if we could get some information on the accident and as you can see as of this writing is very sketchy and inconclusive. As soon as we get more solid information we will report it right here.

Regards, Spud Spornitz

## Phone number change

In some of our earlier newsletters and newsletter information letters and order forms we had a phone number listed we had a phone number listed as: (913) 397-0518

We have disconnected this number and the new number is:

**(913) 764-5118**

E-mail continues to be:

**Bspornitz@aol.com**

## Newsletter input...

You newsletter input procrastinator need to get off you butts and get your stuff into the newsletter to share with the group....

There is about six to eight people that are doing all the work....

Come on gentleman.....

## A troop checking in from down under.....

Hi Spud and GP-4 group,

First let me introduce myself. I am a 65year old, supposed to be retired airline pilot living in Picton New Zealand. On leaving school I did a 5 year Aircraft maintenance engineering apprenticeship with our local National airline working mainly on the old DC3. In 1956 I joined a new Tourist venture as a pilot flying tourists on to the glaciers in our Southern Alps first using ski-equipped Auster (English) aircraft then Cessna 180s and 185s. In 1961 the company started an airline called Mt. Cook Airlines so I found myself flying DC3s until replaced with HS748 turboprops in 1968. I took early retirement in 1987 to complete the building of a Roberts 53ft. yacht I had been quietly on for several years. My wife and I launched it in January 1989 sold our house and lived aboard for the next five years during which we cruised to Australia and some of the Pacific Islands. We decided to settle in Picton here which is a little seaport town of 4000 inhabitants at the north end of New Zealand's South Island. We ran a Boat Charter Company for several years but gave it up when I found myself working 7 days a week for very little reward.

After selling the yacht I got the urge to fly again so regained my licenses and bought a share in a Chinese Nanchang CJ-6A which I still have. However 2 years ago I received a call from an Aviation Consultant asking if I was interested in flying one of my old HS748s up in the Pacific Kingdom of Tonga. They have one of our old aircraft which incidentally I first flew when a brand new aircraft in 1972. They have three of us oldies with lot of experi-

ence on the type up there as Captains, the pay is not enough to attract the younger guys. I agreed to do it for a few months and stayed full time until last December. This year two of us are job sharing doing 4 weeks then coming home for 4 weeks. It is great flying up there, the weather is good most of the time, very little traffic to worry about and a well run little airline which doesn't work us to hard, we are flying approx. 50 hours per month.

For some time I have been looking for an aircraft to build or rebuild in my house basement the space available dictating the size. On a flight at about this time last year a passenger gave me a copy of January 1998 "Kitplanes" containing the story on George's wooden wonders. The more I thought about it the more I liked it. It is wood which I like working with, it will fit my workshop and has about the same cruising speed and range as the 748 that I am flying. I obtained George's info. pack and last October jumped on a flight out of Tonga and payed George a brief visit. Needless to say after flying with him I was hooked and came away with a set of plans under my arm.

I ordered about 3/4 of the materials kit from Wicks last January and am still waiting for it to be shipped, I understand they are having trouble getting the wide spruce. However this is giving me time to set up and equip the workshop. I can't wait to get started!

Keep up the good work, I'll try to contribute when I get started.

Regards,

John

## GEORGE'S CORNER

Fellow GP-4 builders:

Recently I was having lunch with the usual bunch of Buzzards. A guest Buzzard was asking a lot of questions about the Glasair he was building. I fended off most of the fiber glass questions, (glass not being my long suit), until he started on mass balancing of the moveable control surfaces. Seems Glasair people are just as concerned about flutter as I am!

I may have addressed this subject before in our news letter but I think it's worth another go around.

The three most common contributors to flutter are the lack of torsional rigidity in the component, play in the hinges and actuating mechanism. Most importantly, the lack of enough weight ahead of the hinge line to balance the weight of the trailing edge. The GP-4 has all of the safe guards and was well tested by trying to induce flutter at speeds well over 250mph. I am from the school that says a slight over balance is better, (slightly more weight ahead of the hinge line). Remember, it never can be fully weighted until the component is finished, painted.

The elevator should be well over balanced with extra lead in the tips.



After finish painting you can drill out the excess weight on the inside of the weighted surface and fill the hole with a foam plug. The trailing edge surface ply can be lightened some by block sanding the ply half way back to the trailing edge. Squeegee the resin well when applying the deck cloth to keep the weight down aft of the hinge line. You should balance each elevator side separately because of the trim assembly on one side.

The rudder weight on the top overhang, (drawing 15), can be fixed and painted. Final balancing is done on the counter balance arm shown on drawing 16. Rudder, elevator and ailerons should be slightly over balanced where the trailing edge moves up about 5 to 10 degrees. All of the surfaces are balanced off the airframe. You level two knife edge surfaces on your

work table, spaced so they rest under the hinge pin at each end of the finish painted component.

On the elevators, drill out enough lead until the trailing edge tilts upward about 5 to 10 degrees, sitting horizontally on the knife edge rests. The rudder is balanced the same way, horizontally on two knife edges on the table. Since the rudder has the same lead on the center balance arm, it's easy to adjust the proper weight. Ailerons also have a counter balance arm shown on drawing 25 and 27. Remember to always rebalance if any repainting is done.

Regards to all,

George

## The Classifieds

**For Sale:** New Hydraulic Gear Plans Upgrade. Convert your GP-4 manual landing gear system to hydraulic - electric system. Complete with emergency back up system. (Note: System must be installed prior to wing skinning!, no retro-fits) Complete print package for \$150.00 Mail your checks to: George Pereira 3741 El Ricon Way, Sacramento, California 95864 phone (916) 483-3004 Fax (916)978-9813 E-mail [GP-4@juno.com](mailto:GP-4@juno.com)

**For Sale:** Pre-fabricated composite components for GP-4. Cowling, exhaust blisters, inlet ramps, tailcone. Complete four-piece package. Call or E-mail for current pricing. Shipment will be sent "Freight Collect" - Jake Jackson - Rio Linda, CA (916) 992-0608 E-mail [J7200@aol.com](mailto:J7200@aol.com)

**For Sale:** Now flying Ultralite due to loss of medical. GP-4 project now for sale. Gear in wing. Tanks ready to mount. Tail group enclosed. Ailerons and flaps mounted but not covered. Call and make me offer. (423) 396-2917 Rich Nadig, Ooletawah, TN

**For Sale:** Quality custom fabricated metal components for your GP-4. See GP4BFN issue #4 for complete component listings and pricing. Please allow generous time allowances for your orders. Darry Capps, 813 Hoyer Road, Newman, California (209) 862-2707

**Back Issues:** We have all of the GP-4 back issues (#1 thru #23) available for \$3.00 each. Mail your checks to Bill Spornitz - 1112 East Layton Drive - Olathe, KS 6061-2936

**Wanted:** Looking for a GP-4 project that is "well under way" through "close to being finished". Will consider all projects. Contact me at (503) 646-5276 or by mail at Edward Mitchell, 13835 S.W. Devonshire, Beaverton, OR 97005

**Wanted:** An original video (not a copy!) that George Pereira made on the GP-4. I have a multi-copied video now, but is very poor. Will gladly pay a reasonable price. Contact: Spud Spornitz (913) 764-5118 or 1112 East Layton Drive, Olathe, Kansas 66061

**For Sale:** GP-4 project - Most wood materials to complete. Most metal parts cut-to-fit and tack welded. New hartzel prop and spinner to George's spec's. Contact Tony Mikus in the evenings after 5:30 PM mountain time. (970) 963-9575

### Subscribers Information Center

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Scientists at NASA have developed a gun built specifically to launch dead chickens at the windshields of airline's, military jets and the space shuttle, all traveling at maximum velocity. The idea is to simulate the frequent incidents of collisions with airborne fowl to test the strength of the windshields.

British engineers heard about the gun and were eager to test it on the windshields of their new high-speed trains. Arrangements were made. But when the gun was fired, the engineers stood shocked as the chicken hurtled out of the barrel, crashed into the shatterproof shield, smashed it to smithereens, crashed through the control console, snapped the engineers backrest in two and embedded itself in the back wall of the cabin. Horrified Britons sent NASA the disastrous results of the experiment, along with the designs of the windshield, and begged the U.S. scientists for

NASA's response was just one sentence: "Thaw chicken before use."

Drew (reading the instructions) in sunny Florida.

Yet another....

A major jet engine manufacturer was conducting bird ingestion tests on one of the gas turbines they were developing. They were using an air cannon to fire the Cornish game hens into the inlet of the engine. They kept the hens frozen in storage. The test engineers loaded their cannon with the frozen game hens and decided to take their lunch break and let the hens thaw. About an hour later they returned to the test stand and charged the cannon with compressed air. They fired the cannon and the engine fan exploded. They could not understand what had gone wrong since they had done the same test to similar fan designs. They then took their high-speed camera film to the lab and processed it. When they reviewed it they discovered the answer to the mystery. The test stand was located in a remote wilderness area and they saw a very surprised raccoon flying through the air along with what was left of the Cornish game hens he was eating. Anyway they found that the engine was not raccoon ingestion proof. Good thing there was not a FAR covering Raccoon ingestion.

Sam Owen



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***First Class Mail***

**NEWS FOR CRAFTSMEN OF FAST WOODEN AIRCRAFT!**