

A.M.H.F.

Dedicated to preserving, in flying condition, a vintage PV-2 Harpoon in memory of all who fought in the air on behalf of the United States of America

News Letter May 2015



Greetings to members & friends of the AMHF,

We are now starting into May and lots of work in front of us. The weather in Indiana this spring has not been the greatest for getting any outside work done on the plane. You can take your choice of the following; cold, rain, windy, or a combination of all three. We were able to accomplish several things in the ramp building during this time.

AMHF received an invitation from Indiana Landmarks in March inviting us to attend a round table discussion at Grissom AFB in April. Rich and I went up on April 24 to participate in this conference. It was called the Indiana Preservation Conference. The discussion revolved around what were the major differences involved when working to preserve a movable object versus working on a building or bridge.

There were three groups involved in the discussion. Jim Price, Executive director of Grissom Air Museum, Chris Donahue with USS LST 325 based at Evansville, and Rich and me from the AMHF. They had five question they had sent to us prior to the meeting with most of them around our relation to the history of the era we represented and what was involved in maintaining something that moved around. Each of the three made a brief presentation then the group really warmed up and started asking a lot of questions. I think we acquired some

new friends and will be asked to attend some of their functions. Grissom asked us to participate in their fly in, but it is on the same day as the Dayton airshow.

It was a good experience and only time will tell if anything comes out of it.

You have heard me talk a lot about installing our fuel tanks when they arrive and the amount of work that is taking place in preparation for their arrival. With that in mind, for those of you who have never seen the fuel tanks in the Harpoon, I have pulled three pages out of the parts manual to give you an idea of what we are looking at and the amount of work involved.

Figure 96 shows the 4 fuel tanks located inboard of the engine. The location of the fuel boost pump and fuel quantity transmitter is also shown. You can also see there are three panels above and 2 stress panels below that have to be removed in order to get to these fuel tanks. What you cannot see very well is all of the internal plumbing that runs between these tanks. We have the two right forward tanks installed and they have fuel in them. We are now waiting for the left forward and the four aft tanks.

Figure 7 shows the outboard tanks. There are 4 in each wing and this picture gives you a good look at the internal connectors, hatch covers, fuel quantity transmitters, and the filler neck. What you don't see is the **644** fasteners to get the stress panels removed so you can get inside to work on the tanks.

Figure 253 shows the military set up with fuel all the way to the carburetor. Naturally we do not operate with the wing pylon, internal tanks, or the bomb bay tanks. I hope this will give, those of you who have never been there to see any of this when all of the access covers are off and the bays opened up, you an idea of the amount of work necessary to complete this job. All of that being said we can use help in getting this job done so we will be able to attend the air shows that we have currently been invited to. It also gives us more reasons to try to get a hanger for Hot Stuff. We spend 50 % of our time opening and closing simply because we must have the plane closed up before we can leave.

"One never notices what has been done; one can only see what remains to be done."

*Marie Curie,
Polish-French physicist and chemist*

"You will never find time for anything. If you want time you must make it."

*--Charles Buxton,
British brewer, philanthropist, writer and legislator*

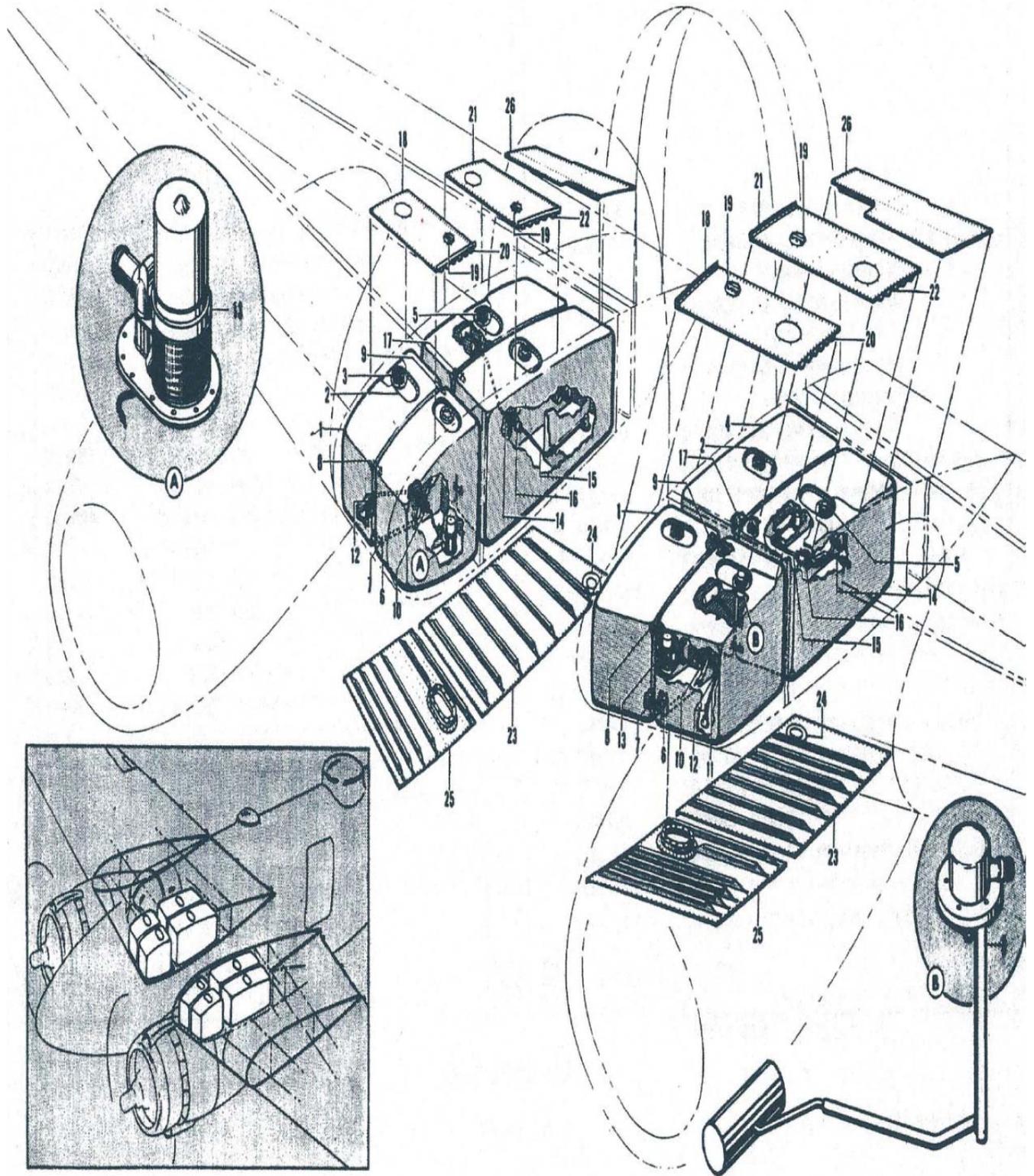


Figure 96 - Mid Body Fuel Tanks - Center Section Inboard

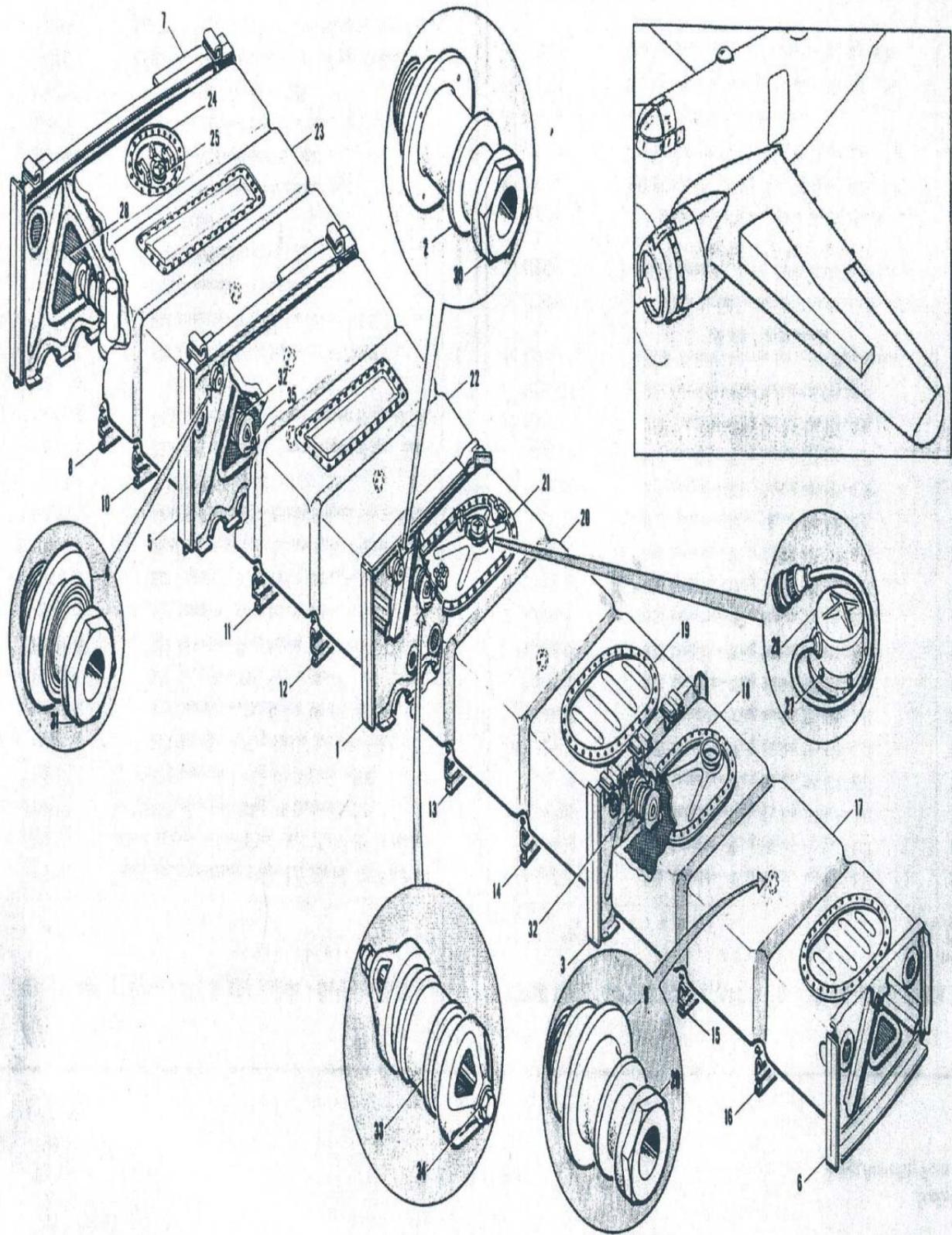


Figure 7 - Section Assembly - Outer Wing Panel Tank - L.H. and R.H.

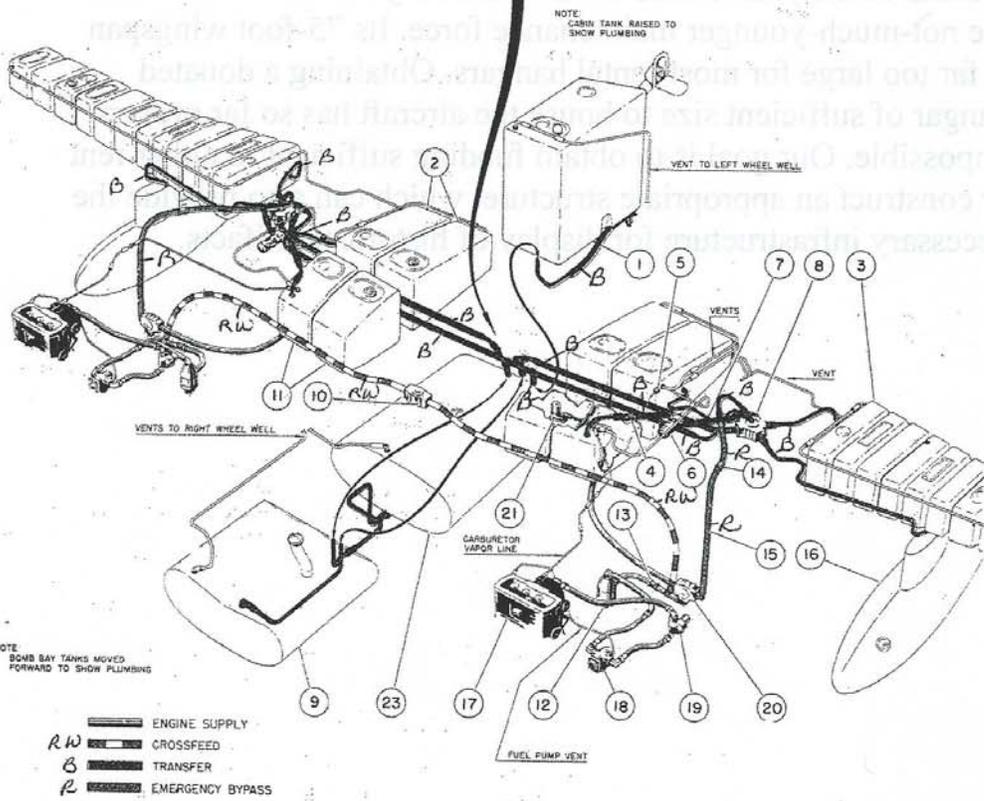
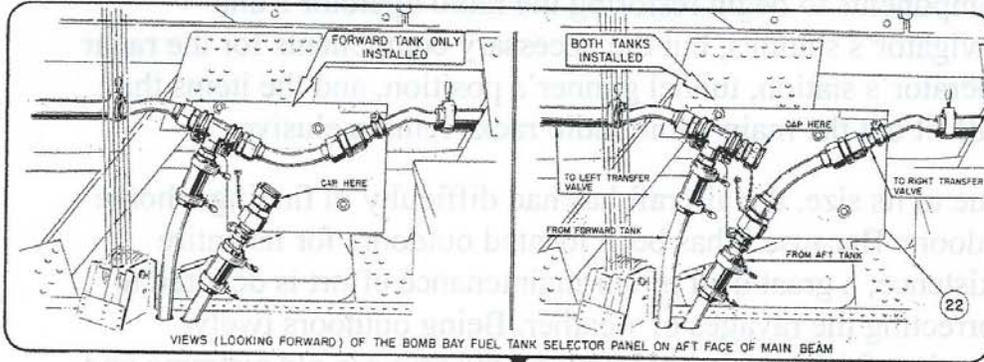


Figure 253 — Fuel System

This month our Board member is Donn Starkey. I hope you find him to be a very interesting addition to the AMHF.

Enjoy life to the fullest and do some good along the way,

Gaylon

Interview question for BOD

What is your back ground schooling, work, and hobbies, anything else we could mention that others might not know about you?

I was raised in the idyllic town of Waterloo, IN...back in the 50's and 60's when life was still simple for kids. Waterloo is at the crossroads of US-27 and US-6. The lake country was north of us and all of the people who had lake property had to go through Waterloo to get there. When I was a kid, my sister and I used to put up a lemonade stand in front of the house every summer on US-27 and sell ice cold drinks to the people driving to and from the lakes. If a New York Central train was across the tracks, the cars had to stop in front of our house, and our business boomed.

My family lived in a house that was the original farm house the town was built up around beginning in the 1850's. My dad and I rewired the house when I was a kid. We put over 1000 ft. of modern Romex wire into that old house to replace the old tube and knob wiring. The original barn was still behind the house and it was used as a garage. When we moved into the house in the early 60's, the upstairs of the barn contained over 1500 oak half wagon wheels called 'fellies'. They were too hard to cut up with a saw, so my dad got ahold of some of the Amish up in Middlebury, IN to come down and haul them off for free. The Amish were pretty excited about it. It took them several trips to get them all toted back the 60 miles or so from Waterloo to Middlebury in horse-drawn wagons.

I attended Manchester College in North Manchester, IN. [Oddly enough, there is no 'South Manchester'] I graduated with a degree in Biology/Chemistry in 1974. I married my high school sweetheart that same year. My first job was working for a company in Lafayette, IN that made polygraphs for the CIA. That lasted about a year, and then I worked the next 20 years making urethane foam for companies in Marion and Auburn, IN., where we live now. In 1989, another fellow and I started our own company from scratch making epoxy and urethane polymers. These

polymers are used in adhesives, potting and encapsulation compounds and also in medical devices. I have two US patents on the use of Ultraviolet light cured polymers. I sold out my half of the company in 2011 and am now retired. Somewhere along the way, we had three boys. The oldest boy has his multi engine rating as well as his A&P rating. He served in the Air Force at Edwards AFB modifying F-15 Strike Eagles. He went to Indiana State to get his degree in Airport Management. He is now an executive over the corporate IT department for Serva in Ft. Wayne. He is married and has two daughters. The middle boy is an attorney living in Brownsburg. He is married. We are still bugging them for grandkids. The youngest son lives in Auburn. He is an electrical engineer who works for a company that does radiation curing of plastics. He is also married...and is also being bugged for grandkids.

In previous interviews we have heard about jeeps, pickup trucks, and airplanes. With that information is there anything that you do for fun or hobby? I have heard a rumor that you might have a mundane interest in Astronomy.

I have always had an interest in astronomy. When I was 12, there was a total eclipse of the sun that was visible from Indiana. I build a solar projector from an old refrigerator box and was able to tell the time of day by measuring the inclination of the sun's image projected through a pinhole in the box. In 1996, I talked my wife into letting me purchase an 8" telescope. My youngest son and I ended up building roll off roof observatory in the backyard to accommodate the scope. His senior year, he did a science fair project on the classification of a supernova that occurred in December of 1998. We spent most of the winter in our Carhartt's out in the observatory making brightness measurement on that supernova. It was a great father-son bonding experience. He took the science fair project to the International Science Fair in Detroit that year and got a scholarship to the University of Evansville out of the deal. Once the youngest boy had left for college and we were 'Empty Nesters', I got more involved in astronomy. I tore down the old wooden, roll off roof observatory and had a local contractor build a two-story observatory with a domed roof. I traded in the old 8" scope for a new, custom made 16" scope on a computer controlled mount. About that same time, I began to realize just how much I *didn't* know about astronomy. I was having more questions that I had answers. I started my Masters of Science

in Astronomy and completed it in 2005. My major focus of interest is Variable Stars. These are stars that vary in brightness over time. Some will cycle in brightness over a period of years...others will cycle in brightness over a period of minutes. I just finished a stint on the board of directors of the *American Association of Variable Star Observers* headquartered in Cambridge, MA. I also study exosolar planets; these are planets in orbit around distant suns. So, now, almost every clear night, my wife can find me out in the observatory making observation on stars of one type or another. I also work with a college professor at the University of Hawaii on a summer program that allows high school students to use my telescope by remote control from Hawaii. When it is 4pm in the afternoon, in Honolulu, it is 10pm here in Indiana. So the kids can take point and digital images through my scope over the internet. We have done this for about 7 years. Two of those years, I went to Hawaii to teach the students while my youngest son ran the scope back here in Indiana. For the most part, these students were at-risk kids that were smart but just needed a boost in self-confidence. The goal of the program is to teach math and physical concept to the students using astronomy as a teaching aid. The students actually devise and complete astronomy projects while in the two week program on the campus of the university. They are then encouraged to take these projects to the local and state science fairs. The projects themselves were daunting:

“Spectral Analysis of Time Dilation in Quasar Microvariability”

“Analyzing the Correlation Between Solar Activity and Global Temperatures”

“Bow Shock Formation and Exoplanet Hat-P-32b

“Solar Tsunami: A Study of the Correlation Between”

“Coronal Mass Ejections and Extreme Ultraviolet Waves”

“Spectral and Periodic Variation in Cataclysmic Variable System FO Aquarii”

An amazing number of these students have qualified for partial or full ride college scholarships. Some of the students that I have kept in touch with are working on their Masters in Chemistry, Masters in Computer Science, BS in Divinity, this list goes on. I am honored to be a small part of it.

What caused you to join the AMHF?

Joining the AMHF was a conspiracy propagated upon me by fellow board member Gaylon Piercy. Before I retired, Gaylon was one of my customers. After we would talk business on the phone, we would talk about our hobbies, and Gaylon would talk about this old bomber he was working on. After I retired, one thing lead to

another and Gaylon asked me if I would consider being on the Board of the AMHF. I jumped at the chance. The board needed someone who had a background in marketing. I was also able to contribute by supplying flyers, photos and banners to the AMHF when needed.

How long have you served on the BOD?

This is my 4th year on the board.

Can you give other members a good reason to step up and fill a director's seat?

The PV-2 is a small part of history. But it is an important part of history. **Our history.** Over the last 50 years, way too much of the physical history of WWII has been lost. The PV-2 is a symbol of the sacrifice our servicemen and women made for insure our freedom. But it is an actual working model and not just a static artifact in a museum. Being an American is **advanced citizenship**. It's not for the lazy or the faint of heart. Keeping history alive by keeping the Harpoon in the air is a responsibility and a privilege of that citizenship.

Now must of us who work on the Harpoon on a regular basis and have been around you know if some yells "Paula, over here" that means we have a spot no one else will fit in. What do you have to say about that?

Don't let her diminutive size fool you. Paula is a combination of the Energizer Bunny and a Champion sparkplug, all on one. She is tireless and is a wellspring of information. What amazes me is that; if it has wings and an engine, she knows something about it.

If a person walked up to you and asked about joining the organization what advice would you give him in regards to the work and historical significance of the plane. How about the clothes he would need if he worked on it?

When I joined the AMHF board, I asked our treasurer how much we had in the bank. He said, "275". I asked, "Thousand?" He replied, "No. Dollars". The biggest problem that the AMHF had is funding. Many of the members of the

board have loaned/gifted heavily just to keep the plane from being sold for scrap. They do this because they love the idea of keeping this bit of history in one piece and functioning. And there is no 'local garage' that we can 'drive' the plane to when it needs repairs [which is - always]. The work is done by the members of the AMHF themselves. Since we do not currently have a hanger for the Harpoon, those repairs take place on the tarmac...sometimes in less than ideal weather.

What would you like to see take place in the future or changes you believe the BOD could act on to make it even a better organization? Do you have any type of a road map that might help achieve that goal?

The long term goal of the AMHF board of directors is to build a hanger/museum where the Harpoon can be housed and showcased. If this does not happen in the next few years, the weather will continue to take its toll on the plane and it will require even more maintenance. A modest amount of funding has been secured from the Hamilton County to investigate a fund raising and market campaign required to meet this goal. As with most marketing campaigns, the end-game is to put the needs of the organization in front of as many people as possible and then ask for assistance in funding the new hanger/museum. We need to take more advantage of social media, attend more airshows and attend conventions centered on specialty aircraft in order to achieve this goal.