



# EAA Chapter 974—Newsletter

May 2010

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## Prez Says

Brian Charlton

### Oshkosh Camping

It has been brought to my attention that Kent Forsythe will not be going to Oshkosh early to reserve camping spots for our members. If anyone feels like they would like to step forward and take over this responsibility, please let me know.

Blue skys

Brian

## Meeting Minutes

Brad Payne

Meeting called to order May 2, 2010

### Attendance

Guests

### Reports

Secretary's Report

No Report

Treasurer's Report

Bob Burkhardt – Taking Dues today. No Split the pot

Tech Counselors' Reports

Ray Parker

No Report

Mark Taylor

No Report

Young Eagles Report

Asked for interest in Young Eagles flights. Have One group of 8-10 kids requesting. Decided on May 15<sup>th</sup>. 9am Saturday.

Hanger Master's Report

No Report

Web Masters Report

No Report

Librarian's Report

It's still there!

Chapter Historian's Report

Toured the Hartzell propeller plant. Very interesting tour. Worth Seeing if you ever get a chance.

Publicity Officer

No Report

Presidents Report

No Report

Project Reports

Johnathan Hardwick – During an Annual found an overheated Cylinder and will be taking about.

EAA Biplane project in Kevin Gassard's hanger is underway. Found some issues with the ignition.

Brett – New instrument panel is in the Velocity and hoping to fly next few weeks.

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## Meeting Minutes ( continued )

Brad Payne

### Announcements

Paul Payne- Interested in Stories of First Flights. The chapter picnic will be in July instead of June.

## Program List for 2010

**May 2**—Gordon Penner—Stall/Spin recovery      **June 6**—Stories of First Flights

**July 11**—Picnic

**August 8/15**—Oshkosh Pictures

**September 12**—Corvair Engines by Gary Collins

**October 3**—Project Tour

**November 7**—Aircraft Registration by Jerry Brainard

**December 5**—Unknown.

## Hartzell History and Tour

Bob Dombek, Chapter Historian

When John T. Hartzell & Orville Wright became Oakwood, Ohio Neighbors in 1914, no one realized their association would lead to The Hartzell Propeller Company, one of the longest lasting remnants of the aircraft industry that blossomed around the Wright Aeroplane Co. In 1875, John T. Hartzell, borrowed \$25 from his father & set up a wagon making business. He soon realized that he would need a ready supply of special hardwoods. He founded a sawmill in Greenville Ohio, so that he would have a supply of Oak, Ash, & Walnut for his wagons. His son George purchased the company in 1900 & began specializing in walnut lumber for the European market. When a World War I embargo shut off lumbar markets into Europe, The Hartzells, turned to production of walnut gunstocks. Enter George's son, Robert, an engineering student at the University of Cincinnati. Orville Wright suggested to Robert that he try making a few airplane propellers. The Hartzell Walnut Propeller Co. was born. Propeller manufacturing had a simple beginning, as the first blades were literally chopped out of glued-up walnut blocks with hatchets.

The propeller business grew as Hartzell became an established name in the aviation industry. 1981 Saw the end of the Hartzell's wood propeller business & a split from the original Hartzell Hardwoods Company. Both companies thrived & continue to serve the needs of their customers. The propeller company turned more & more toward aluminum and later, composite propellers. The company has been sold & bought several times over the years, but is now once again under local ownership. Today, Hartzell seems worlds away from the early days of flight. The company continues to be a market leader in supplying both metal and lightweight composite blades for private & corporate aircraft.

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## Hartzell History and Tour (continued)

On Thursday, April 30, Brian Charlton & I took the Middletown Chapter, EAA 1394, up on their invitation to join them on a tour of the Hartzell plant. We flew to Piqua on a beautiful but windy day & shuttled to the plant in the “crew car”. We were guided through the facility by a retired Hartzell engineer who knew the operation well. Not really knowing what to expect, I was struck by the cleanliness & order of the plant. It was amazing to see racks of rough prop blanks, that had been extruded from cylindrical billets, be transformed into beautifully finished blades. Much of the work is done by computerized CNC milling machines of various shapes and sizes. These machines close up around the work & the operator monitors both a computer and closed circuit TV screen. That is not to say there isn't some hand labor going into the making of props. At one work station, or “cell”, the machinist was doing some finish work using a big grinder, then feeding his work to a robot which did the final cutting to shape of the propeller blade. It was interesting to see the team work between the man and the robot, the “old” & the new working together. In another part of the plant, we saw composite blades being finished for Cirrus. At the present time Cirrus is one of Hartzell's biggest customers. We did not get to see the actual lay-up work being done on these blades. That was occurring at another plant. (Hartzell has 4 plants)

Of course a modern propeller is nothing without its hub. Hartzell makes its own hubs, & they are beautiful to behold. Once the hub & blades are mated, the props are balanced. The precision balancing leaves nothing to vibrate. The blades are balanced individually in multiple axes and on the hub. Finally, we stopped at the shipping area. There were props of all shapes & sizes, boxed up & ready to ship. Can you imagine boxing a 10 foot diameter 3 blade propeller? You could tell what was in the box, because the box was shaped to fit around the blades. Amazing!

Something that made this tour special for me was the personal connection I have with the Hartzell Company. My Grandmother owned a farm that bordered the east side of the airport. In 1961 she sold about 60 acres of her farm to the Hartzell Family. At that time they were operating both the airport and the propeller repair facility. They needed some of her property to lengthen the runway. They were beginning to service larger turbo-prop corporate aircraft and runway length was becoming critical. The proceeds from that sale paid college tuition for me, my sister and my cousin. Unfortunately, the farmhouse, located directly in line with runway 26, was recently torn down. A King Air landed short of 26 just missing the house but spraying the house with jet fuel. Witnesses said that the jet fuel was atomized by the impact and came down like rain. The wood structure was soaked with fuel and could not be salvaged.

I'll end by saying that the next time Hartzell opens one of its plants for a tour, it is well worth the drive---or flight---to Piqua.

Happy Landings!

Bob Dombek  
Chapter 974 Historian.

## Program— Stall Spin Seminar

Gordon Penner



Gordon speaking about Angle of Attack



A great turn out for a great presenter



Gordon Penner