AT-10 WICHITA

Cadet AirCorps Museum AT-10 Project

by Chuck Cravens

AIRCORPS AVIATION

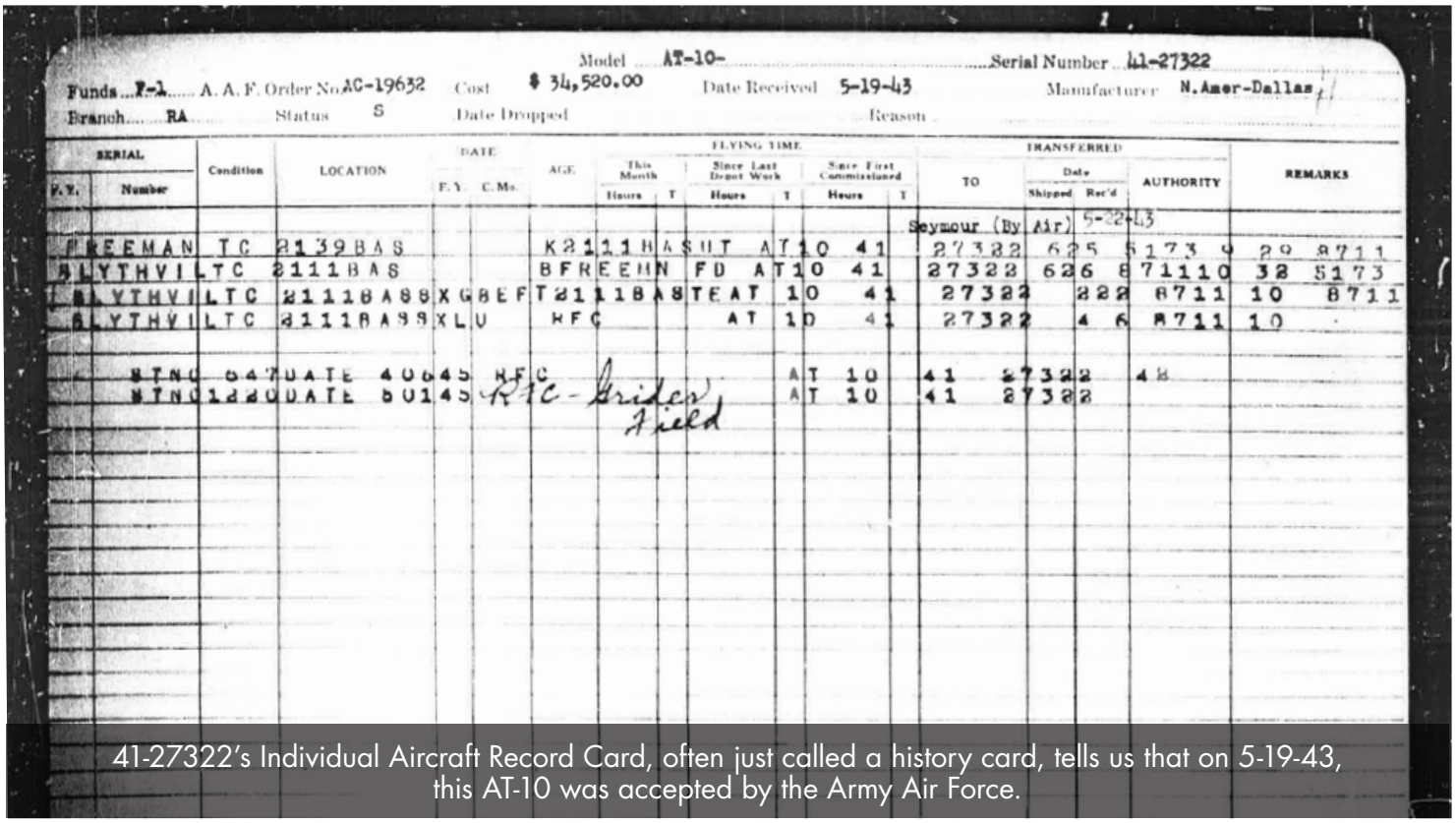
The only complete AT-10 in the world at the National Museum of the U.S. Air Force, USAF photo.

Project...

The Beech Model 25 project was designed to provide the Army Air Force with a small, twin engine trainer suitable for developing pilot skills in retractable landing gear twins. It was to be produced with primarily wood construction because there was fear that aluminum suitable for airframes would become scarce as the war progressed. The original model 25 prototype crashed on May 5, 1941. Despite the accident, the design was promising, so Beech went ahead with further development of the design. Work on the trainer, now designated Model 26, began the next day.[1]

Deliveries began in February 1942 and ended in 1943 after 1,771 were completed by Beech. Another 600 were produced by Globe Aircraft in 1944.

The Wichita, as it was named, was an important step in the development of twin engine fighter and two and four engined bomber crews, acting as an intermediate airplane between light, single engine trainers and the heavy, high performance twins.



Model AT-10 Serial Number 41-27322
Funds F-2 A. A. F. Order No AC-19632 Cost $ 34,520.00 Date Received 5-19-43 Manufacturer N.Amer-Dallas
Branch RA Status S Date Dropped Reason

SERIAL F.Y.	SERIAL Number	Condition	LOCATION	DATE F.Y.	DATE C.Mo.	AGE	FLYING TIME This Month Hours	T	FLYING TIME Since Last Depot Work Hours	T	FLYING TIME Since First Commissioned Hours	T	TRANSFERRED TO	Date Shipped	Date Rec'd	AUTHORITY	REMARKS
													Seymour (By Air)	5-22-43			
FREEMAN	TC 2139 BAS		K 2111 BAS UT AT	10	41								27322	625	5173	9	29 8711
BLYTHVI	LTC 2111 BAS		B FREEMN FD AT	10	41								27322	626	8711	10	32 5173
BLYTHVI	LTC 2111 BAS	X	G B E F T 2111 BAS TEAT	10	41								27322	222	8711	10	8711
BLYTHVI	LTC 2111 BAS	X	L U RFC AT	10	41								27322	4 6	8711	10	
	STNO 047 UATE 40645 RFC										AT	10	41	27322		48	
	STNO 1222 UATE 50145 RTC - Gridley Field										AT	10	41	27322			

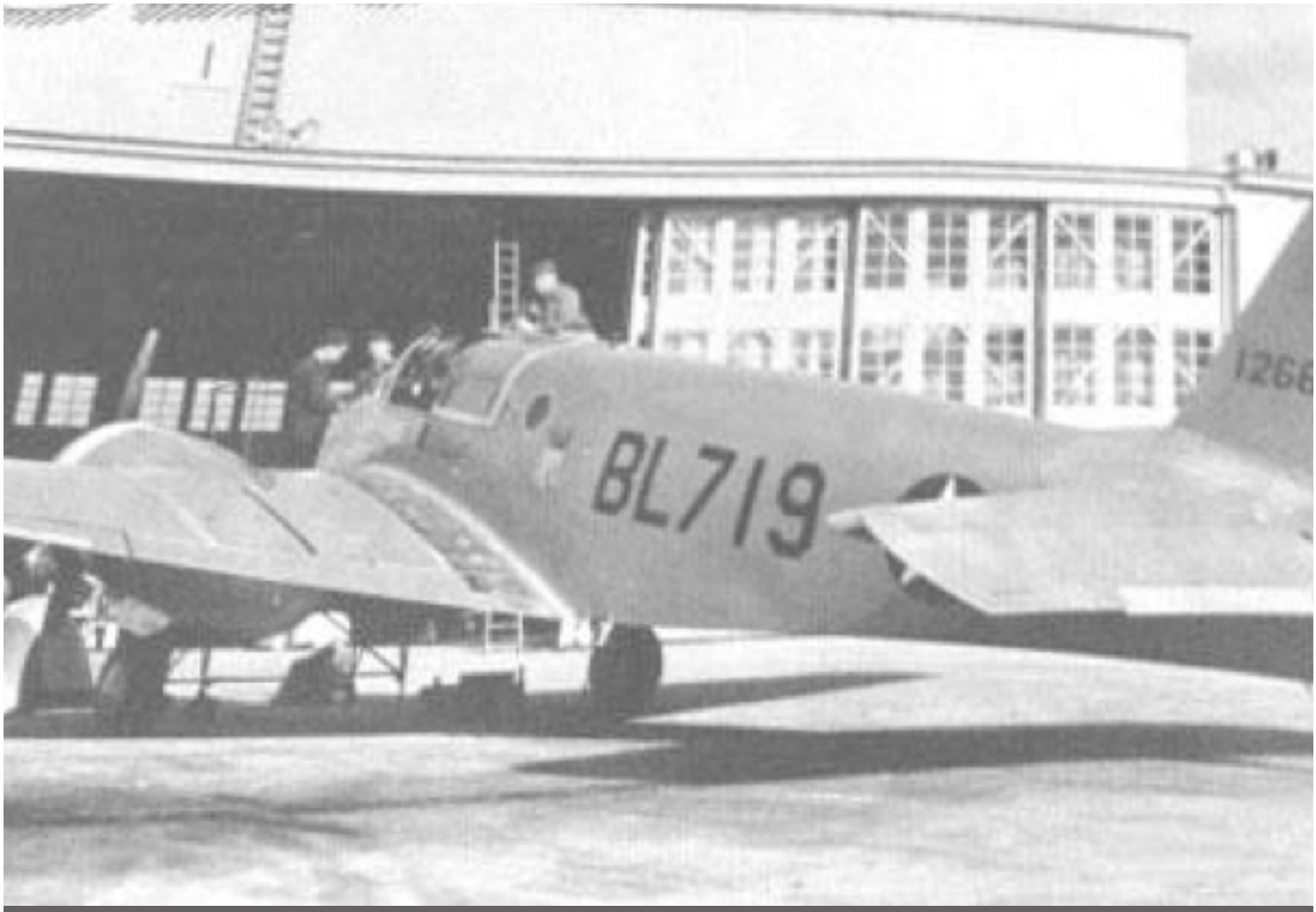
41-27322's Individual Aircraft Record Card, often just called a history card, tells us that on 5-19-43, this AT-10 was accepted by the Army Air Force.

Most likely it was completed on that date or a day or two before. On 5-22-43, she was flown to Freeman Army Airfield, Seymour, Indiana and then on to Blytheville, Arkansas, on 6-24-43, arriving the next day. There she served until she was declared surplus on 4-6-45

1 Edward H. Phillips, Beechcraft, Staggerwing to Starship, Flying Books, Eagan, MN, 1987

Additional Researched Info for 41-27322

Her construction contract, AC 19632, was approved on June 5, 1941 for a run of 1080 AT-10s, serial numbers 41-26252 through 41-27331. Contract AC 19632 was the third and largest production run of AT-10s. This Wichita was plane 1071 of this batch and the 1420th AT-10 built, including all separate production runs. She was built in the Beech factory in Wichita, Kansas, as were all but the last 600 of the 2371 AT-10s built. That last run of 600 were were the ones constructed by the Globe Aircraft Company in Fort Worth, Texas.



The only AT-10 photo confirmed to have been taken of a Blytheville-assigned Wichita that we have found. Courtesy of Ray Westbrook of Blytheville, Arkansas

Possible WASP Connection

There were ten Women Airforce Service Pilots assigned to Blytheville, either from other bases, or after training was completed at Avenger Field in Sweetwater, Texas. The official archive of the WASP is located at the library of Texas Woman's University and the figures shown in this report come from there.

Women Airforce Service Pilots Assigned to Blytheville Army Airfield[1]

BLYTHEVILLE ARMY AIRFIELD BLYTHEVILLE, ARKANSAS

Bergh, Margaret	**44-W-5**	Kenworthy, Patricia	**44-W-5**
Christiansen, Marjorie	**44-W-9**	Martin, Mary Eleanor	**44-W-3**
Clements, Grace	**43-W-5**	Mundt, Roberta	**43-W-5**
Jackson, Mary	**44-W-8**	Quist, Mary	**44-W-7**
Johnson, Dorothy	**44-W-8**	Storm, Mary	**44-W-7**

The number and letter code beside their names stands for the class with which they graduated. 44-W-5 would be the fifth WASP class of 1944 at Avenger Field, the training facility devoted to the WASP.

Most of this group of WASP flew as B-25 co-pilots and AT-10 pilots, but WASP flew over 70 types of aircraft during WWII. Assignments included engineering test pilots, instrument check pilots, ferrying, and flight checks for returning overseas pilots. Thirty-eight Women Airforce Service Pilots gave their lives flying for their country.[3]

The following pages have information obtained from the pilot cards of the ten Women Airforce Service Pilots who may have flown our AT-10 at Blytheville Army Airfield, generously made available to me by Texas Woman's University, the nation's largest university primarily for women.

TWU is home to the national archives of the Women Airforce Service Pilots (WASP). Please do not use images contained in this update without obtaining proper permission from the official archive of the Women Airforce Service Pilots at Texas Woman's University.

Continued research into a WASP or other pilot connection with 41-27322 will be conducted with a goal of locating a logbook entry showing that a specific pilot, male or female flew this airplane during World War II.

1 Courtesy of The WASP Archive, The TWU Libraries' Woman's Collection, Texas Woman's University, Denton, Texas

3 Final Report on Women Pilot Program by Jacqueline Cochran, WASP Archives, Texas Woman's University, originally sent to the Commanding General of the Army Air Force on June 1, 1945

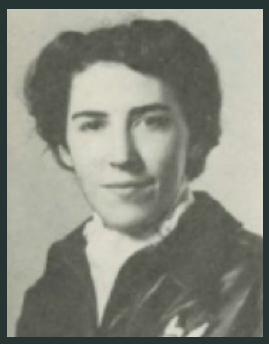
MARY ELEANOR MARTON SABOTA

-1999

CLASS:	44-W-3
BASE ASSIGNMENT:	Dodge City Army Air Base Blytheville Army Air Field Laredo Army Air Base
PLANES FLOWN:	B-26, B-25, AT-10, P-36, P-40

Mary Eleanor Martin hailed from Bloomsberg, Pennsylvania. Courtesy of the official archive of the Women Airforce Service Pilots at Texas Woman's University.

DR. GRACE "BETTY" CLEMENTS

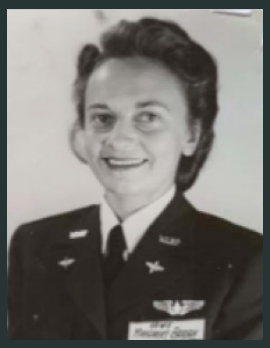


-ND

CLASS:	44-W-5
BASE ASSIGNMENT:	Avenger Field; Officer Training Orlando,FL Lockbourne Army Air Base Blytheville Army Air Base
PLANES FLOWN:	PT-19, B-25, AT-10

Dr. Clements was from Elmwood, Nebraska, courtesy of the official archive of the Women Airforce Service Pilots at Texas Woman's University.

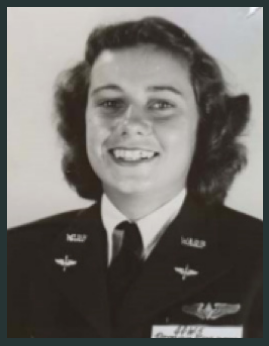
MARGARET W. BERGH MCGLINN



CLASS:	44-W-5
BASE ASSIGNMENT:	Avenger Field; Officer Training Orlando,FL Blytheville Army Air Base
PLANES FLOWN:	AT-6, AT-10

Margaret Bergh came from Tuckahoe, New Jersey and she was a group commander, courtesy of the official archive of the Women Airforce Service Pilots at Texas Woman's University.

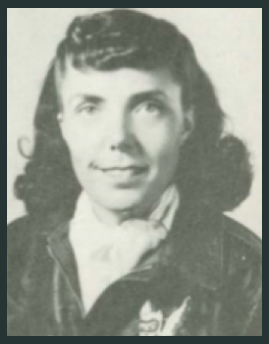
PATRICIA KENWORTHY NUCKOLS



CLASS:	44-W-5
BASE ASSIGNMENT:	Blytheville Army Air Field
PLANES FLOWN:	B-25, AT-10

Glenside, Pennsylvania was Patricia Nuckols home before joining the WASP, courtesy of the official archive of the Women Airforce Service Pilots at Texas Woman's University.

ROBERTA E. MUNDT



-1998

CLASS:	44-W-5
BASE ASSIGNMENT:	Romulus Army Air Base Lockbourne Army Air Base Blytheville Army Air Field
PLANES FLOWN:	AT-6, PT-19, C-47, B-24, B-17, B-25, AT-10

Roberta Mundt hailed from Berea, Nebraska, courtesy of the official archive of the Women Airforce Service Pilots at Texas Woman's University.

MARY QUIST (EDWARDS)

CLASS:	44-W-7
BASE ASSIGNMENT:	Unknown
PLANES FLOWN:	Unknown

Mary Quist (Edwards), hometown unknown, courtesy of the official archive of the Women Airforce Service. Pilots at Texas Woman's University. No "pilot card' seems to exist for Mary Quist in the archive.

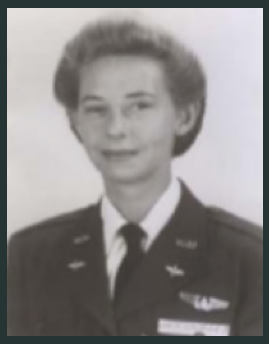
MARY G. STORM RUPRECHT

1918 -

CLASS:	44-W-7
BASE ASSIGNMENT:	Blytheville Army Air Field
PLANES FLOWN:	BT-13, AT-6, AT-10

Class 44-W-7 graduate Mary Storm called Englewood, New Jersey home, courtesy of the official archive of the Women Airforce Service Pilots at Texas Woman's University.

MARY E. JACKSON KINNEY



CLASS:	44-W-8
BASE ASSIGNMENT:	Avenger Field Blytheville Army Air Field
PLANES FLOWN:	AT-6, AT-10, PT-17

Mary Jackson came from South Roanoke, Virginia, courtesy of the official archive of the Women Airforce Service Pilots at Texas Woman's University.

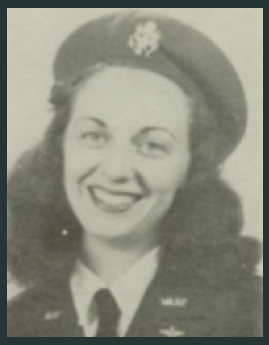
DORTHY JOHNSON BURRI

- 1995

CLASS:	44-W-8
BASE ASSIGNMENT:	Blytheville Army Air Field
PLANES FLOWN:	B-25, AT-10, AT-6, PT-17

Bethesda, Maryland was hometown to Dorothy Burri, courtesy of the official archive of the Women Airforce Service Pilots at Texas Woman's University.

MARJORIE M. CHRISTIANSEN BECK

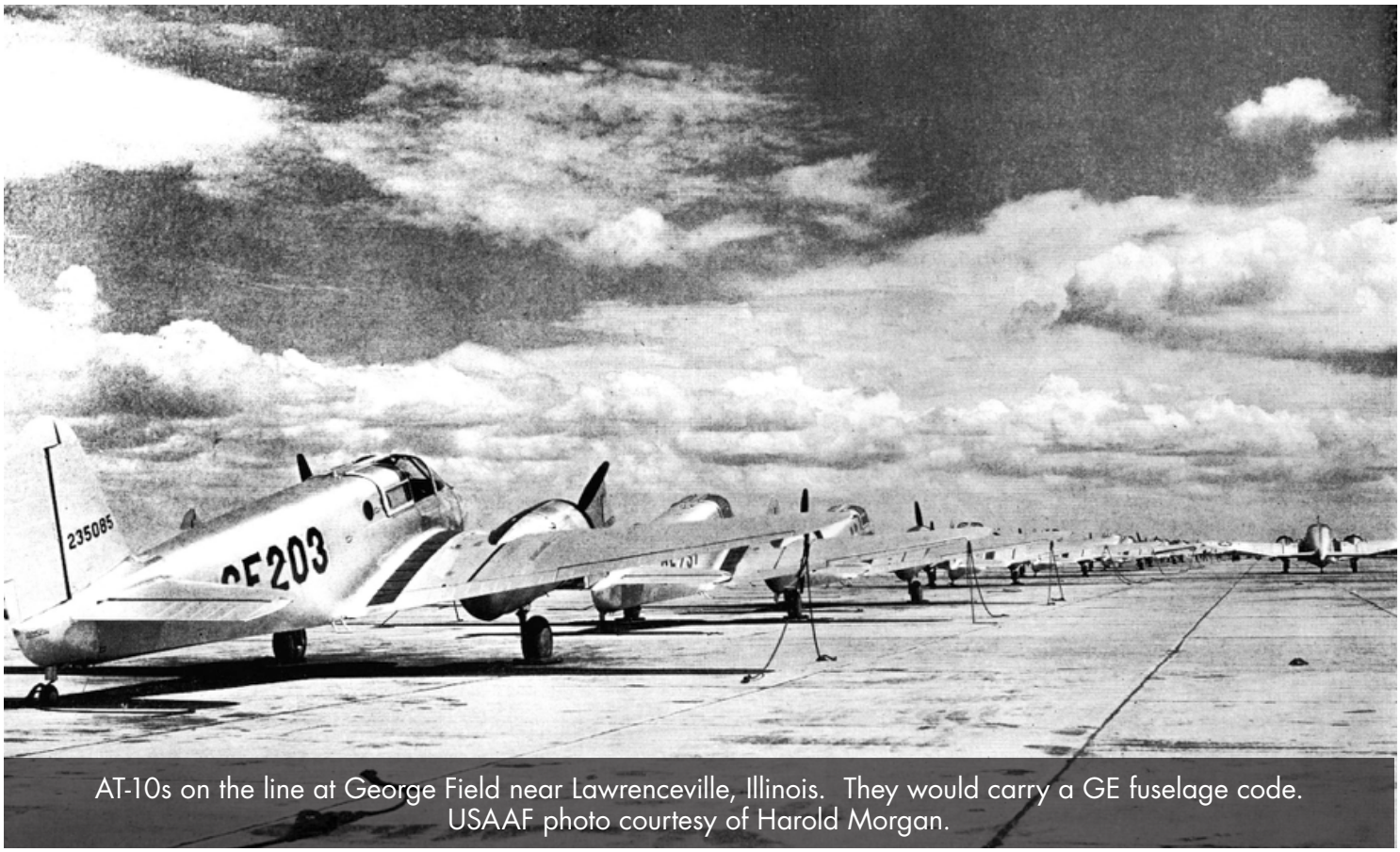


1923 -

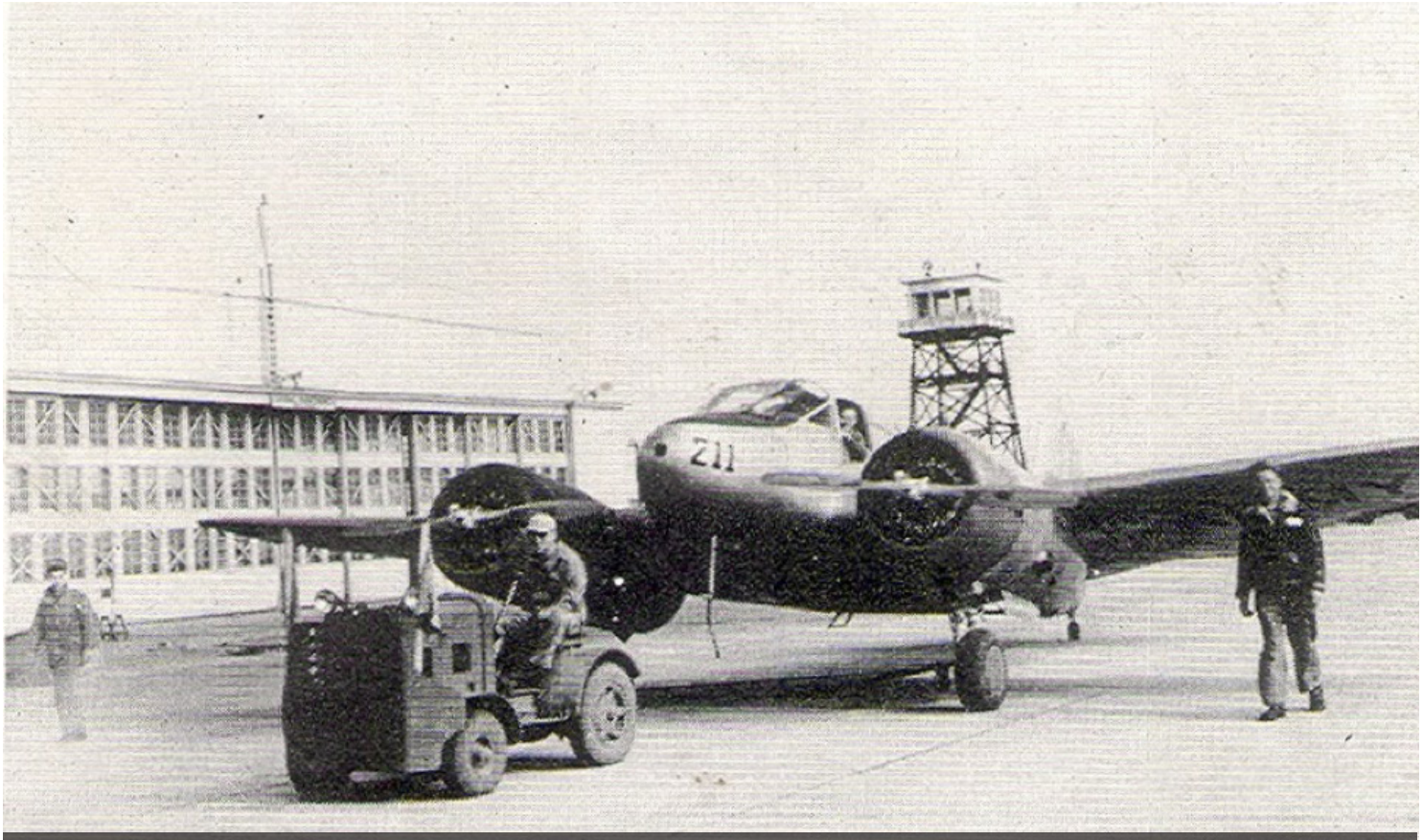
CLASS:	44-W-9
BASE ASSIGNMENT:	Blytheville Army Air Field
PLANES FLOWN:	AT-10, B-25

Our final pilot is Marjorie Christiansen of Provo, Utah, courtesy of the official archive of the Women Airforce Service Pilots at Texas Woman's University.

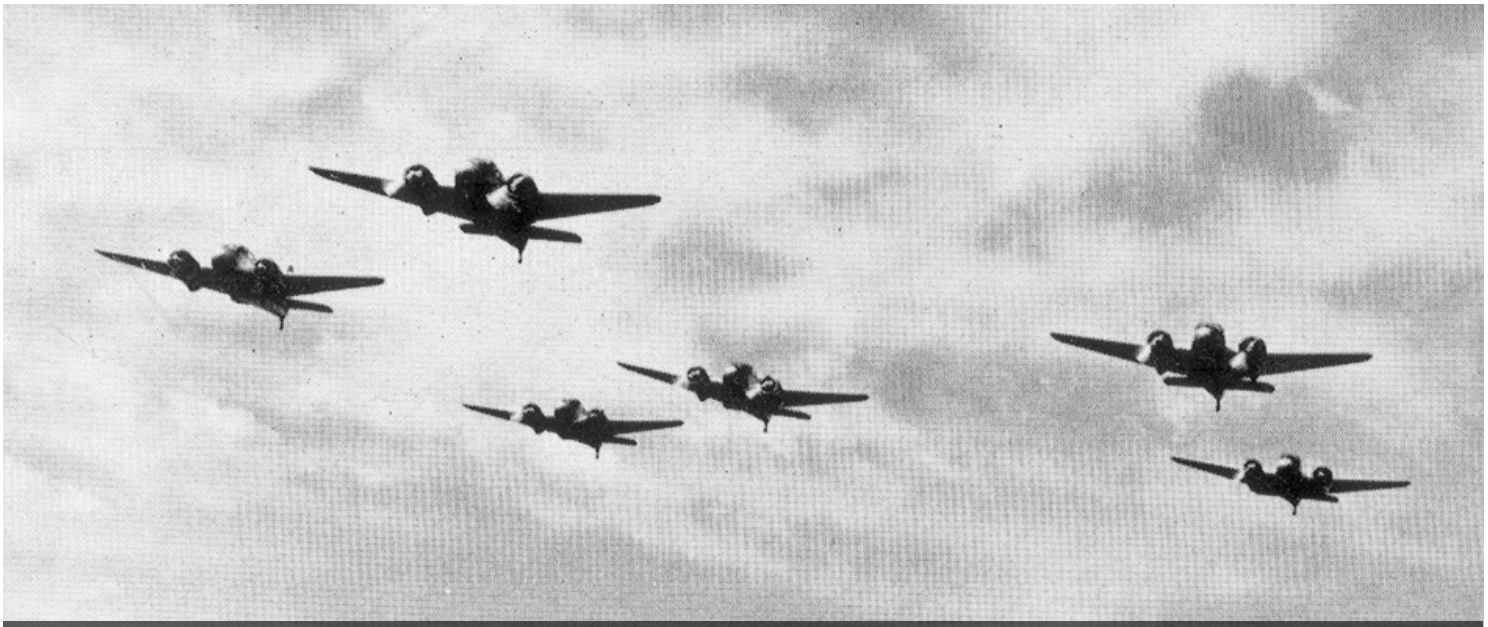
Wartime AT-10 Images



AT-10s on the line at George Field near Lawrenceville, Illinois. They would carry a GE fuselage code. USAAF photo courtesy of Harold Morgan.



Refueling at George Airfield, USAAF photo courtesy of Harold Morgan.



Overhead formation pass, USAAF photo courtesy of Harold Morgan.

This formation photo shows at least three AT-10s from the same production run as 41-27322. USAAF photo courtesy of Harold Morgan. The third AT-10 in from the foreground, 41- 27237, is 85 airframes before ours on the production line and the one in front, 41- 27233, is 89 earlier.

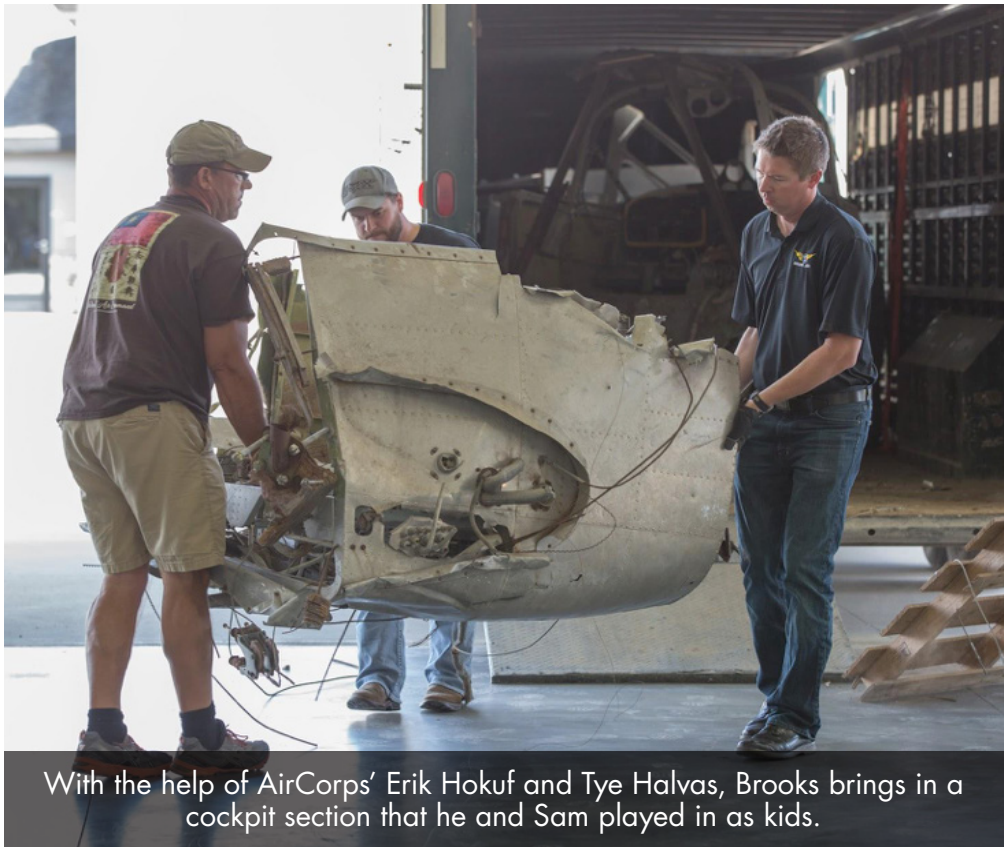
The AT-10 Arrives

On August 8, 2016, Cadet Air Corps Museum AT-10 Project board members Sam Graves and Brooks Hurst arrived at the AirCorps Aviation hangar at Bemidji Regional Airport bearing "gifts". The gifts were, of course, the components saved for many years to eventually use as the backbone in a restoration and rebuilding effort to once again put an AT-10 in the air.

There are no flying AT-10s and only one complete example in existence at the National Museum of the U.S. Air Force, shown in our cover photo.

Brooks Hurst carries in a windscreen frame.

Sam and Brooks bring in instrument panels.



With the help of AirCorps' Erik Hokuf and Tye Halvas, Brooks brings in a cockpit section that he and Sam played in as kids.

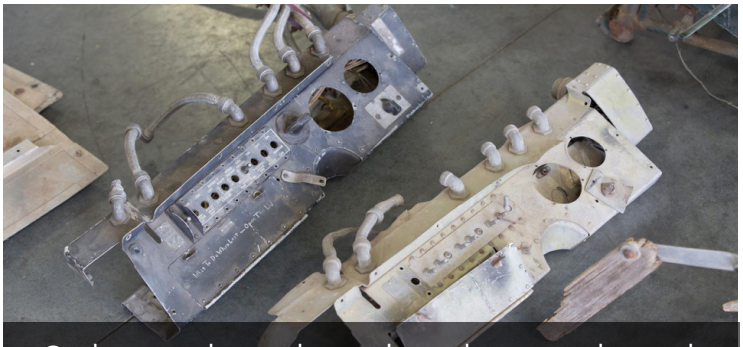
Another cockpit comes out of the truck.

This one has the windscreen and the rest of the upper cockpit enclosure still attached.

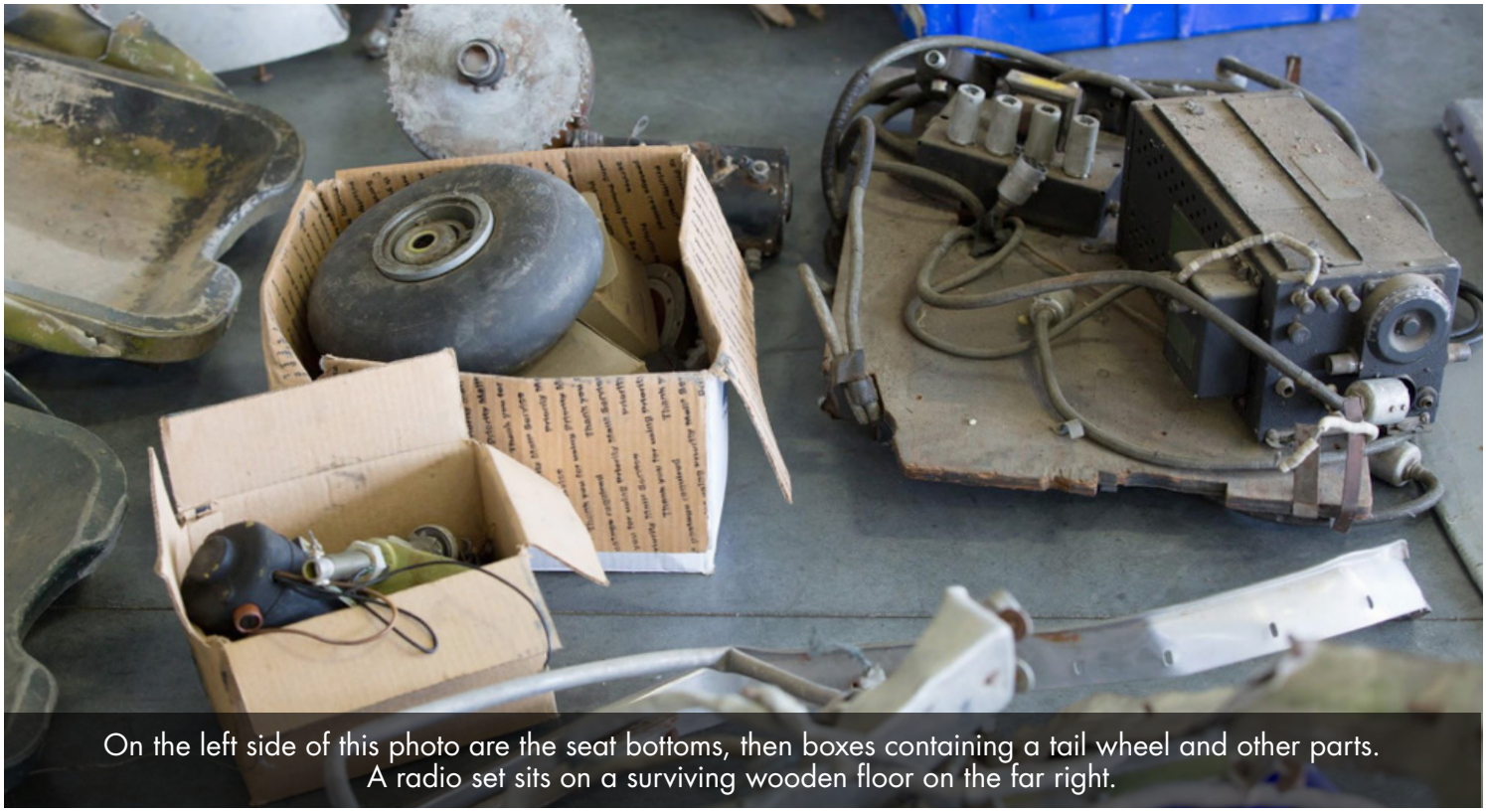
From left, we have elevators, windscreen frame, seats, and what Beech called "demountable nose assemblies."

Cockpit section number three comes out.

You may have noticed that the remaining parts of these AT-10s are the metal sections. Many AT-10s were purchased surplus for the two Lycoming R-680-9 radial engines, usable in Stearman crop dusters, among others. The airframes were left sitting abandoned at various airfields around the country. Moisture and neglect over the years allowed wood rot to decimate the main portions of the airframe, so the AT-10s, like MacArthur's old soldiers, faded away.



Cockpit switch panels are shown here complete with some flexible conduit for the electrical connections.



On the left side of this photo are the seat bottoms, then boxes containing a tail wheel and other parts. A radio set sits on a surviving wooden floor on the far right.

Brooks and Sam look happy to have the AT-10 stuff off the truck and inside the hangar!

Left to right, Brooks Hurst, Tye Halvas (AirCorps Maintenance Manager), Erik Hokuf (AirCorps' General Manager), and United States Congressional Representative Sam Graves of the Missouri Sixth District.

Restoration Begins

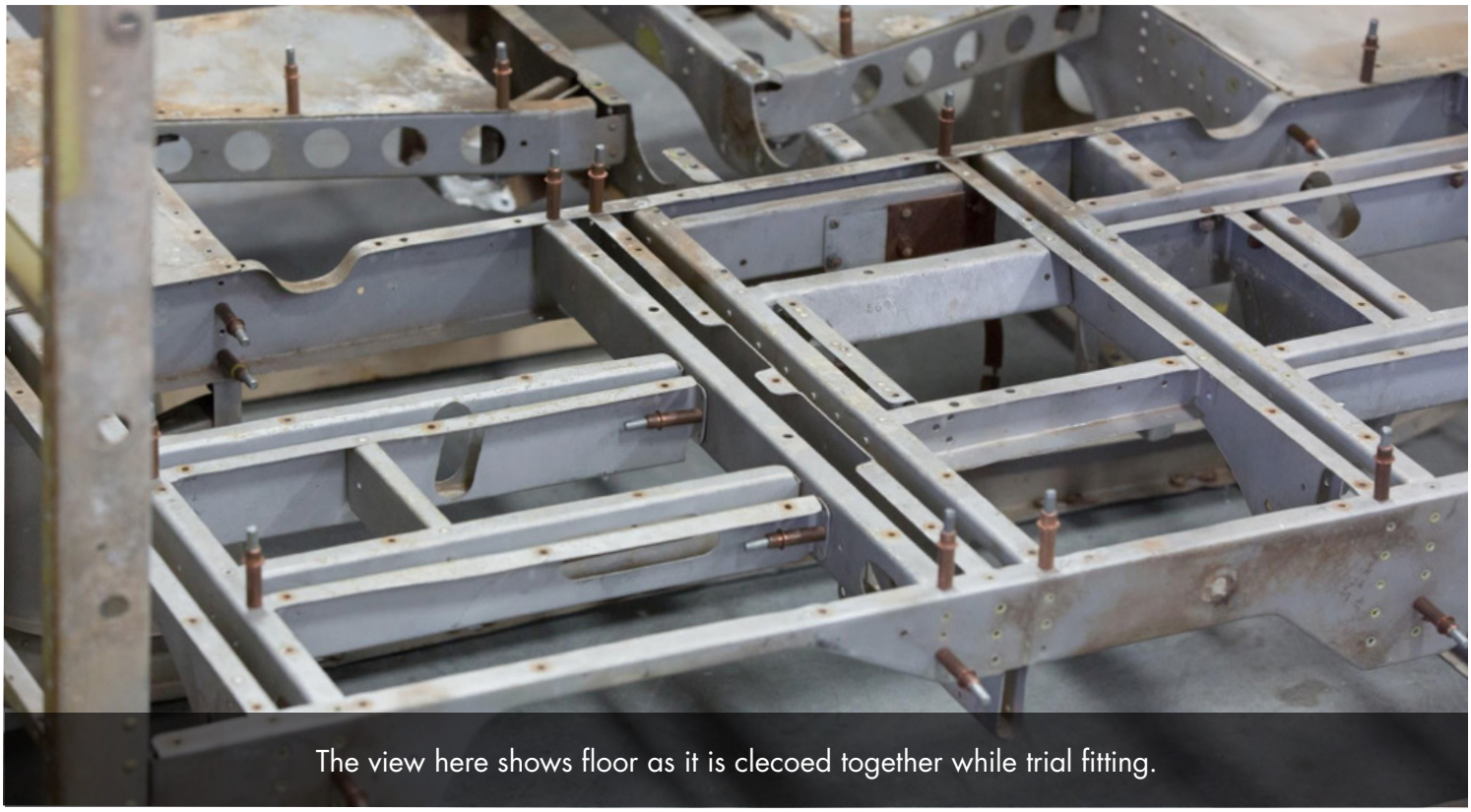
Guy Gorman looks over what there is to start the process.

A cockpit section begins to take shape using the best parts.

Once the parts have been selected and trial assembled, they will be inspected, repaired, painted, and eventually put in place in the restored cockpit permanently.

One of the "donor" sections shows here. Behind it is the P-51D, Cripes A'Mighty and Wings of the North's N2S-1 Stearman BuNo 3347, once flown by George H.W. Bush in training at Minneapolis Naval Air Station.

View from the rear as trial assembly continues shows in this image.



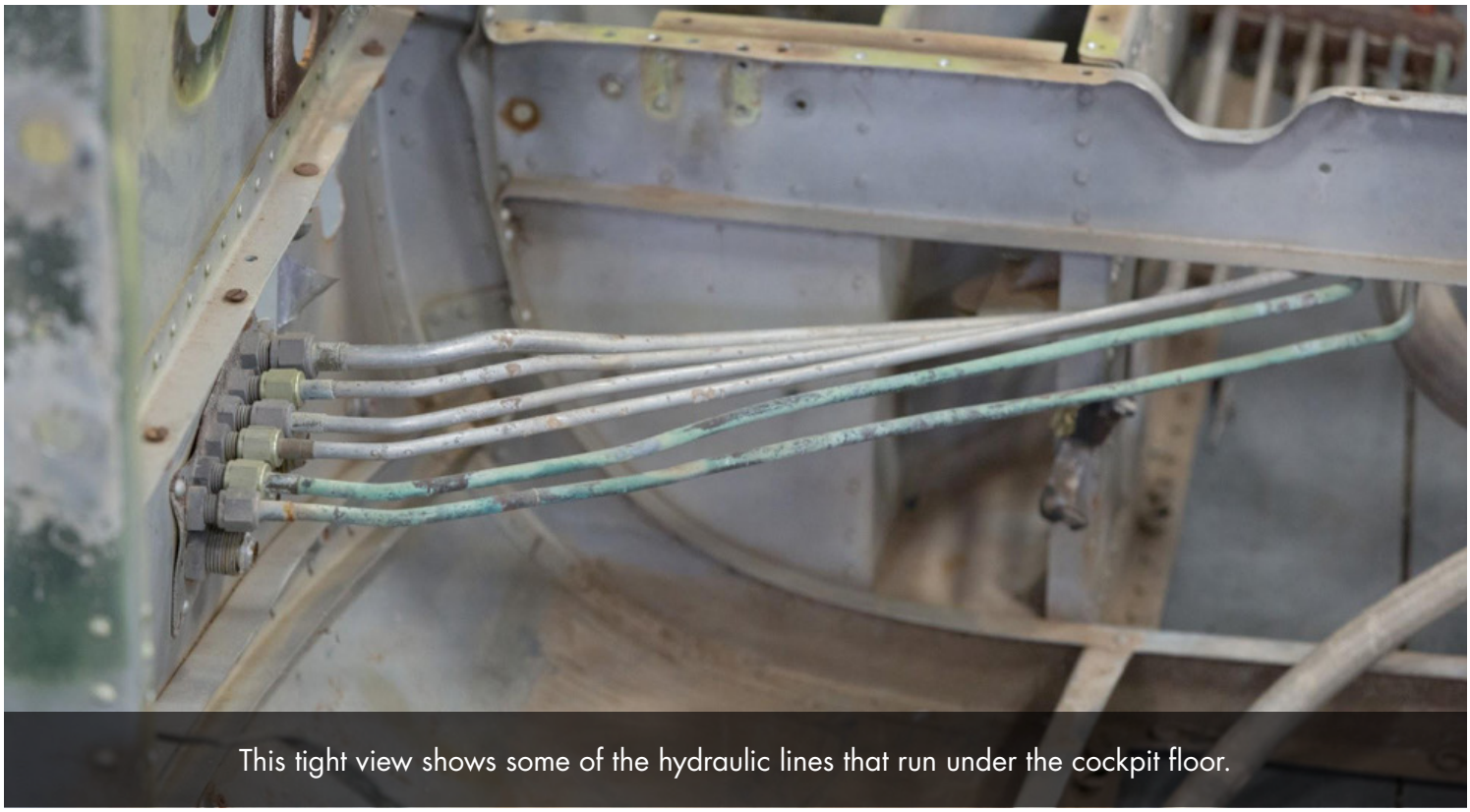
The view here shows floor as it is clecoed together while trial fitting.

For those who wonder what a cleco is, it is an easily installed and removed temporary fastener used in aluminum aircraft assembly (among other applications).

Somewhat as a sewing pin is used to hold material together, the cleco functions as a temporary fastener to clamp the aluminum skins to one another or to underlying frame sections as holes are drilled, skins are trimmed, and as other fitting procedures are done.

Originally developed by the Cleveland Pneumatic Tool Company, they are a standard item in any aircraft sheet metal shop. Color coded, the copper color of these clecos indicates that they are #30 for an 1/8 inch hole.

A windscreen frame sits on the bench.



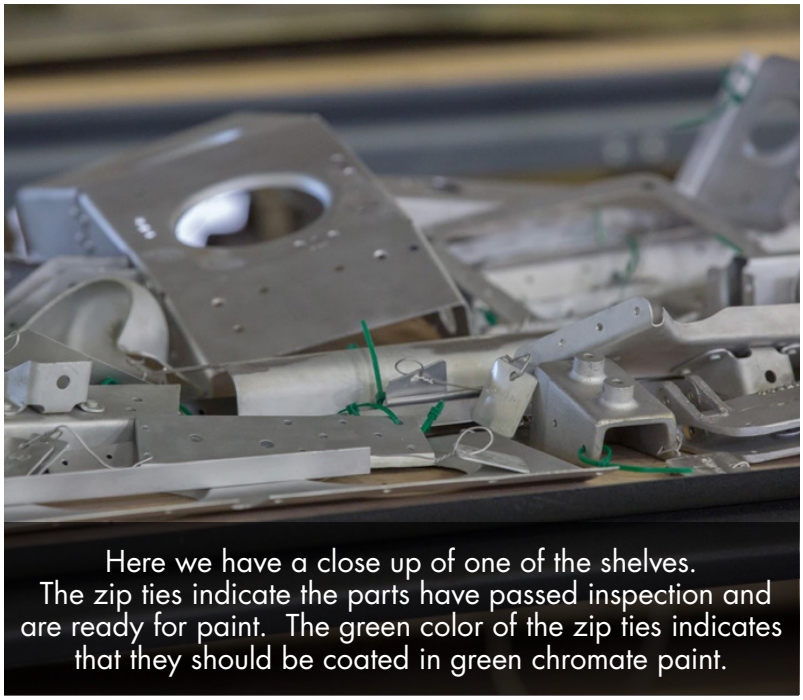
This tight view shows some of the hydraulic lines that run under the cockpit floor.

Another view shows the forward end of the same lines.

Guy looks over a part for possible use.

Parts organized on a shelf, some repaired and stripped, others newly created by the fabrication shop to the original Beech drawings or to CAD drawing from scanned original parts.

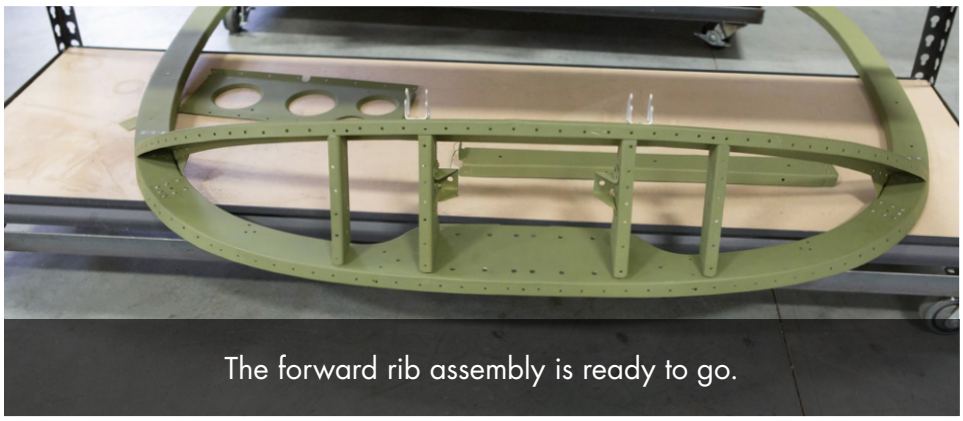
A strip of skin that fairs the windscreen into the fuselage skin sits on the bench in this shot.



Here we have a close up of one of the shelves. The zip ties indicate the parts have passed inspection and are ready for paint. The green color of the zip ties indicates that they should be coated in green chromate paint.

These parts have received their chromate green paint.

A closeup view of painted parts shows some of the clecos.



The forward rib assembly is ready to go.

Here we see a rack of shelves with many of the painted parts that will go into a cockpit section.

The floor goes together on the bench.

Here is another view of the floor from a different angle.

Fuselage ribs and structural members of the cockpit as they are assembled on the bench.

This is a front view of the same parts.