

Hangar Tales

Official Newsletter of the National Warplane Museum



While we all will agree that we've had a pretty mild winter, the temperature in the Big Hanger got pretty chilly on some Saturday's!!!!

INSIDE THE HANGARS

- 2023: Greatest Show on Turf Preliminary Lineup (June 3rd & 4th, 2022)
- Fokker DR1 Weights and Balance
- Our B-36 Peacemaker (model) is in the Air Again
- We Have A Flare For That
- We Need Your Input
- Work Being Done On The WACO
- "International" Road Trip To Promote Our Museum
- Marilyn B Cleveland and A Tiger Moth
- Replicating Whiskey 7's Pan Seats
- 2023 National Warplane Museum Event Calendar

2023 “Greatest Show on Turf” June 3rd and 4th Preliminary Lineup



F-16B “Viper” Team Demo



“Viper” Climb Demo



Rob Holland Ultimate Airshow



Class of ‘45



Hi Flight Mustangs P-51 Demo Team
“Little Witch” & “Mad Max”



“Quicksilver”
Scott Yoak



P-40 "American Dream"
Thom Richard



"Bent Wing" Corsairs



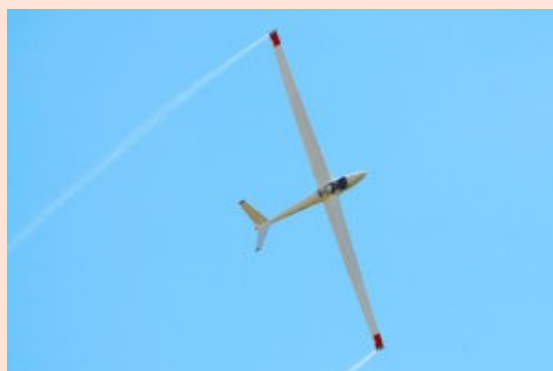
Skipper Hyle Air Corps Aerobatics



Jason Flood Pitts



Canadian Harvard Aircraft Association
Formation Team



Manfred Radius



Round Canopy
Parachute Team



Military Aviation Museum's
Consolidated PBY-5A Catalina



NWM's C-47, "Whiskey 7"



Air Heritage Museum's
Fairchild C-123K Provider
"Thunderpig"

Parking will be both tailgate and general admission.

LINEUP SUBJECT TO CHANGE due to weather or mechanicals.

Also appearing:

- Heritage Flight with the P-51
- NWM's Liaison Planes (L-16A, L-16B, L-21) and our "New" WACO
- Rob Gilman's BT-13 Vultee "*Valiant*" and Steve Nesbit's PT-26 "*Cornell*"
- JB Allred's Fokker Dr.I and Jeff Brook's Fokker D.VII (WWI reproductions)
- LEGO display in the Long Hangar
- Re-enactors, Military Vehicles
- Vendors

Fokker Dr1 Weights and Balance

By Craig Wadsworth

The Fokker Dr1 had its weights and balance checked. Weight and balance are a critical part of safe flying regardless of the age of the airplane. The balance point of the airplane must stay in a fairly narrow range defined by the original design, normally about 25% back from the front of the center wing for this airplane. Once the airplane is leveled, three weights are collected. The math takes the weights, the distance from a specific location called the "datum", and comes up with a total value called the "Moment". Once the moments are added and divided by the total weight, we get the new Center of Gravity (COG) value from the datum point.



The airplane is leveled
as per design



Level is checked
as per the manufacturer



Nice and level!



Each landing gear has a scale
placed under it

(“Fokker Dr1 Weights and Balance” continued)



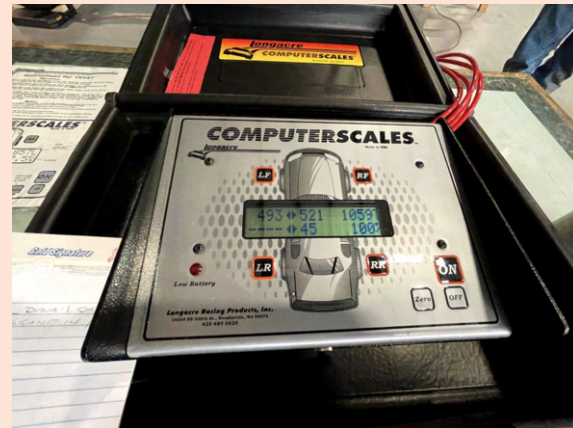
Both main gear scales



Main gear scale



Tail gear scale



Weights of each scale with the total weight on the right

(See Article “OUR B-36 PEACEMAKER IS IN THE AIR AGAIN” next page



OUR B-36 PEACEMAKER IS IN THE AIR AGAIN

By Jamieson Steele, Collections and Displays

Think back to our October, 2021 Hangar Tales for the story about the donation of a



huge, balsa wood, model of a B-36, Peacemaker, cold war, bomber. It was built by Louie J. Leone, from Batavia, and he was an electronics crewman on this massive bomber from 1951-55. He remained in the AF Reserve for a total of 41 years of service to our country. His son, David, donated this model to us in 1921, but due to the size, and need for a lift to hang it, it waited, but now it is finally up in the air of the long hangar!

After the volunteer work crew were done with the lift for the 1941 Hangar renovations, which are just monumental, they left it in the display area so we could hang the B-36. Mind you, it is 7" by 10', light, but awkward.

When it came to us, it needed new wheels, which Andy Ginsberg provided, and installed, with the able help of our patron saint of the skies, Don McLean, better known as Ducky, or Mac. That Irish guy, who swears a lot, and sorts book donations.

So, after our Feb 1st staff meeting, we hung the plane in the long hangar. Mac had already placed wire and padded tubing, so all we had to do was get it 15 feet up to the hangar ceiling. Yeah, that's all! The lift helped, but it was still a challenge to balance it, and not break the delicate parts, and I am not referring to Mac's parts, they are no longer delicate! There were some tense moments, but it is aloft!



So there was Mac, Craig Wadsworth, and Amy Beechler, a professional fire fighter, up on the lift, attaching the bomber to the ceiling. Craig pretty much did the final attachments, and we all breathed relief that it was not damaged. Some of us, wisely, stayed on the ground to add unwanted, useless, comments.

So, now we have a Cold War bomber aloft, as our museum continues to grow, and change, thanks to all who helped.

WE HAVE A FLARE FOR THAT

By Jamieson Steele, Collections & Displays

Many years ago, during our air show, a fellow gave me a bag, from his father's days in the Army Air Force as a B-17 mechanic. He said his dad would be on ferry flights, bringing damaged Fords to Greenland for repairs. In the bag was a flare gun, which his dad had on the flights. Also in the bag was a pouch of live flares, yes, live. I carefully hid them in the storage trailer.



Years passed, but while I was at an emergency service demonstration in Syracuse, I asked a bomb squad deputy about the volatility of the flares. He allowed that they should be disarmed, or turned over to an explosives team. The flare gun, itself, was not illegal, and was safe. Not wanting to destroy some cool items from WWII, I knew a fireman who was also a demo expert. He emptied the shells so that we can safely display them. One had split open, so I left that as an example of the contents. The pistol and empty flares are in one of the display cases near the main hangar.

The flares were different colors with various meanings. As bomber flights returned to base, they would shoot flares to advise the ground of conditions. A green flare signaled all was OK, yellow indicated airplane damage, and red meant wounded on board. The ground could also use various colors to indicate runway conditions were OK, or turn away the incoming flight. When I interviewed Capt. Facer last year on his 105th birthday (he just had his 106th) he said a prearranged flare color was also used to indicate to the ground that they were friendly in areas where enemy aircraft were on the prowl.



(Continued next page)

WE NEED YOUR INPUT!

The National Warplane Museum is currently seeking input for its 5-year Long Term Plan. A volunteer committee is detailing all the areas of the Museum operations in order to solicit feedback and ideas to include in the plan.

Your opinions matter to us! Stop by the Swanson Building at the Museum on **Saturday, February 25** from 9am-noon. Director Austin Wadsworth and the committee will be available to record your ideas. Committee Member John Snyder has developed a “Mind Map” to graphically illustrate the Museum’s operations. This is a fun and unique way to visualize our operations and generate suggestions for the Long Term Plan. If you can’t make this meeting on February 25, please email your ideas to Austin Wadsworth at Austin.wadsworth@nationalwarplanemuseum.com. Thanks for your feedback!

(“We Have A Flare For That” continued)



In the pictures you can see nubs around the end of the barrel. To just shoot out of a plane window was dangerous, so there were ports where the pistol would lock into the opening to fire safely away from the plane. The pistol had a safety latch that would prevent accidental discharge.



Work Being Done On The WACO

The WACO needs a new altitude encoder, which will not fit in the same location as the old unit. We had removed the transponder and altitude encoder for checkout (last summer Rochester Airport Air Traffic Control reported not receiving a signal from the airplane) and the encoder will need to be replaced and the transponder repaired. The new unit was mounted just behind the pilot and once the transponder is back from repair the system it will be installed. Then the next step will be to request that the airplane be added to our rides program. These are in progress and the system will need to be certified before we can operate in controlled airspace or offer rides.



Also, we continued a repair on one of the engine fairing sections, from near the cylinders. We had to add a doubler to where the cowling connection had broken. We were able to match the paint and have a spray can of it prepared at Paint Masters (Brighton-Henrietta Town Line Rd).



The doubler is held in place with cleco fasteners as rivets are pressed into place.



These rivets are squeezed into place. They are not "pop" rivets.

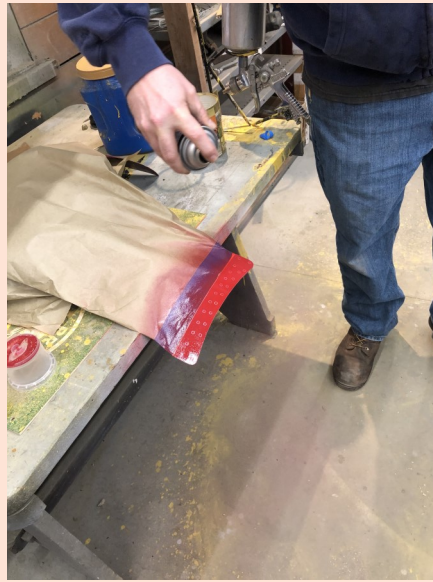


The doubler is in place and ready for painting

("Work Being Done On The Waco " continued)



Applying the color-matched paint.



Adding a finish coat



Finished repair is very close!

“INTERNATIONAL” ROAD TRIP TO PROMOTE OUR MUSEUM

By Jamieson R. Steele

Taking Our Show On the Road!

Well, I may be stretching things a bit, but I did go to Warsaw; New York, that is, to give a talk at a new senior complex, 'Connect 55'. I took a few large photos of W7, some trays of WWII aviation items, extra programs, and other information. About 25 attended, and were quite interested in what we do, and many had been here for air shows.

I was told about an hour, and I kept checking with the moderator, and activities director, Jill Tillford. But she said to keep going. Those who know me are more than aware of my ability to talk, but I spared them any of my jokes. Many in attendance vowed to bring family, and visit us when it is warmer. I stayed at a local motel, and explored Warsaw the next day, which has many antique shops. While having a wonderful breakfast at a Mennonite run store, who walks in but John & Ruda Frew! I can't hide any place!

MARILYN B. CLEVELAND AND A TIGER MOTH

By Jamieson Steele, Collections & Displays

If you were to make a list of the very first people to believe in our museum, and be a major role in its success, then at the top of that list is Marilyn B. Cleveland. We lost Marilyn on January 9, 2023, after a long and joyful life.

She was born in NY City in 1928, and earned a degree from Bates College, Maine, and became a dietitian at the VA in Bath, NY, and later for the Geneseo Central Schools, along with a real estate career with Nothnagle.

She married Richard Cleveland, and they resided in Hammondsport, NY. Richard was an avid pilot, and an



expert in aircraft repairs, and service. While in Hammondsport in the 60's, Marilyn decided to also learn to fly, and fly she did. She trained at the small airport near the cemetery where Glenn L. Curtiss is buried. She learned in a J3 Piper Cub, and always favored that aircraft.

In 1970 Richard opened Cleveland Aerial Service Co. right at what is now our museum, with Austin Wadsworth at his side. Together, they worked on various aircraft, and delved into foreign auto repairs, as well. Richard held certificates as both IA and A&P, inspector and aircraft & power plant. Not easy titles to attain, just ask Craig! Richard and Marilyn had four children while all of this was going on, and



(Continued next page)

("Marilyn Cleveland and a Tiger Moth" continued)

yes, aviation buffs. Her son David, who provided me with some information, got the bug, and put 800 hours in his UPF-7 WACO.

As the idea of air shows on our site began to grow, Marilyn was one of the very early, tireless volunteers, and was instrumental in its success. She also would invite the visiting Canadian pilots to dine, and stay at their home in Geneseo. She loved to cook and entertain, and this tradition went on for decades. When the Canadian group acquired a WWII Tiger Moth, they named it 'Marilyn', and unknown to her, landed it, pulled up to her, and much to her surprise and joy, there was her name on the side!



Eric Dumigan Photography

www.airic.ca

That fine trainer has blessed our air show many times, and still bears her name.

One time, at Donna's, (office mgr. & M's good friend) for dinner, she was talking to me about flying over Western Pa, and calmly said, "You know, there are a lot of trees in Pa., and no good place to land if you had to". Too funny! We all should look to the sky over our museum, and give Marilyn a big 'thank you' for all she did to make it all happen.

Obituary from the Livingston County News:

https://www.thelcn.com/obituaries/marilyn-b-cleveland/article_a669dd4e-eef5-527a-8156-9eabbb23b940.html

For more on the story of the Tiger Moth "Marilyn go to:

<https://www.inthehills.ca/2014/06/flight-of-the-tiger/>

Replicating Whiskey 7's Pan Seats

By Brian Trzaskos

When "Whiskey 7" came off the assembly line in 1943, She was equipped with pan seats to hold her paratroopers. (The seats we are currently using for our rides program are similar to those that would have been found on the Navy's R4D version of the C-47.) After the war, as W7 often changed hands, they went missing. Not needed in an airliner or cargo transport, they were most likely removed and discarded. As we try to restore W7 to her former glory, we would like to return her to that configuration. But since these were not parts necessary for a C-47 to fly, they were often scrapped. We are fortunate to have found some seat panels, but not the parts that attach them to the fuselage. We have blueprints for the parts, and we have been loaned a set that we can use for patterns. So, the "Saturday Crew" is recreating the parts.



Pan seats installed on the C-47
"Luck of the Irish"

I plan to show you the step-by-step process we undertake to recreate these seats over the coming months.

Jan 7

In the paint booth we drilled apart two of the three pan seat assemblies for the left side of the cabin. We separated the unit

(Continued next page)



This seat mount attaches to the side of the fuselage. It runs almost the entire length of the fuselage.

("Replicating Whiskey 7's Pan Seats" continued)

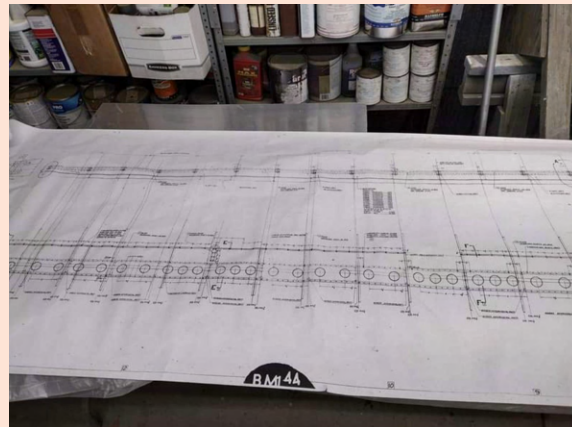
into sections and removed the intercostal supports and strengtheners from inside. We also spent time with the jigs and drawings mapping out how we were going to move forward with the project. Then we ordered the metal.



Taking the sections apart



Then we had to remove each of the intercostals from inside



One of the many blueprints we have

Jan 14

In the paint booth we finished disassembly of the left seat assembly. Time was spent with the plans and parts as we brainstormed the process for making the ribs and other parts. We will be using calibrated copies of the drawings to make patterns out of 1/16" plastic sheeting for the rough parts. We also had to be sure we had all the forming blocks made and fitted and ready to go once the materials were here. Our "new" machine shop had to be readied to work with the sheets of aluminum.

“Replicating Whiskey 7’s Pan Seats” continued)



Looking over the full-sized plans for the pan seats



Wood forming Blocks for the intercostals



Making sure the blocks fit the borrowed parts

CONSISTS OF:

4116840	INTERCOSTAL	1 REQ
4116845	INTERCOSTAL	1 REQ
4116837	INTERCOSTAL	1 REQ
4116838	INTERCOSTAL	1 REQ
4116839	INTERCOSTAL	1 REQ
4117252	INTERCOSTAL	1 REQ
4117252-1	INTERCOSTAL	1 REQ
4117253	INTERCOSTAL	6 REQ
4117253-1	INTERCOSTAL	1 REQ
4116843	INTERCOSTAL	1 REQ
4116844	INTERCOSTAL	1 REQ
- 4, -6, -8, -10, -12, -14, -16, -18, -20, -22, -24, -26, -28, -30, -32, -34, -36.		
4113017	FITTING	14 REQ
AN3-SA	BOLT	56 REQ

List of part #'s and the number of each needed. Notice that many of the parts require only one piece, each being only slightly different.



Organizing our intercostal templates. (Notice the part numbers written on each template. This will be important throughout the process!)



2023 Calendar of Events

3489 Big Tree Lane, PO Box 185
Geneseo, NY 14454
585-243-2100

www.NationalWarplaneMuseum.com



EVENT	Date	CONTACT
Safety Down Day	3/25	(585)243-2100
Flightline & Admissions Training	5/6	(585)243-2100
WNFFS Spring Opener	5/6-5/7	Lyle Whitford (716)807-4748
Whiskey 7 at Meadville	5/10/, 5/13-5/14	(585)243-2100
Private Event- Swanson	5/13	(585)243-2100
ROTC Commission-Museum closed	5/15	(585)243-2100
MARS Sport Launch	5/26-5/29	www.marsclub.org
Memorial Day Observance-Fly over	5/29	(585)243-2100
*GENESEO AIR SHOW	6/2-6/4	(585)243-2100
Wargames Among Warbirds	6/10	wargamesw@yahoo.com
Whiskey 7 at Norwich, NY	6/10	(585)243-2100
Empire State Champion Free Flight	6/16 - 6/18	Lyle Whitford (716)807-4748
MARS Sport Launch	6/24 - 6/25	www.marsclub.org
Rides Day	7/1	(585)243-2100
York Field Days W7 flyover	7/1	(585)243-2100
Whiskey 7 Independent Day Fly Overs	7/4	(585)243-2100
Local Flying Aces Event	7/12-7/15	
MARS Sport Launch	7/22 - 7/23	www.marsclub.org
Whiskey 7 Skydive the Falls	7/14-7/15	(585)243-2100
Whiskey 7 Fly over Canandaigua	7/29	
Rides Day	8/5	(585)243-2100
VFW Picnic	8/5	
Rochester Air Show	8/11-8/13	
MARS Sport Launch	8/12 - 8/13	www.marsclub.org
Whiskey 7 Away D-Day Conneaut, OH	8/17-8/20	(585)243-2100
Yankee Air Pirate Challenge	8/18 - 8/20	Mark C. Rzdca (wnyffs@gmail.com)
Pancake Breakfast	9/4	(585)243-2100
Great Grape Gathering	9/8 - 9/10	Roy Smith aeronut.kos.net
Whiskey 7 Away New Hampshire	9/9	(585)243-2100
Wargames Among Warbirds	9/16	wargamesw@yahoo.com
MARS Sport Launch	9/16 - 9/17	www.marsclub.org
Whiskey 7 Rides & Birthday	9/23	(585)243-2100
MARS Sport Launch	10/7 - 10/8	www.marsclub.org
Rides Day	10/14	(585)243-2100
SUNY Geneseo Cross Country Meet	10/14	(585)243-2100
MARS Sport Launch	11/4-11/5	www.marsclub.org
MARS Friends Gathering	11/5	www.marsclub.org
Veterans Day Observance	11/11	(585)243-2100
Christmas Party	December TBD	(585)243-2100

Dates Subject To Change



**NATIONAL WARPLANE
MUSEUM**

3489 Big Tree Lane
PO Box 15
Geneseo, NY 14454-0185

585-243-2100 (office)
585-245-9802 (fax)

newsletter@nationalwarplanemuseum.com

Museum Hours:
November 1 through April 30
Wed, and Sat. 10 a.m.—3 p.m.
May 1 through October 31
Wed.—Sun. 10 a.m.—3 p.m.

The National Warplane Museum is a not-for-profit (501 (c) (3) public corporation with a Provisional Museum Charter issued by the New York State Board of Regents. We are dedicated to the restoration, preservation and operation of vintage and historical aircraft, particularly aircraft associated with World War II, the Korean War and the Golden Age of Aviation. The facilities and 5,000-foot grass runway are located adjacent to the picturesque village of Geneseo, NY. Founded in the 1980s, the Museum continues to promote and encourage the appreciation of military and civilian aviation, aeronautics and aviation history. It serves the community with flying events, museum displays, social functions and educational opportunities associated with these aircraft and their history. To date, we have twenty historic aircraft owned by or associated with the Museum. We are operating profitably and have increased the attendance to our annual Geneseo Airshow in each of the last five years. Plans for the future include expanded facilities and additional aircraft.

A P P L I C A T I O N F O R M E M B E R S H I P (O R R E N E W A L)

Name: _____ Phone: _____

Address: _____ e-Mail _____

City : _____ State _____ Country _____ ZIP: _____

Occupation: _____

Membership entitles you to free admission to the airshow and museum, a 10% discount at the museum store, one-year e-Mailed subscription to *Hangar Tales*, a window sticker for your car, and a membership card which is requires for admissions and benefits.

Membership fees (Reflects changes as of January:

Please check if New Membership <input type="checkbox"/>
or Renewal <input type="checkbox"/>

- | | |
|--|----------|
| _____ Individual (18-59 yrs) | \$ 50.00 |
| _____ Individual (Gold) | \$ 75.00 |
| _____ Senior (age 60 and up) | \$ 45.00 |
| _____ Student (17 and under) | \$ 20.00 |
| _____ Family (Parents and 2 children under 18. Please provide names & dates of juniors) | \$100.00 |
| _____ Family (Gold) (Parents and 4 children under 18. Please provide names & dates of juniors) | \$150.00 |
| _____ Lifetime | \$600.00 |
| _____ Check here if you need a new decal for your car | |