July 2020 Vol 44, Issue 7

The Pylon

*I*P*M*S*

The newsletter of the Western Reserve Chapter of the International Plastic Modelers Society

Next Meeting:

Sunday, July 19 Surfside Park 36420 Hillcrest Dr. Eastlake

Pavilion reserved from 12:30 – 5:00PM

What's Inside:

From the Editor	3
What the Heck?	4
Websites to Visit	6
Whisk v Bf 109	7
Impossible WTH	7
Upcoming Events	9

WE'RE HAVING A MEETING – OUTDOORS!



From the President

Once again, I hope this finds everyone healthy.

In 2005 my daughter served as an intern with ExpressJet airlines at Cleveland Hopkins Airport. As a parting gift that summer, the Chief Pilot gave her a wooden desktop model of the Embraer ERJ-145 in the Continental Express livery. A decade later a fire in her apartment building destroyed the model and I looked to find a replacement for her.



Complicating matters a bit was the fact that Continental and United had merged and readily available models were in the new United Express scheme. I was finally able to find a company in the Philippine Islands that hand-crafted wooden aircraft models and would customize the paint if so desired. I recently recalled that the company was started by a pilot during WWII for the purposes of creating wartime "recognition" models. It turns out I may have misremembered that last bit (I could only verify that the company was started by a *British* pilot and was located near Clark Air Base) but the subject of "recognition models" (also known as "ID" or "spotter" models) is fascinating nonetheless.

Early in WWI it became apparent that identifying enemy aircraft simply by color and markings was proving inadequate. Incidents of friendly fire and misidentification of the adversary were on the rise. Prior to WWI recognition of one's opponent had not been a factor as soldiers only had to know the color of their enemy's uniform. By 1917 however (according to a British spotting guide), an observer needed to be able to distinguish between a friendly or enemy machine at a distance not less than 5,000 yards. Anti-aircraft artillery required foes to be identified 10,000 yards away. These expectations led to training with 2D photographs and



drawings (often as simple silhouettes from various angles). While some *models* are known to have been built during WWI, it was not until WWII that the practice of creating 3D recognition models took off.

The Pylon Page 2 of 9











both a civilian and a military endeavor. Posters, playing cards, board games (like Spot-A-Plane), kites and Tru-Vue Stereoscopes showing planes in 3D sold by the millions. Per the U.S. Army-Navy *Journal of Recognition*, models were deemed especially important for *military* training purposes as it was vital that observers be able to see an "object as a whole" and be "able, through constant practice, to recognize that object (plane, tank, ship, etc.) from any angle". Indeed, shortly after the Pearl Harbor attack the U.S. Navy asked American children to build 500,000 scale Comet identification models. While some models were detailed for use in educational roles, most were simply painted black to simulate a silhouette. Model making was also used for creating 3D terrain maps. These were used for locating airfields, railways, and roads. Like Allied forces, Axis powers also extensively modeled vehicles of war, including airplanes, tanks, and ships.



I recall that at a meeting many months ago, WR members were asked how many of them had built a balsa and tissue kit. By a wide margin almost every member had assembled at least one balsa model (many of them from Comet). Imagine the excitement of being able to build the same kit while contributing to the nation's war effort as many children of 1940s did! For

more information, an excellent source detailing the history of "friend or foe" identification can be found here: http://collectair.org/museum.html.

Last but certainly not least, I would like to thank Ted Bamber for *successfully* securing an appealing location for this Sunday's meeting. Looking forward to seeing you all there.

Jim Wentzel



Page 3 of 9 The Pylon

From the Editor

We're Going to Have an Outdoor Meeting!

It's going to be like a picnic, but not really. Ted has arranged for us to have our meeting at the Surfside Park behind his house this Sunday, July 19th. Surfside is a small community park located at 36420 Hillcrest Dr. in Eastlake, and he has reserved the pavilion for us from 12:30 to 5:00PM. There is plenty of parking on site and bathrooms as well.

We're not planning anything specific at this point, but who knows. Ted will donate water, pop and ice and you're welcome to bring along a snack. Based on pictures I saw online, the tables are epoxy coated steel mesh so if you want to bring a model to work on bring a placemat too.



Rebekah is ready to socialize outdoors

Safety Minute

The coronavirus is having a surge, with cases and deaths on the rise, even in NE Ohio where we've been mostly unaffected. We planned this meeting outdoors in a pavilion with plenty of room for a group of our size, trying to find that middle ground between the desire to meet and the need to be safe and responsible.

We are meeting in Lake County which does not require wearing masks but we encourage you to be safe, wear a mask and practice social distancing. If not for yourself, then for the rest of us. Thanks.

A Very Visual Pylon

It's said "a picture is worth a thousand words". Due to a fat-fingered error on my part, which resulted in my newsletter working folder being deleted, followed by my utterance of a large number of *select words*, more of this Pylon is going to pictures than text.

Enjoy the print equivalent of "quiet time."

Kirk





The Pylon Page 4 of 9

What the Heck is That?

The *What the Heck?* subject last month was the **Riout 102T Alérion Ornithopter**.

For ages man looked to the skies and yearned to fly. Naturally, the early designers sought to mimic the features of the flying creatures with various forms of flapping wings. French engineer René Louis Riout was one of those people.

By the turn of the century most engineers determined that the complexity of flapping-wing propulsion was not the way forward and focused on fixed wings and propellers. Riout stayed with the flapping-wing format and by 1907 was flying



small models of his ornithopter designs. In 1909 one of his models flew a distance of 164-feet at 10-feet off the ground. His designs improved and in 1910 the distance grew to 558-feet, and to 722-feet in 1911.

Riout was granted a French patent for his flapping wing mechanism and ornithopter design in 1911, describing how the power was transferred to the wings and how the wings would warp downward on the down stroke to provide forward thrust and then return to a neutral position on the upstroke. The speed of the engine would control the up and down movement of the wings with a heavy flywheel or springs used to smooth out power pulses from the engines. Remember how I mentioned "complexity" a bit earlier in the article?

In 1913 Riout had partnered with Jean Marie DuBois and they built the DuBois-Riout Monoplane. The Monoplane ornithopter was powered by a 35hp three-cylinder engine that first drove the wheels via a pulley to get the aircraft up to lift off speed and then transferred the power to the 34'-5" span wings. It was predicted that the nearly 800-pound machine could reach 84 mph.

World War I interrupted Riout's work as he went off to fight the war, but he returned for a while in 1916 and fitted a 50hp Gnome-Rhone engine to the Monoplane. The source I found said the ornithopter did make it off the ground but came down quickly – and hard, wrecking the craft.





The Monoplane before the wreck

After the war Riout worked for other aircraft companies while working on a design utilizing two sets of flapping wings. In 1933 he presented his designs to the *Service Technique de l'Aéronautique* (STAé or Technical Service of Aeronautics), including models of both two and four-wing designs. The 3.5 and 17.6 ounce models flew up to 328 feet, impressing the STAé enough to order a 1/5 scale model powered by an electric motor. The model was built in 1934 and underwent 200 hours of wind tunnel tests proving the feasibility of the design. In April of 1937 Riout was awarded a contract for a full-size ornithopter prototype – the Riout 102T Alérion.

The single-seat Alérion had a fuselage of tubular-steel with aluminum skin and wings of fabric covered metal frames. Two wheels were fitted to each side and retracted into the fuselage. The cockpit was at the nose of the aircraft, followed by the two sets of wings, each mounted with hinges to a structure in the

Page 5 of 9 The Pylon







center of the fuselage. Behind the wings was mounted the 75hp OHV V-twin engine. The tail surfaces were of typical for the era steel frame covered by fabric.

The finished aircraft was 21-feet long with a span of 26'-3" and the tip of the tail was 8'-2" off the ground. The wings

were to move 40-degrees above horizontal and 10-degrees below for a total of 50-degrees of travel, and wing warping behind each wing's second spar was to provide forward thrust, much like the Monoplane twenty years earlier. Info gets a little sketchy after here. What specific model engine was used or exactly how the wings were connected isn't known. While it's thought that the sets of wings would operate opposite each other (front set up while back set down) there are photos with all wings up as well as with one pair up and one pair down.

Final assembly was completed in 1937 by Breguet in Villacoublay and after some preliminary tests was moved in 1938 for wind tunnel testing at Chalais-Meudon. Tests began, first with the wings stationary and later with wings flapping for up to 20 minutes, though without any wing warping for thrust. On April 12, 1938, after some three hours of successful tests, the engine speed was increased to 4500 rpm with a tunnel wind speed of 81mph. Disaster struck as the outer third of one wing folded, followed quickly by the other three.

Some design modifications were on the drawing board but once the wings folded so did the interest in the 102T. The damaged wings were discarded but by some favorable twist of fate the fuselage survived the war and as of 2017 was undergoing restoration and is on display at the *Espace Air Passion Musée Régional de l'Air* in Angers, France.

Congrats to Jim Ward and Jim Wentzel on this WTH subject (Fred was on the right path but I slipped and gave him the answer first – my bad). This month we are social distancing -- with armor plate. Good luck.

Kirk



The Pylon Page 6 of 9

Fun Websites to Visit and a Tip

Dave Virant passed along a couple more web sites to visit if you find yourself with some extra time.

He 219 gets its wings: https://www.key.aero/article/he-219-restoration-gets-wings?fbclid=lwAR0jvEoiGs1InV X4KFCck91CR9qAt0aw83Q7QxyVzVuaocWFAIUosqpwqE

A cool, site documenting Warbirds in Florida: https://floridawarbirds.com/2020/01/19/trip-report-american-aero-services-17-jan-2020/

Histories of the Black Sheep Squadron Corsairs:

http://warbirdsnews.com/warbirds-news/poor-lambs-corsairs-baa-baa-blacksheep.html?fbclid=lwAR19eDCtzhN5EvZgZcjO03v5RYAKE_gFXf9lk2VLgeAbRug1J6nfy0GxOUg

Aussie Curtiss P-40 fires its guns: http://warbirdsnews.com/airshow-news/curtiss-kittyhawk-to-fire-main-armament-at-warbirds-over-wanaka-2020.html

Found on FB by Dave V: I recently picked up this tip in one of the other groups. I don't know if he's a member here or not. If so, thank you a thousand times Mike. I tried it out and it works so wonderfully, I figured everybody should know about it. How many times have you knocked over and spilled your Micro Set, or Micro Sol? I have, more than once. Just take the tops off a couple of spray can lids. Not the little modelling rattle cans, but the big ones you get at Walmart. Everybody has one or two of those. The center ring holds them perfectly. I guarantee you, you would have to be some sort of super klutz to tip them over now.



And from Woodland Scenics a very cool looking product call Shaper Sheet and their How-To video: https://woodlandscenics.woodlandscenics.com/show/video/shapersheethowto/?utm_source=scenicview2
https://woodlandscenics.woodlandscenics.com/show/video/shapersheethowto/?utm_source=scenicview2
https://woodlandscenics.woodlandscenics.com/show/video/shapersheethowto/?utm_source=scenicview2
https://woodlandscenics.woodlandscenics.com/show/video/shapersheethowto/?utm_source=scenicview2



Simply cut into any shape or size just using scissors.

Form

Form anything with as much or as little detail as you want.

Finish

Finish your model with or without Shaper Sheet Plaster.

Page 7 of 9 The Pylon

Never Too Many

I was putting away the washed dishes and hung one whisk over with the other whisk, only to be told by the Lovely Wife that "no, that whisk goes over there with *that* whisk." That's when I noticed that we have *a lot* of whisks. Big one, little ones and medium ones, wire ones and plastic coated ones, round ones and flat ones. I was about to sarcastically complain and ask why she has so many of the same utensil when the self-preservation portion of my brain kicked in and reminded me of the 18 versions/scales of the Bf 109 or the 11 types of P-40s I have yet unbuilt in the basement.

I wisely kept my mouth shut and put the whisk where it belonged.





Nearly Impossible What the Heck is That? Second Edition

Sticking with the "more pictures than text" theme of this edition, enjoy the NIWTH round two. Send me your answers by email or wait until next month. Have fun.





The Pylon Page 8 of 9















Western Reserve Officers

President

Jim Wentzel

Vice President

ruffneckjc@gmail.com

Secretary

Treasurer

Chapter Contact **Newsletter Editor**

Kirk Ballash Kapitan219@aol.com

Region IV Newsletter Editor of the Year 2015, 2016, 2017 2018 and 2019

Visit us on the Web!

See us at:

www.ipmsusa.org

(216) 536-7346 JTWentzel@aol.com

John Camper (440) 375-0007

Jon Hudak (216) 351-6086 F4U2636@sbcglobal.net

Ted Bamber

(440) 946-5881 Belfast1947@yahoo.com

(440) 946-8074

The International Plastic Modelers Society is dedicated to promoting the hobby of plastic modeling through meetings, demos, seminars, conventions, contests and most importantly through friendship and enjoyment of the hobby.

Visit us on the web at or ioin. either online or with the form at right and enjoy the full color magazine, discussion forums and vast knowledge and experience to help you enjoy the hobby to the fullest.

Upcoming Events

Western Reserve Meetings and Events

2020

July 19, 2020

General meeting at Surfside Park in the outdoor pavilion, see address on page 1. We encourage wearing a mask.

Next meeting date will depend upon the duration of the novel coronavirus, the state and community's restrictions as well as finding an acceptable location for us to meet.

Stay tuned – and Stay Safe

IPMS and Regional Events

As of this writing (July 15) it appears that many shows are still cancelled or postponed. At this point your best option is to go to the IPMS/USA Upcoming Events page at https://calendar.ipmsusa3.org/ for more information and if necessary follow the links to the host chapter's contest page for additional details.

2020

Sep 19, 2020 SVASMCON 36 Annual Show - Sharon, PA Oct 17, 2020 Annual Contest and Swap Meet - Cincinnati, OH

Nov 1, 2020 Cleveland Model Show - Kirtland, OH

Nov 13-14, 2020 Region IV Convention hosted by Wright Scale Modelers -

Dayton, OH

2021

Feb 27, 2021 SEMMEX 2021 Annual Show - Warren, MI

IPMS No.: Address:lf Re	Name:newing	First	Middle	Last
			: Zip:	
Signature (required by P.O.)				
Type of Membership	Adult, 1 Year: \$30	dult, 2 Years: \$58	Adult, 3 Years:	\$86
Junior (Under 18 Years) S	17	(Adult + \$5, One Set Jou	rnals) How Man	y Cards?
	35 Other / Foreign: \$3			
Payment Method:	Check Money Order			
a)e.ii iiieiiioai	eneck intensy order			
Ch+ Affili-+i /if -	ny):			
	11y)			
	IPMS Member, Please List His A		ember Number:	
If Recommended by an	IPMS Member, Please List His I	Her Name and Me		
If Recommended by an		Her Name and Me		