

Chapter Contacts

Please forward to your members!

IPMS PATRIOT

BILLERICA, MA



It's always a pleasure to receive Pip Moss' latest newsletter. It can be counted on to be filled with members' latest, widely varying, and wondrous projects, all nicely photographed and well described. Among them we can usually count on John Walker to display one or two widely varied, quite impressive models: judging from his output, the man must model 24/7! John also obviously attends both Patriot chapter meetings in Massachusetts and Granite State chapter meetings across the state line in New Hampshire, so his models will often appear in both newsletters. But that just makes his rather prodigious total of fine models all the more impressive, certainly when compared to most of us. I am somewhat in awe.

This month one of John's models is an impressive Russian "aerosan" (literally, "aero sled") diorama.



The Russians was the only WWII military to make significant use of aerosans, or propeller-driven sleds. Of course, they had lots of snow to develop and use them on! Pip includes a good capsule description: the 2nd link below includes info on **Igor Sikorsky's** pre-Revolution aerosans. That was long before Sikorsky came to the U.S. for non-medical health reasons. (He felt threatened with lead poisoning. There was a lot of that going around in Russia thenand since.) In this country he became a significant figure in American aviation, first with transports ..especially, flying boatsand then fame with helicopters. https://en.wikipedia.org/wiki/Igor_Sikorsky
<http://www.aqpl43.dsl.pipex.com/MUSEUM/TRANSPORT/propsleigh/propsleigh.htm>

John also displayed a really nice figure of a French Infantryman from the 1757 warfare in the North America which became known to those in the U.S. as the **French & Indian War. That war was really the last of four global wars over colonies between England and France that lasted nearly a century: the fight was really for global supremacy. Over that century, their various shifting allies included nearly all of the rest of Europe. Those last, decisive innings of that struggle are today known to everybodyexcept those of us in the soon-to-be-in-revolution British colonies in North Americaas the **Seven Years War**. <http://history.nd.gov/exhibits/lewisclark/colonialwars.html>**



So many other fine models in this issue, making it so hard to choose: they're all fascinating!

Pip's contribution this month is the above 1/48th Yak 7 UTI "two-holer" trainer, from the (appropriately Ukrainian) ICM kit.



Pip includes a nice discussion of the genesis of this trainerwhich was so good that it actually morphed backwards into a superb single-seat fighter!

But no fighter can be better than its engine, so what has always fascinated me about these early-war Yak fighters (and some bombers) has been their liquid-cooled V-12 engines. They were developed in Russia after engineer Vladimir Klimov was sent to France to obtain a build-license for the 1930's twelve-cylinder aircraft engine design of an inspired SWISS engineer, Mark Birkigt. Mr. Birkigt was the genius of a Swiss-Spanish company, which from early in the 20th century, had become known for a wide range of products*mostly built in a FRENCH branch* of the companyover a very long period of time.



The resulting Klimov M 105 engine, seen above, was developed from the Hispano-Suiza 12Y engine, and built in huge quantities (129,000!) to power many Russian types, including the Yaks. See https://en.wikipedia.org/wiki/Klimov_M-105

The Hispano-Suiza product line also included a well-known auto-load aircraft CANNON licensed to several countries, including England where it armed several WWII RAF fighters plus many ground application use. However, when rushed to licensed production in the U.S. before “bugs” were eliminated, the result could be called a disaster. Of the 56,410 AN/M1 cannon manufactured, NONE were ever installed in aircraft; by the end of the war the AN/M2 wasn’t much better.

Many problems were encountered, so that the P-38, whose configuration of nose mounted armament (below) meant misfires could be manually cleared by the pilot, was just about the only

American fighter to use the cannon in quantity during WWII. (It's poor performance in early Curtiss SB2C Helldiver dive bomber probably didn't seem as important: the "Son of a Bitch, 2nd Class" had enough of its own development problems.)



Thus, John Browning's "Ma-Deuce", the M2 .50 heavy machine gun, remained pretty much the American weapon of choice for aerial gunnery during WWII, and into the Korean War.

https://en.wikipedia.org/wiki/Hispano-Suiza_HS.404

http://pwencycl.kgbudge.com/H/i/Hispano_20mm_gun.htm

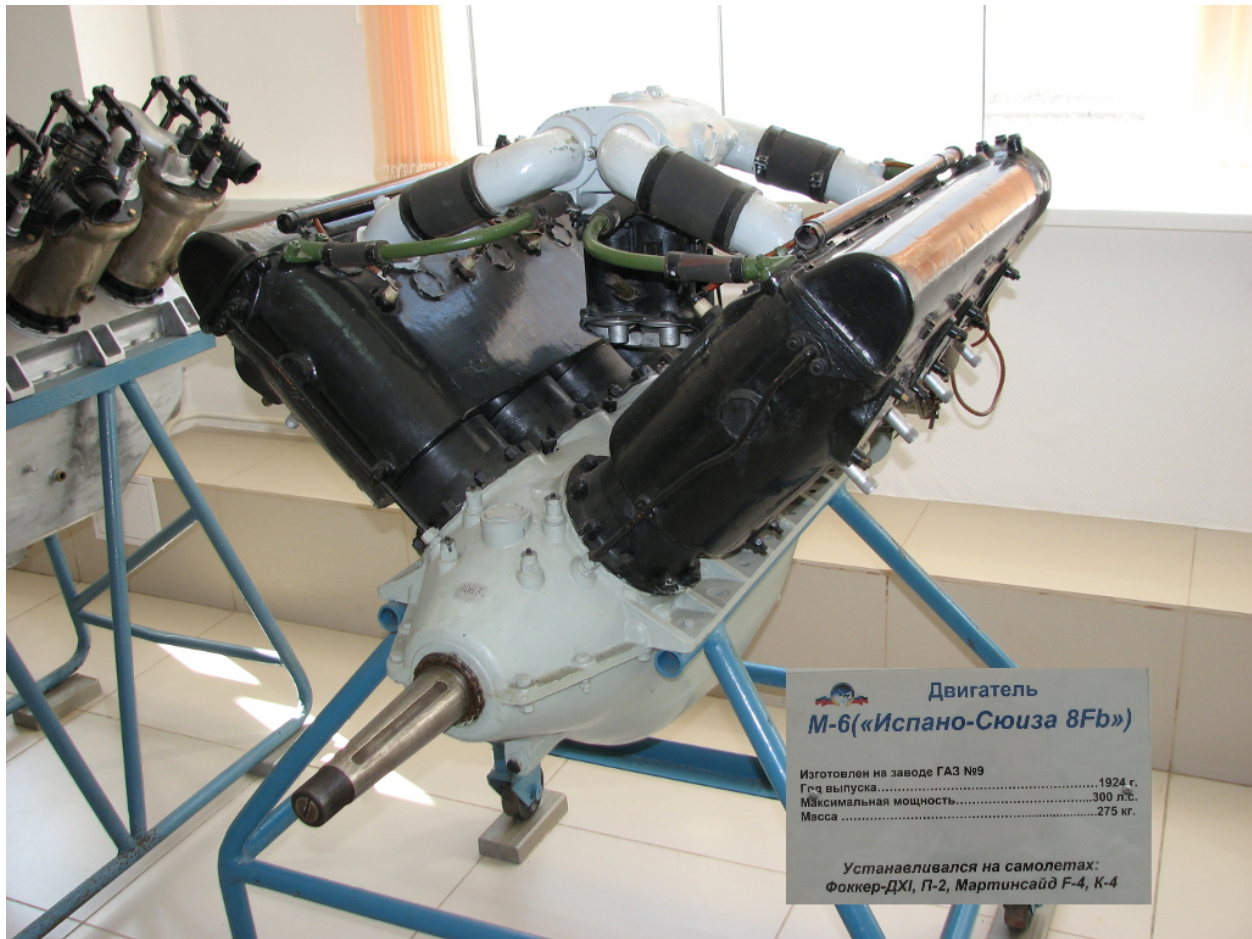
But that's not all of the Hispano – Suiza story. Often forgotten (or never known) by aviation enthusiasts is that the company also produced a superb line of between-wars luxury automobiles that are

still prized today ...the prices paid at high-end, “if-you-have-to-ask-you-can’t-afford-it” auctions reveal just HOW prized! Some of the H-S snobs still point out that way back then, “lesser” cars like the Rolls-Royce had to license improvements, like much more efficient brakes, from Hispano-Suiza!



1921 Hispano-Suiza H6B (see https://en.wikipedia.org/wiki/Hispano-Suiza_H6)

Very significant among Hispano – Suiza World War **ONE** products was engineer Birkigt’s series of Hispano-Suiza ninety-degree V8 aero enginesengines that powered the famed S.P.A.D fighters of the Great War, among many others.



Developed from Birkigt's automobile V8 engine technology, the Great War "Hisso" aero engines were easier to build than other aero engine layouts, and were thus soon license-built in several countries. His design featured cast aluminum blocks with steel cylinder liners, overhead cams, dual ignition, and other advanced features at a time when most aero engines were still inefficient "rotaries": a huge mass of multiple cylinders spinning around a fixed crankshaft, making them better snap-roll-inducing gyroscopes than aero engines!

Today the company remains a leader in aerospace engineering. The H-S story is much too long and complicated to be quickly told here, but this reference link will give a much better outline. <https://en.wikipedia.org/wiki/Hispano-Suiza>

This time I got sort of far-afield from the subject of Pip's Yak, didn't I?
Sorry 'bout thet.....

