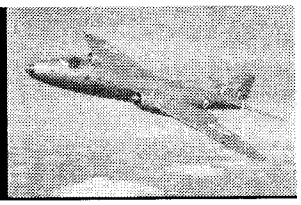
Seattle Chapter News

Seattle Chapter IPMS-USA
December 1999

PREZNOTES



As the 1900s close out in a few days it gives me pause to wonder what we'll see in the next century (and millenium) that will cross our model benches.

The 20th Century saw some of the greatest technological advances the planet has ever seen and since the vast majority of the subjects we choose to model are products of the 20th century, will our grandchildren want to build models of B-52s and F-15s?

Who knows, they'll probably still be in front line service.

Will there be new airplanes and vehicles developed that some future kit manufacturer will produce?

Will something yet to be invented take the place of our hobby or modify it some way? Will we even have plastic model kits in twenty or thirty years? My heirs apparent show little interest in my garage o' kits but possibly in a few decades plastic may become as valuable as gold....Nahhh. Who knows what will happen to them. Predicting the future is damn near impossible. We all laugh at the guy who a hundred years or so ago claimed that "there is nothing left to invent." Let's see: airplanes, TV, 8-track tapes, electric guitars, Siegfried and Roy, to name a few. Admittedly, there have been a handful of clunkers like the Edsel and the Fisher P-75 Eagle. We all have bad days. Who knows what fabulous machine will show up in the next century that Tamigawarevellogramfix will produce a kit of. Maybe someone will actually produce an affordable and workable flying car. Two or three kits right there. Then again, not all 20th Century subjects have been rendered in kit form. Maybe we'll see a model of the Curtis-Goupil Duck or Capelis XC-12! Also, the aliens that have been tricking us for the last fifty years by flying over just out of camera focus range or turning on all their lights and flying at night will finally tire of the joke, land somewhere in a densely populated area and say "just kidding." Some more kit ideas. I guess we'll have to wait and see. Oh yes, the aliens will look nothing like the big headed, pointy eyed types that appear in the movies or even in kit form. They will all look like Ross Perot. Or Milton Berle in drag. Ewww.

We have abbreviated the years to the last 2 digits - '98, '99 and so on. Is there a good abbreviation for 2000? I've stretched this one about as far as I could whilst waiting for the glue to dry on my Buffalo canopy: ought-ought, zed-zed, naught-naught (or double naught, courtesy of Jethro Bodine), zero-zero, or just plain 2000. Maybe I should just change glues to something that dries faster...

And lastly to all the members of our fine group: It has been my sincere pleasure to talk to you, ask questions on techniques (and answer questions on techniques) and share in this most enjoyable of hobbies with you all. I think we have the finest group of modelers anywhere and on behalf of the rest of the executive staff of IPMS/Seattle, I wish you happiness always and best wishes for the New Year.

See you at the meeting (and remember to bring goodies!),

Terry

In This Issue

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Public Disclaimers, Information, and Appeals for Help

This is the official publication of the Seattle Chapter, IPMS-USA. As such, it serves as the voice for our Chapter, and depends largely upon the generous contributions of our members for articles, comments, club news, and anything else involving plastic scale modeling and associated subjects. Our meetings are generally held each month, (see below for actual meeting dates), at the Washington National Guard Armory, off 15th Ave. NW, just to the west side of Queen Anne Hill in Seattle. See the back page for a map. Our meetings begin at 10:00 AM, and usually last for two to three hours. Our meetings are very informal, and are open to any interested plastic modeler, regardless of interests. Modelers are encouraged to bring their models to the meetings. Subscriptions to the newsletter are included with the Chapter dues. Dues are $24 a year, (or $18 a year for Internet newsletter only) and may be paid to Norm Filer, our Treasurer. (See address above). We also highly recommend our members join and support IPMS-USA, the national organization. See below for form. Any of the members listed above will gladly assist you with further information about the Chapter or Society.

The views and opinions expressed in this newsletter are those of the individual writers, and do not constitute the official position of the Chapter or IPMS-USA. You are encouraged to submit any material for this newsletter to the editor. He will gladly work with you and see that your material is put into print and included in the newsletter, no matter your level of writing experience or computer expertise. The newsletter is currently being edited using a PC, and PageMaker 6.5. Any Word or WordPerfect document for the PC would be suitable for publication. Articles can also be submitted via e-mail, to the editor's address above. Deadline for submission of articles is generally ten days prior to the next meeting. Please call me at 425-823-4658 if you have any questions.

If you use or reprint the material contained in the newsletter, we would appreciate attribution both to the author and the source document. Our newsletter is prepared with one thing in mind; this is information for our members, and all fellow modelers, and is prepared and printed in the newsletter in order to expand the skills and knowledge of those fellow modelers.

Upcoming Meeting Dates

The IPMS/Seattle 1999/2000 meeting schedule is as follows. To avoid conflicts with previously scheduled IPMS events and National Guard activities at the Armory, please note that some of our meeting days fall on the third Saturday of the month, not the traditional second Saturday. We suggest that you keep this information in a readily accessable place. All meetings begin at 10:00 AM.

December 11, 1999 (2nd Saturday)
January 8, 2000 (3rd Saturday)
February 12, 2000 (2nd Saturday)
March 11, 2000 (2nd Saturday) SPRING MEET!

IPMS/USA NEW MEMBER APPLICATION

IPMS No.: (leave blank) Name: (First) (M.I.) (Last)
Address:
City: State: Zip:
Signature (required by PO):

☐ Adult: $19 ☐ Junior (17 years old or younger): $9
☐ Trade Member: $19 ☐ Canada & Mexico: $25 ☐ Other Foreign: $28
☐ Family (Adult dues + $5, one set magazines,# of membership cards required:)
☐ If recommended by an IPMS member, list his/her name and member number (name) (IPMS#)

IPMS/USA
Check out our web page: www.ipmsusa.org

P.O. Box: 6138
Warner Robins, GA 31095-6138

Remember to bring cookies, cakes, soft drinks, and other goodies to the the December 11 meeting. It's our Holiday munchfest meeting!

Selling Out The Children: A Swordfish Model or a College Education?

by Andrew Birkbeck

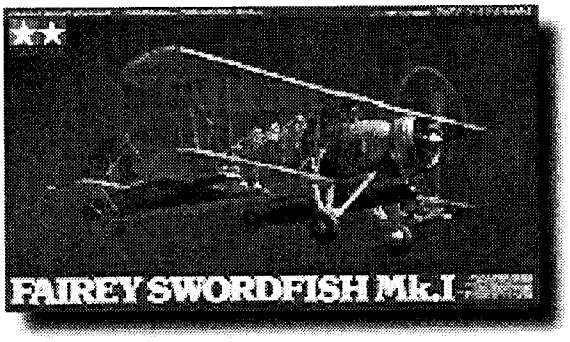
Time was when a new model release cost $1.49. Now they are heading towards bankrupting the children's college fund. While a slight exaggeration, Tamiya America really has pulled out all the stops on the cost of Tamiya's newest 1/48th aircraft release, the Fairey Swordfish. This baby weighs in at a full retail price of $68, plus the obligatory $13 Tamiya-supplied etched set, so that with tax, you are out $88. But more on the price a little later.

The question really is, how badly does one need a Swordfish model in one's collection? The answer, I would argue, is that if you have any interest in British WW2 aircraft, then you must have a Swordfish. If you have an interest in carrier based aviation, then again, you must have a Swordfish. And if you have an interest in military biplanes, then yet again, you must have a Swordfish. If you fall into any of these interest categories read on.

The Fairey Swordfish first entered British squadron service in 1936, and hard as this might be to fathom, it soldiered on until the very end of WW2, with a staggering 2,392 aircraft being manufactured, in three Marks. Only the British entered **and** exited WW2 with a biplane actively engaged in front line squadron service in their Fleet air force in any numbers. And not just in small numbers, as the Swordfish was to be found on **every** front in WW2, serving in 30 front line squadrons and no less than 59 secondary squadrons.

From the immediate outbreak of hostilities between German and British forces in September 1939, the Swordfish was in the thick of things, and served with distinction both as a carrier based aircraft, as well as from land bases. Swordfish were credited with 12 outright U-boat kills, as well as sharing a further 8 kills with surface ships. On top of this, tens of thousands of tons of enemy shipping were sent to the bottom of the seas due to Swordfish activity. And almost every major German capital warship was at one time or another engaged by Swordfish: *Scharnhorst*, *Gneisenau*, *Prinz Eugen*, *Tirpitz*, and *Bismark*, the attacks on the latter being the most well known.

The Swordfish squadrons as mentioned, served in every theater of the war, from the opening campaigns in Norway, to Atlantic and Mediterranean convoy duties. They were involved in ground attacks on Italian forces in Libya, and the defense of Crete and Cyprus. They took part in Operation Torch in North Africa, attacks on Vichy French forces in Madagascar, and RAF Coastal Command operations in support of the D-Day landings. And of course against Japanese forces in the Far East. However,



it is with their key role in the attack on the Italian fleet at Taranto that the Swordfish squadrons are most identified. For on November 11th 1940, two waves of Swordfish launched from the carriers *HMS Illustrious and HMS Eagle*, totaling 12 and 9 Swordfish respectively, attacked the Italian fleet at Taranto. Despite the dark of a night operation, strong flak installations, barrage balloons, and torpedo nets, this small force of aircraft managed to severely damage three battleships, a cruiser and two destroyers, along with sea plane and oil storage facilities, for the loss of two aircraft. If nothing else, the Japanese Navy noted this little episode with great interest.

Obviously, then, the Swordfish was a very important aircraft, both in numbers produced, and in missions engaged, for the British forces in WW2. And in terms of the Swordfish's importance as a biplane? Again, look at the numbers produced: 2,392, and flying in a total of 89 Squadrons. Surely this ranks the airplane near the top of any list of military biplanes, either WW1, post-war, or WW2? And in the history of world naval aviation? Again, surely it must place in the top ten in terms of missions flown and enemy ships sunk or damaged? The Swordfish, then, is a very important aircraft, period.

Now back to the Tamiya kit. What do you get for your $88? Five sprues of aircraft parts, plus two of ordinance, and one small clear sprue, make up the kit. For an additional $13, you can purchase the etched metal set covering bracing wire and engine details plus some other odds and ends. I personally feel that to do the model justice, you need the etched set. That the etched set wasn't included as part of the regular kit is a crime, given the $68 price tag. (In Japan, where the kit retails for a yen equivalent of $40, the etched set omission is a little more acceptable).

The plastic parts themselves are probably the best so far from Tamiya. The fuselage halves are simply gorgeous, and the fabric effect on the wings I think is very well done. The engine is very well detailed, especially when the etched set is employed, with detail being clearly visible on the Swordfish from both the front and rear of the engine.

And what of the wings, and how easily they attach to the fuselage? Judging from the instructions, the builder should have little difficulty aligning the wings well, due to the engineering that has gone into the kit's design. And the etched bracing wires also look like they position very positively.

There are two areas of major weakness in the kit. The first is in the ordinance set, which contains what looks like the same poorly produced rockets that came with the Beaufighter kit from Tamiya. There is however a very good torpedo, as well as 250 pound bombs, and smoke bombs,

although why Tamiya refer to the bombs as 113 kg, I don't know. Yes, I know 113 kg is just about 250 pounds, but the British didn't go metric until well after the end of WW2.

The second problem with the kit involves the color and markings instructions and the decals. The latter are by Tamiya in Japan, and are consequently on the thick side, although my experience with these is that they do settle down nicely over surface detail. Xtradecal of the UK have already issued an aftermarket set of decals for the Swordfish, based on the artwork from the MDC kit's decals (a resin kit issued a few years back, and costing $200!) and printed by Microscale. However, there are no Mark I schemes on this decal sheet. However, I am sure you will see a number of other aftermarket sheets from the various British producers, and perhaps Aeromaster. There certainly won't be a lack of potential schemes!

It is the kit's color and marking instructions however, where some terrible, and inexcusable errors exist. First, there is one of my pet peeves. Tamiya has decided to call out the colors for the various schemes based on the paint names from their own line of paint. Consequently, what should be listed as Dark Slate Grey is in fact listed as "Luftwaffe Grey Violet". But there is worse to follow, for what should be listed as Extra Dark Sea Grey is listed as "AS-9 RAF Dark Green"! Sorry folks, but Dark Green is an RAF color, not a Fleet Air Arm color. Perhaps Tamiya used the Alan Hall "Warpaint" book on the Swordfish for their color information, looking at the color chart supplied in this book, without actually reading what the colors were. For in the "Warpaint" book, the square listed as Extra Dark Sea Grey **does** indeed look to be Dark Green. Anyway, two out of the three schemes listed in the Tamiya instructions are therefore grossly in error.

So is the kit "worth" the money asked? Well, this all depends on where one stands. Firstly, one year ago, I would have bet my hard earned money that we would never see a decent injection molded Swordfish kit in 1/48th scale. And if pressed, I might have conceded that one of the limited run firms, such as HiPM or Classic Airframes **might** have produced one. And if they had, the kit would not be in the same league as this kit on offer from Tamiya. So if you fit into one or more of the three categories listed earlier, then I suppose you have to make a choice. Since you need a Swordfish, you can spend next to nothing on the old Smer kit, wherein your model will not be to the same scale as anything else in your collection (Smer's kit is 1/50th), and will be a poor representation of the Swordfish. You could opt for the $200 resin kit, wherein the relatively much cheaper Tamiya kit will look like a bargain! The Tamiya kit will also go together a lot easier than the resin kit as well.

However, thanks to the good fortune of your living in or near Seattle, you don't have to pay $68 plus $13 for your Swordfish. For Kevin Callahan of The Supply Depot is charging $48 (tax included) for the kit, and $9.75 for the etched set. Emil Minerich of Skyway Model Shop also had the Swordfish on a pre-order special. And at $48, I can unreservedly recommend Tamiya's Swordfish to anyone interested in having a first rate kit that will give many hours of pleasure to anyone who chooses to actually **build** the kit. However, if your intention is just to look over the plastic parts prior to tossing it onto an already high pile of unbuilt kits, I suggest looking at something a little more affordable.

On the subject of references to help build your Swordfish kit, one should look out for the following:

Warpaint Series No. 12 *Fairey Swordfish* by W.A. Harrison. This book offers a great number of color profiles, as well as decent photographic coverage of the Swordfish, and is certainly the most readily available source in Seattle. Both The Supply Depot and Skyway Model Shop have had this book recently.

A more useful book in terms of pure "detail shots" is Aeroguide Classics No. 4, *Fairey Swordfish Mks. I-III*. The Aeroguide series was an excellent source on post-WW2 British military aircraft, and also covered a few WW2 types in their "Classics" series, such as the Swordfish, Tiger Moth, Spitfire etc. Sadly, they are now out of print, although I have seen an advertisement in the British modeling press showing that a reprint of the Swordfish title now exists to coincide with the release of the Tamiya kit. Well worth acquiring.

The Swordfish Story by Sturtivant and *Swordfish at War* by Harrison are also worth having, but for the history behind the Swordfish, rather than the photographic coverage. I have always felt that the "At War" series of books slipped rather badly when it came to the quality of its photographic reproduction.

A **very** useful article if you can find it, is from an old issue *of Scale Aircraft Modelling*, in the "Ian Huntley column" series, titled "The evolution of FAA camouflage THE FAIREY SWORDFISH 1938-1942". I have this article, should anyone wish a photocopy, but unfortunately, I don't have the exact issue of SAM it came from. *[Vol. 13, No. 10, July 1991 - ED]* You see I tear up every model magazine I get, keeping only the articles that interest me. And I must be subconsciously selfish, as I don't note which issue an article comes from, since after all, I already have it, and such information would only be useful to someone else...

Finally, thanks to the powers of the Internet, we have the following web page which contains a "Swordfish Walk-around" so to speak:

http://homepages.tesco.net/~veronica.hubbard/Walkrounds/Swordfish/swordfish.html

Magazine Wanted

I'm looking for a copy of *Scale Aviation Modeller*, Vol. 3, Issue 3. I'm interested in the 1/72nd scale drawings for the Brewster F2A-1/2. If you have a copy (not a photocopy), I'd like to buy/borrow it to help build a model of a Finnish Brewster 239. Thanks.

Michael Morrow
(206) 937-2851
e-mail: aeroaces@netzero.net

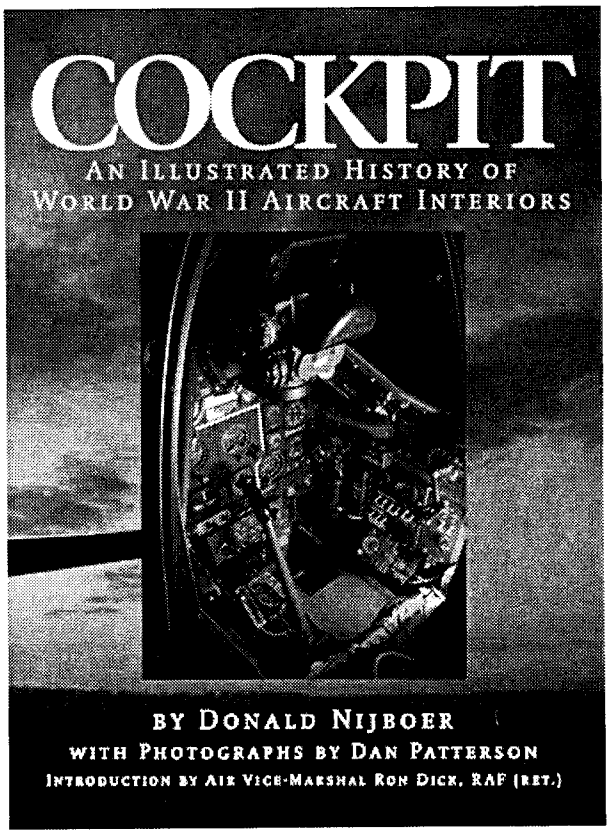
Cockpit: An Illustrated History of World War II Aircraft Interiors, by Donald Nijboer with photographs by Dan Patterson

review by Greg Reynolds

This book has been out for a while, but it recently popped up in FSM and on R.M.S. I first read about *Cockpit* in *Air and Space Smithsonian* several months ago. There was a mini article describing the co-operation of the NASM and other museums, the photographic techniques and vision of the authors. They sought to capture not just instruments in technical detail, but the cockpit ambiance on film. Despite the sub-title, it was illustrated with a full page illustration of the cockpit of the Hughes H-1 racer. Well, I was sold. I had to have one immediately. When it came, I was disappointed. But, I was a victim of my own expectation. Now that I've had a few months to re-read and mull over the book, I've changed my mind completely.

First, I'll spare you my disappointment. This book is NOT a "walk around". If you are looking for a *Maru Mechanic*, *Model Graphix*, or tech manual, forget it. You will not find anything like comprehensive coverage of the subjects. *Cockpit* is, in the end, a coffee table book. Furthermore, despite my palpitations on seeing the H-1, the subjects covered are **strictly** WWII military, and mostly prosaic ones at that. Having gotten that out of my system, does the book have any value to the model builder? You bet! Color. Lots and lots of colors.

The centerpiece of each subject is one (regrettably, only one) full-page cockpit photograph. Thanks to Dan Patterson's masterful use of lighting and lenses, these views capture a lot. More than you and I have ever managed, popping our heads and cameras into cockpits at airshows! Whatever Dan gets in the lens is well lit and in striking focus. There are no dark and murky corners in these photographs. The shots are naturally aimed at the main instrument panel, but usually manage to include a significant portion of windscreen, stick, floor, one sidewall and a bit of seat and harness. The views are accompanied by a smaller annotated version in black and white. There's not enough here to **build** a whole cockpit, but there more than enough to **paint** a whole cockpit.



After my disappointment wore off, I realized that this book is an invaluable resource for finishing WWII cockpits. Those old axioms I learned 25 years ago about interior colors - Germany: RLM 02, US: zinc chromate, Japan: metallic blue - are laughable. The truth is: there are no "rules". The variety of shades of grays, green and blues is amazing, sometimes even in the same cockpit. Then, there's the colors of all the handles, knobs, straps, tubing, wiring, instruments and so on. The only rule I can see, is that you can't tell squat from black and white photographs! These are of course, restored aircraft and that raises some doubts about the absolute authenticity of what you see here. There are a few aircraft from private collections (the P-51 and P-47, for example) that I have reservations about, but nearly all of the other subjects are in the collections of museums renowned for their scholarship.

Of course, the book would be a little dry for the general public if it were exclusively interior photos, so there is also a fine collection of exterior views. These are mostly rare WWII color photographs, many of which are stunningly printed full page. Each subject is completed by a brief aircraft history and pilot's comments.

Now, I can answer the question I posed several issues ago: the interior of the P-39 is indeed black overall!

Aircraft covered are:

United Kingdom: Gladiator Mk I, Swordfish Mk II, Hurricane Mk IB, Spitfire Mk II, Blenheim Mk IV, Beaufighter Mk IC, Mosquito Mk 35, Typhoon Mk IB, Lancaster Mk VII

USA: P-35A, P-38L, P-39Q, P-40E, P-47D, F-6D (P-51D recon), P-59B, A-20G, B-17G, B-24D, B-25B, B-26G, B-29, FM-2, F6F-3, FG-1D, SBD-5

Japan: A6M3, Ki-46-II, N1K2-Ja, Ki-100-IIB

Russia: Yak-3

Germany: Bf 109G-2, Fw 190D-9, Ju 87G-2, Me 410A/U2, Me 163B, Me 262A-1A

Howell Press, USA, 1998. ISDN 1-57427-068-0. Hardbound, 9 x 12", 176 pages, indexed. List $39.95. Amazon $27.97.

The Image of Modelers in the Real World

by Lee Kolosna, IPMS Eagle Squadron

On an *X-Files* episode entitled "Piper Maru", Dana Scully and Fox Mulder are looking at a video taken by an underwater submersible of a crashed World War II airplane in the Pacific. As the camera works its way around the barnacles and other sea life, the windscreen comes into view. Agent Scully says, "What a minute, Mulder! I know that airplane. It's a P-51 Mustang! I remember when I was a child that my father and brother built a model of one." Mulder looks at her incredulously and says, "I just got incredibly turned on!" Wow! Dana Scully knows P-51s! And better yet, models! In typical *X-Files* fashion, however, Scully reacts with indifference to Mulder's retort. No matter. In my book, Dana (or perhaps even Gillian Anderson) has a positive view of modelers. Same with Mulder. In fact, it seems that someone on *The X-Files* is a big fan of modeling. Another episode depicts an Air Force pilot assigned to Area 51 who is having some personal problems caused by strange occurrences around the base. In one scene, he is clearly working on a 1/48th scale Monogram F-117 model as Mulder questions him. Too bad the pilot later commits suicide. We'll take what we can get.

Unfortunately, the few appearances of modelers in movies and TV have not always been so kind to us and our hobby. Tim Allen on the show *Home Improvement* has shown models on a number of occasions in a positive light. *[In a less positive light, what British comedy lover can ever forget the sight of the title character in* The Secret Diary of Adrian Mole *with an Airfix 1/48th scale Spitfire V glued to his nose? - ED]* It's public knowledge that Jay Leno frequents hobby shops and buys kits of cars that he is interested in purchasing for his real-world collection. Ken Griffey Jr. builds model cars. Eric Clapton has said that he built Airfix car models in the 1970s while he was between bands. I'll mention in passing that he was strung out on heroin during that period, but that shouldn't diminish the endorsement too much. More often than not, it has been the other way around, with modelers being thought of in more or less the same light as model railroaders: grown up men and women who still play with toys. We modelers know this not to be true, of course, but it definitely tempers the image we share with outsiders.

I've noticed that wooden ship modelers seem to escape this scrutiny, or at least they appear to be more respected by the general public. This may come from the fact that they generally eschew plastic kits, which has been associated with kids and childish pursuits ever since styrene models were introduced in the early 1950s. The fact that wooden ship models have been built by artisans for centuries probably helps, too. It seems that a lot of millionaires (or at least the ones on TV) have a model of a racing schooner or clipper ship festooning their smoking rooms, placed prominently next to the bar with crystal decanters of Scotch, bourbon, and other spirits. Score one for the ship modelers. But us mundane plastic modelers, who wrestle with the newest release from Hasegawa, aren't in that category.

Perhaps it's because we "cheat" by using a pre-manufactured kit where practically all the work (ha!) has been done for us ahead of time. All we have to do is glue and paint, just like when we were seven years old. Right. George Costanza, the character on the show *Seinfeld*, once noted that all people have two sides to their individual being, a public side and a private side. He had a "Public George" that is the everyday personality the world sees. But "Private George" is the side that is deeply personal, and contains his innermost thoughts and fears and deeds. In the case of the TV show, "Private George's" ATM password was in contention. He didn't want to give it out to Elaine because it revealed more about his private life than his wished to expose. (It turned out to be "Bosco", the chocolate syrup that he enjoyed in his youth, by the way.) This got me thinking about "Private Lee" and how I portray my status as a modeler to the rest of the world. I choose to keep it pretty close to the vest and not make a big deal about it. Too often I've seen model railroaders get teased by their colleagues at the office. While the kidding is generally good natured, it still has the underlying implication that a modeler is a person who is in a state of arrested development - that despite being adults, they still play with toys. Spending hours poring over photographs in books attempting to discern the differences between different variants of a vintage aircraft is definitely not child's play. But explaining that to those who don't understand rarely is worth the time, I've found. My hobby is for me and my enjoyment, so I tend to keep it personal, sharing the experience only with other modelers. I also happen to collect porcelain Christmas village pieces and don't make that very public, either. Oops. I guess I just did.

A member of the IPMS Houston chapter once posted on RMS the story of how his club got a local TV station to come out to one of their meetings and film a human interest piece. They showed completed models, all of the reference materials that were used, how serious research was required to do a historically accurate representation, and so on. There were models of Bf 109s, a Tiger tank, and some soldier figures at the meeting. They were very pleased at the questions that were asked by the reporter and how he focused on the reference material. When they watched the broadcast the next day, they were horrified to find out the real theme of the story: Houston area Nazi lovers recreate the Third Reich in miniature. It was a public relations disaster. To the general public I suppose that books like *Uniforms of the SS*, or *Gemany's Infantry Weapons 1939-1945*, or *Luftwaffe Emblems* (all titles in this month's Zenith Books catalog, by the way) look a little dubious, no matter how scholarly the research.

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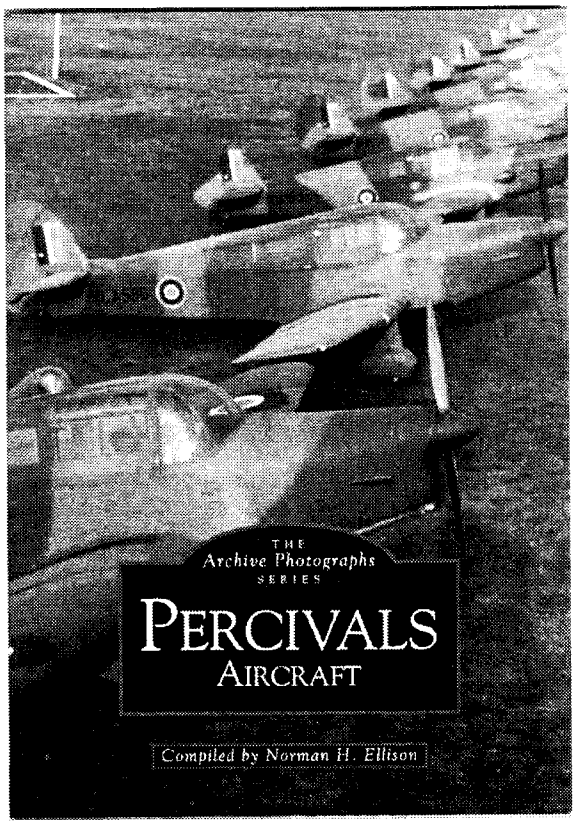
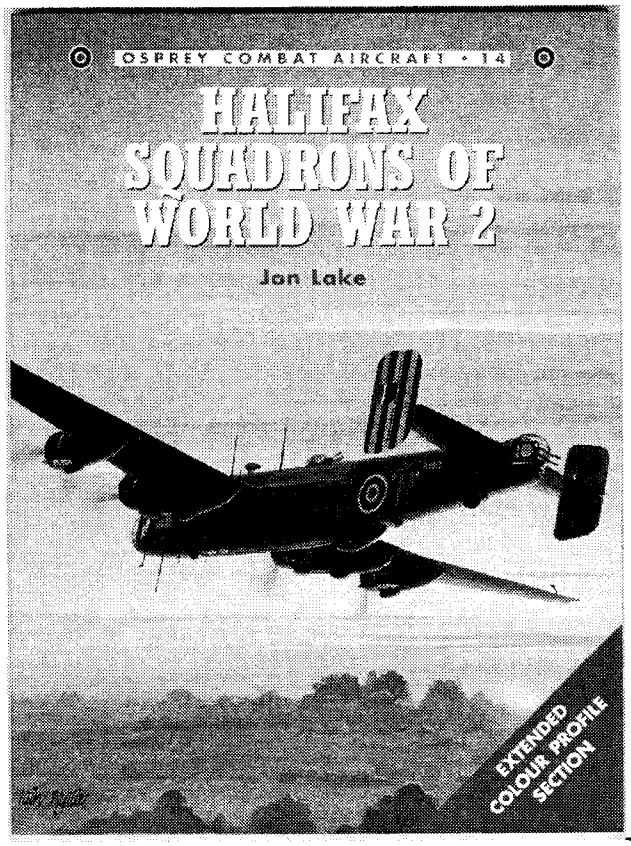
Book Reviews: *Halifax Squadrons of World War 2* by Jon Lake; *Percivals Aircraft* by Norman E. Ellison; *English Electric* by Derek James

reviews by Robert Allen

When we're building a model of a piece of hardware, whether airplane, car, or ship, that's often all it is to us - a piece of hardware. We sometimes forget that these machines were made by and for people. Oh, we may know the name of the pilot or race car driver, and perhaps a little about them, but more often than not, they're just disembodied names. Of course if we've actually been involved in some way with the aircraft, or driven the car, that's a different story. Terry Moore's model of the *Miss Exide* hydroplane, featured last month, is a perfect example - Terry was spurred into building the model by rediscovering a photo of himself taken many years ago, sitting in the boat. Three recent books have reminded me that airplanes have a direct connection with men and women, and very specific ones for me in these cases.



Halifax Squadrons of World War 2 is number 14 in the Osprey Combat Aircraft series, which with its companion series Aircraft of the Aces, seems to be one of the great aviation publishing success stories of the decade (although the author of one of the other books in the series recently told me that he was surprised to have boxes of remaindered copies in his basement). There's a subtle but significant twist to this series as opposed to the Aces one, related to the different nature of fighter versus bomber operations; it's much more concerned with the units than singling out individual pilots. Lake's book is one of the better ones in the series for three reasons - he's a writer than will offer his opinions on things, whether they're the prevailing viewpoint or not; the Halifax served in a variety of roles often not covered by other books; and Halifax variants (with differing engines, turrets, and tail configurations), and markings, changed much more widely than other British aircraft, making the forty color plates more than just a mush of Dark Green, Dark Earth, and Night.



Lake makes a couple of claims at which many will raise their eyebrows. First he states that, "the Hercules-engined Halifax was even superior to the Lancaster, with better multi-role versatility and a lower loss rate by war's end." Secondly, he states that the on-going controversy about the merits of RAF area bombing and USAAF precision bombing is virtually meaningless, because in practice there was little difference, and RAF Bomber Command was more accurate anyway. "In the latter part of the war," Lake states, "RAF Bomber Command was actually more successful at placing its bombs on target than was the Eighth Air Force." Lake may be starting his own firestorm here, but he backs up his assertions.

Less controversial, but handled equally well, are his sections on the Halifax's use outside regular Bomber Command squadrons, as a Pathfinder Force aircraft, Special Operations aircraft (an RAF Halifax flew a Soviet spy team into Austria, with tragic results), ECM jammer, Coastal Command patrol aircraft, glider tug, and transport. Like the B-24, with which it is often compared, the Halifax was supremely adaptable to a variety of roles.

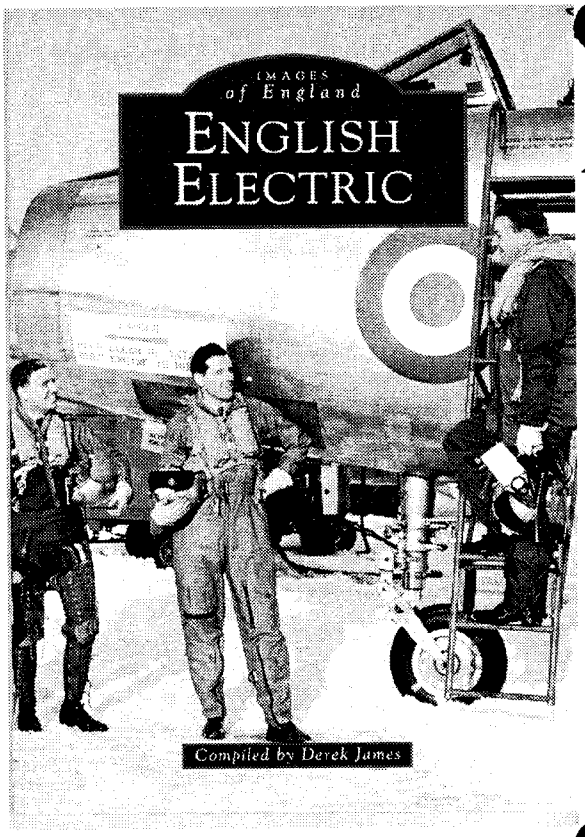
The personal angle? My namesake, Bob Allen, my grandfather's brother's son (if any of you out there are genealogists, I'd

love to know the exact relationship), flew late-model Halifaxes with Nos. 76 and 171 Squadrons. I've always meant to do a model of one of his aircraft, using the ancient Airfix kit. He no longer has his logbook, so he can't quote me a specific aircraft, but he maintains that most aircraft were not assigned to an individual crew anyway. Lake's book has nice profiles of aircraft from both squadrons - pity about the hard-to-reproduce nose art shown on both aircraft!

Chalford Publishing/Tempus Publishing's two series, Archive Photographs, and Images of England (which is part of the aforementioned series), are hard to find in this country, which is a pity, because the books are gems. Paperback books measuring 9.25" by 6.5" and containing 128 pages, they are picture essays covering specific aircraft companies, with just enough text to put things in perspective. The photos are printed on good-quality, though not glossy, paper. Strangely enough, the Percival book has a glossy cover and the English Electric one a matte cover. The aircraft books are actually just part of a much larger series; I can't for the life of me figure out the difference between the two series, because the design and presentation are identical. The books are reasonably priced, at 10 pounds (about $16 or so). Most of the major, and minor, British aircraft companies have been covered, and the line has recently branched out to profile its first US manufacturer, Cessna. Although the focus is on the aircraft, one feature of the series is that these are company histories, not just aircraft reference books - you'll find pictures of the design office soccer teams, and even unposed photos taken at company Christmas dances!

Percivals Aircraft, in the Archive Photographs series, was written by a friend of my family, Bellevue resident, and ex-Percival employee, Norman Ellison, who was one of the flood of British aircraft designers and workers who came to work at Boeing in the mid-60s. Other Seattle-area friends contributed several of the photos. The somewhat cumbersome plural in the book's title is not a misprint; Captain Edgar Percival gave his name to several different companies over the course of his career. The most well-known, of course, was Percival Aircraft Ltd., which manufactured such aircraft as the Vega Gull, Proctor, and Provost, and which metamorphosed into Hunting-Percival.

Ellison provides an excellent selection of photos showing the range of planes made by the different companies, their varied uses, and the markings applied to them. Because Percival made mostly trainer and light transport aircraft, there are a number of differences compared with a history of a company that made combat aircraft. Percivals were flown by many prominent private pilots; there are photos of the famous aircraft used by Beryl Markham and Alex Henshaw, and two of author Neville Shute Norway taking delivery of a Proctor. The book is also a treasure trove for the small air force enthusiast; Percival's planes were tailor-made for smaller air forces, and photos can be found of an Egyptian Q.6, Lebanese Proctor, Argentinean Prentice, Belgian Pembroke, Malayan Provost...you get the idea. There is even a photo of a pre-war Lithuanian civil-registered Q.6. Percival aircraft have often got short shrift when compared with those of other British aircraft companies. If you have any interest in the subject, I can't recommend this book highly enough.



Derek James' *English Electric* in the Images of England series is a marvelous book, except for one horrible error. English Electric (or its predecessors) had four distinct phases as an aircraft company - during WW1, it built other people's designs, such as the Short 184 and Sopwith Snipe; during the 20s, English Electric was amalgamated from five companies and began designing its own aircraft, mainly flying boats; in 1938, after an eight-year hiatus from aircraft production, English Electric again began to produce license-built aircraft, first Hampdens, followed by Halifaxes, and Vampires; and post-war, original planes were once again built, including the brilliant Canberra and Lightning. The company was amalgamated in 1960 with Bristol and Vickers (at government request) to form the British Aircraft Corporation, primarily to build the TSR.2, possibly the greatest might-have-been in aviation history. Don't get me started. Since then, the Warton design offices have handled the British contributions to the Jaguar, Tornado, and Eurofighter programs - an enviable record indeed.

James navigates this convoluted history with skill, concentrating on the indigenous aircraft of the between-the-wars and post-war eras. The section on the rarely seen 1920s flying boats is exceptional, with many excellent photos. The Canberra gets the heaviest coverage of any aircraft, as it should, with a couple of photos of US B-57s thrown in for good measure.

The horrible error? My father, George Allen, worked for EE/BAC from 1949 to 1966, when my family came to this country. On page 92, there is a photo of the EE Flying Controls Group design staff, shot in 1959. My father is standing fourth from the right in the back row, smiling (he should be, as it was taken on my second birthday). Unfortunately, the caption identifies him as George Miles. Now I have nothing against designer George Miles, one of the Miles Brothers, but he's not my father. There are few things in life as satisfying as public recognition, and few things as deflating as getting a name wrong. There is also a photo of the TSR.2 design team, taken on a day when my father was meeting with Rolls-Royce at Derby. Oh, well. Many of the photos feature family friends, and in other cases it's great to be able to put faces to the names from my father's many stories.

Aside from the personal irritants, this is an fine book. As mentioned, Tempus books are hard to find in the US, but they are available from British merchants such as Midland County Publications, or from the publisher. (Tempus Publishing Limited, The Mill, Brimscombe Port, Stroud, Gloucester, GL5 2QG, England).

Revell-Monogram *Star Trek: Voyager* Kazon Torpedo

by Bob Jones, IPMS Oklahoma Historical Modelers Society

Well, as far a strange and unusual goes, this one hits the mark as it does satisfy all of the criteria - that is:

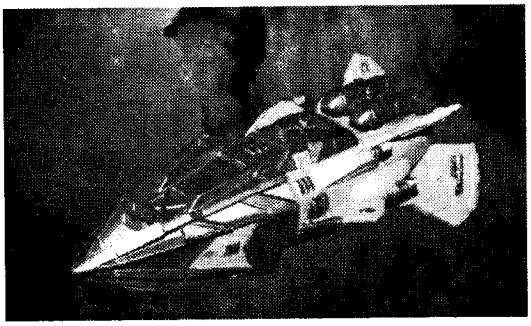
1. It came from a *Star Trek: Voyager* episode that hardly anybody saw or remembers.

2. It probably occupied about twenty seconds in the obscure episode that nobody saw as they were fixing a sandwich in the kitchen at the time.

3. Finally, the infamous "box-scale" that is so indicative of *Star Trek* models leaves no doubt.

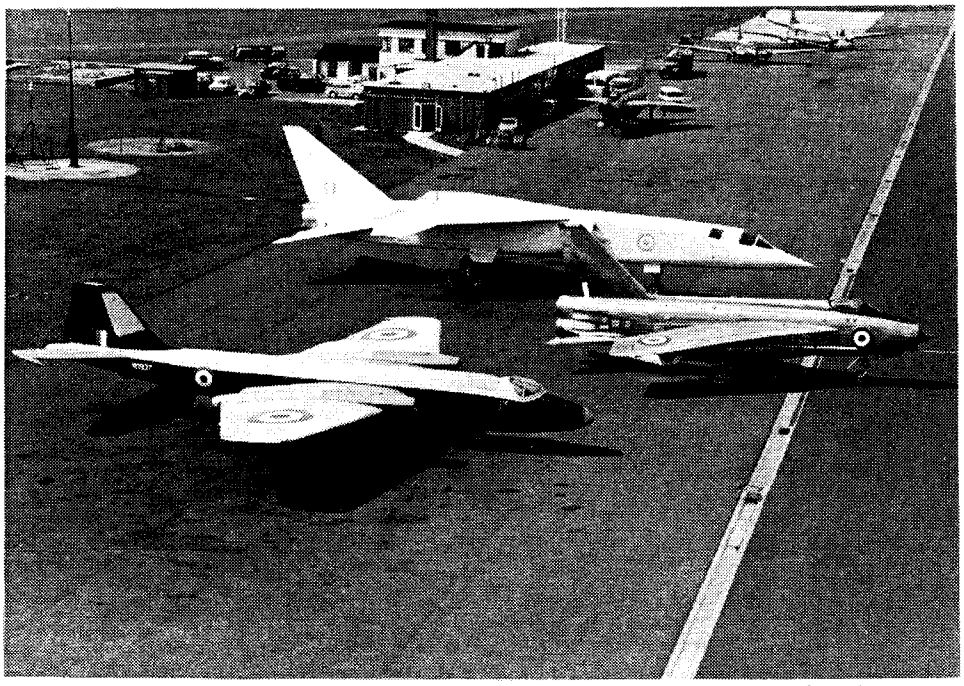
I am glad it fits the criteria because in true *Star Trek* model fashion, that's the only thing that does fit. Now I know why I have never seen one built before. The challenge is to get four sides with sixteen different angles to line up all at once. So, after changing the symmetries and out and out defying (if not breaking) the laws of physics, it was time to paint.

The color scheme on the box was different from the box side panels, as well as the direction sheet. Seeing how I had no reference material (I was in the kitchen like the rest of you), I chose the box lid as it was the "studio model". Frankly, it was simpler, but more importantly, far more



believable. It was finished in brown and Testors Metallizer Gunmetal, dry-brushed with all sorts of stuff I can't remember, weathered with oils and washed out the same way.

In conclusion, I can say I have finally gone where no man has gone before.



Canberra B.2, Lightning F.6, and TSR.2 on the Warton flightline, 1965 (photo BAC, via George Allen)

The Image of Modelers

from page 6

So, does the "Public You" boast loudly your passion, or are you much lower key about it? Do your coworkers know that you make models? Do you show them them your reference collection, oohing and aahing at your cherished copy of *The Official Monogram German Aircraft Color Guide 1939-1945?* Or do you just keep a low profile? A modeler friend once told me of a successful approach he uses to garner a glimmer of respect from the non-modeling world. Instead of telling a stranger that he builds models, he instead starts with a question. "Do you know what those guys in Hollywood do, building miniatures of space ships for *Star Wars*

continued on page 16

Book Report: *Italian Aviators Rome to Tokyo in 1920* by Lt. Gen'l. (Ret.) Domenico Ludovico

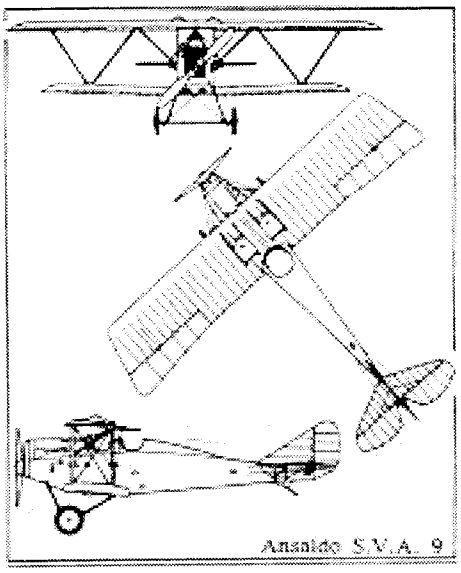
report by Jim Schubert

IPMS-Seattle member Bill Johnson is a remarkable fellow in many ways; one of which is his possession of a large and eclectic technical library built over many years of discriminating buying. If you're doing a research project and are stuck - call Bill. In all likelihood he'll have more than just a little bit of what you're looking for in his library to loan to you. In this case I was researching the civil Dornier Wals used by explorers. When Bill handed me a bag of books on that subject, he picked one out and said, "I think you'll be interested in this. "This" was the book that became the subject of this report.

I've been an aviation enthusiast since age four and have worked in the field for 47 years; I pride myself on knowing a little bit about aviation history and aeronautics; but I had never heard of this epic flight of four Italian aviators in 1920. I'm calling this a "book report", like we used to do in school to prove we'd actually read the book instead of just skimming the Classic Comics version. I'm not calling it a "book review", which connotes something more serious, intended to help the reader decide whether or not to buy the book. This book, anyway, has been out of print for, probably, 28 years. I'm so excited to have learned of this episode in aviation history that I want to share it with everybody.

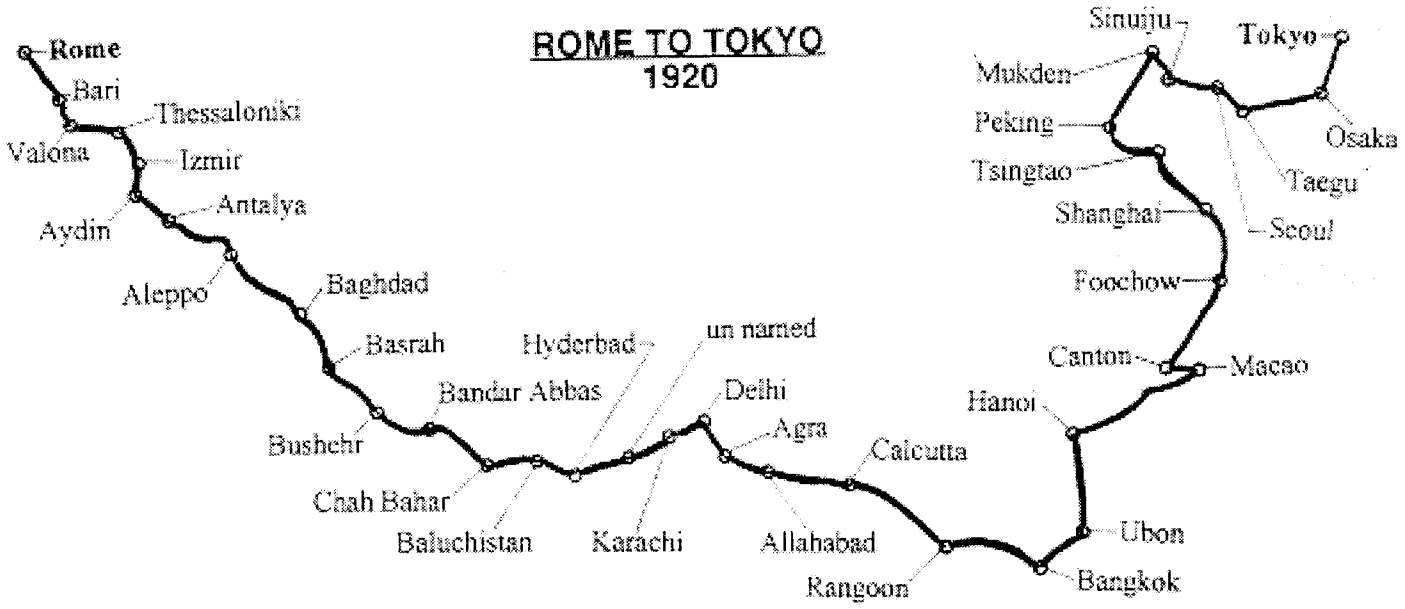
Gabriele D'Annunzio, soldier, hero, poet and erstwhile aviator of WW1 presented the idea of a Rome-to-Tokyo flight in a speech to "fellow" aviators at Rome's Centocelle airfield in July of 1919. It was his intent to lead the flight with his favorite pilot, Natale Palli. Palli flew their Ansaldo SVA-9 leading seven SVA-5s on the celebrated 620 mile round trip, leaflet "bombing" raid on Vienna of August 9, 1918. Lamentably, Palli froze to death walking out of a crash site in the Alps before D'Annunzio's stirring speech. D'Annunzio, himself, withdrew from leadership of the adventure in September of 1919 to dedicate himself to the liberation of Fiume, as the Italians called Rijeka in the Carnaro province of NW Croatia. My Grasp of Italian history is insufficient to know why the liberation of Fiume was so important to D'Annunzio.

After much hard lobbying, of the holders of the purse strings of the war-weakened Italian economy, a plan was finally approved and funded. The plan was to send two SVA-9 two seat trainers, each with a pilot and mechanic, ahead as route provers, pathfinders and "Hares" for a formation flight of three Caproni Ca.3 tri-motor bombers and five additional SVA-9s to follow. In the event, only the two "Hares" made it all the way to Tokyo; all the others having either crashed or broken down. The logistics of such an undertaking were, and still are, enormous; spare parts, fuel, oil, spare airplanes, and even places to land all had to be organized, procured, transported, built, staffed, and protected.



The crews of the "Hares" were: Lt. Arturo Ferrarin and mechanic Gino Cappannini and Lt. Guido Masiero and mechanic Roberto Maretto; all Italian Air Force veterans of WW1. They left Rome's Centocelle airport on February 14, 1920. The flight as, far as Delhi, was quite uneventful. They had flown via Bari, Valona (Albania), Thessaloniki (Greece), Izmir, Aydin, and Antalya (Turkey), Aleppo, Baghdad and Basrah (Mesopotamia), Bushehr, Bandar Abbas, and Chah Bahar (Persia), an unscheduled repair stop in the wilds of Baluchistan, Hyderbad, another repair stop at an unnamed place in India, to Karachi and Delhi. Arriving behind Masiero, and after dark, Ferrarin made a hard landing at Delhi and damaged the undercarriage of his plane. Whilst Ferrarin's plane was being repaired Masiero took off for Calcutta but suffered engine failure on climb out and crashed heavily destroying his plane without injury to himself or to Maretto. Ferrarin, his plane repaired, flew on to Calcutta while Masiero and Maretto continued on to Calcutta by train. After a fuel stop at Allahabad and a diversion to Agra to see the Taj Mahal from the air Ferrarin and Cappannini arrived safely in Calcutta. The Italian ground crew severely damaged Ferrarin's plane while servicing it and both he and Masiero were forced to take spare SVA-9s pre-positioned against just such an eventuality. On final into Rangoon, the next stop, Ferrarin's over-heated engine seized forcing a dead stick landing and another delay for an engine change. Masiero went on ahead to Bangkok where he was joined a day later by Ferrarin.

The next leg to Ubon and Hanoi was uneventful. Enroute to Canton from Hanoi they both got lost and landed in Portuguese Macao to wait out the weather. The next day they continued on to Canton. Due to the weather and flooding the takeoff from Canton for Foochow was extremely difficult. Ferrarin made it but Masiero crashed in the attempt destroying the airplane; again with no personal injuries. Masiero and Maretto continued on to Shanghai by boat. After the difficult take off from Canton Ferrarin's flight to Foochow was fairly easy. His departure from Foochow for Shanghai was, however, delayed for seven days by a typhoon, which flooded the racecourse they were using for a flying field. With the team



safely reassembled in Shanghai, the Chinese laid on a seven day celebration to mark the event. Having picked up and prepared another spare airplane for Masiero and Maretto the four airmen left for Tsingtao (yes, the home of the beer,) then held by Japan as a mandate of the Treaty of Versailles. Enroute they encountered another typhoon, the turbulence of which induced the first air sickness of the trip. The Japanese laid on four days of celebrations before releasing the aviators to continue their journey. To ensure the Italians stayed for the fete, the Japanese refused to give them fuel for the next leg of the flight to Peking until the partying was over. Seven more days of celebrations were held in the capitol before the flyers could continue again. After a fuel stop at Mukden, they flew on to Sinuiju in Chosen (Korea; another Japanese mandate). Thence on to Seoul and Taegu before crossing the Sea of Japan to Osaka. For the last leg of the trip the two planes, freshly cleaned and serviced, left Osaka at 10:00 AM on May 31, 1920 for Tokyo, where they landed at 1:30 PM at the Yoyogi Army Field.

Forty-two days of exceptional festivities, ordered by Imperial decree, celebrated the conclusion of this incredible flight. In addition to all of the wining, dining, speeches, sight-seeing, bestowing of orders and honors, etc. the four aviators were given a rare Imperial audience with the Empress as surrogate for the Emperor who was ill and convalescing elsewhere. In this person-to-person encounter it was discovered that the Empress and the Italians all spoke French, at which point she dismissed the interpreters to speak directly with the aviators. This kind of direct Imperial contact with commoners, as reported in all the Japanese newspapers, was shocking to the populace.

As a gesture of friendship the Italian government presented Ferrarin's plane to the Japanese nation. The plane was immediately placed in the Imperial Munitions Museum in Tokyo, where it remained displayed until destroyed by B-29 raids in 1945. The author did not mention the fate of Masiero's airplane.

Ordered home on the Italian liner Pilsna at the end of the 42 days of celebration, the aviators were greeted upon arrival at Bari with bills from the Ministry of Finance for their fares, meals, and entertainments! Ah, long live bureaucracy.

The adventurers had been enroute from Rome to Tokyo for 106 calendar days, of which only 23 were flying days, due to delays occasioned by weather, logistics and celebrations. The average speed for the time actually spent in the air was 99.5 MPH.

These four bright, clever, brave, self-confident, adventurous, foolhardy aviators all died young: Ferrarin at 46 in a crash at Rome in 1941, Masiero at 47 in a mid-air collision over Milano in 1942, Cappannini at 40 in action at Tobruk in 1940, and Maretto at 50 of illness in Padua in 1942; all whilst still serving in the Italian Air Force. This is a truly great, but little known, epic in the history of aviation. It should be noted as an epilogue, that in the very early 1970s Alitalia, the state owned airline of Italy, named its second Boeing 747 the *Arturo Ferrarin* in its name series of famous explorers; the first was named the *Neil Armstrong*. In my opinion this is a good pairing of colleagues in aviation.

Finito!

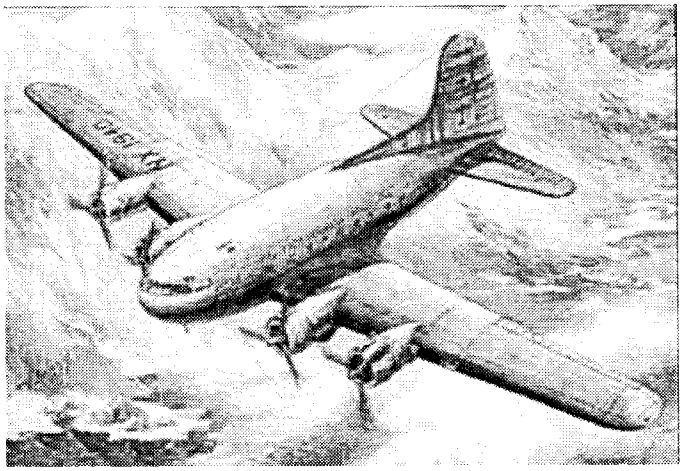
The unarmed Ansaldo SVA-9 two-seater chosen for the flight was a modification of the SVA-5 single seat 1918 fighter. The two-seater was intended for use as a bomber, trainer and communications airplane. Save for the two cockpits, a 200

continued on page 15

Maquette 1/72nd Scale Boeing 307 Stratoliner – An In-the-Box Review

by Terry D. Moore

When I saw the model at a recent meeting I just knew I had to have it. As a relative of the B-17 how could I **not** have this airplane model in my collection?



Oooooh, a Boeing 307. Then I opened the box. Ewww, a Boeing 307? (Before I get any further into this review let me state that I do occasionally build in the so-called "divine scale," mostly for large multi-engined types. I still have a few in my garage o' kits. So there.) What you first see when you open the box are two streaked tan/white/brown fuselage halves, a direct throwback to the Jurassic age of plastic models, a few bits that resemble flap hinges, and a sprue of clear (?) parts. The fuselage halves are **thick**, up to 1/8" in places, some heavy flash, no alignment pins, and crude engraved panel lines. Not much else. Dimensionally, it appears reasonably accurate, but I have not yet put my ruler to it. The remainder of the kit consists of a Frog B-17E, for the wings, landing gear, and stabilizers.

Now, to the model. **As boxed**, you cannot build any of the 10 Stratoliners built at any time in their history! First of all, the stabilizer position location is incorrect for the stabilizers given in the kit. They are three scale feet, a whole 1/2", too far forward. However, the position is correct if you were to use the stabilizers from the Minicraft B-17C/D kit. The other major error in the fuselage is that the contour of the lower fuselage follows the underside of the wing. It should be flat across the bottom at the wing, with only a small portion of the lower fuselage extending below the flat. There is no interior. You could use the flight deck from the B-17 bits but then you would have to polish the clear cockpit section.

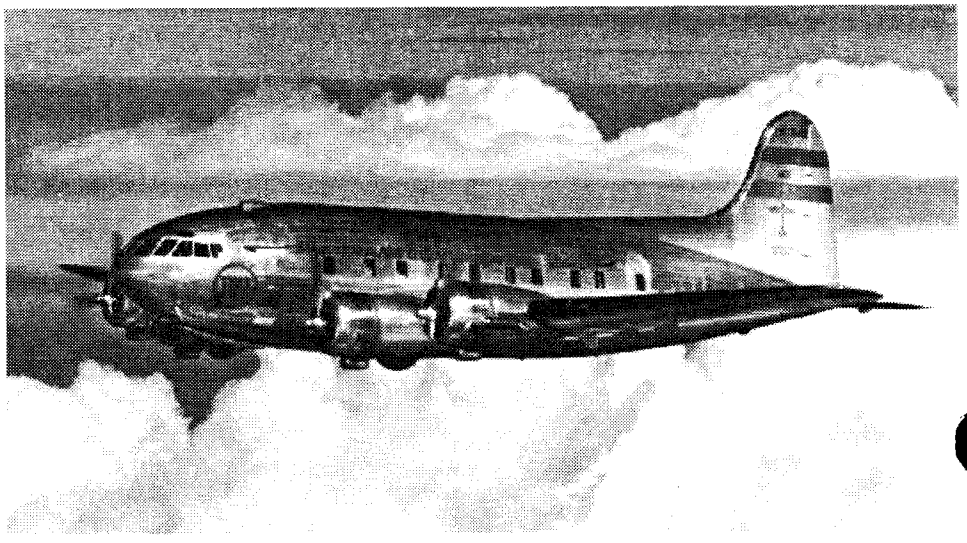
Then there are the wings. No Stratoliner flew with turbo-superchargers. Those will have to be filled in and the contours of the underside of the inboard nacelles will have to be rebuilt to match the contours of the outer nacelles. You will also have to fill the intakes on the leading edge of the wings and the intercooler vents on top of the wings. Research the specific aircraft you wish to build as intakes, exhausts, cowlings and other items varied on different aircraft and in some cases, the same aircraft at different times in their history. Decals are provided for one TWA, one Pan American, and one C-75. They bear a similar resemblance to the actual markings.

All is not lost. It **is** a 307. It ain't Tamiya. It is certainly easier than using the old Airmodel vacuform or even scratchbuilding. My recommendation is to buy it if you are interested in building a model of this aircraft and are looking for a real challenge, using copious amounts of filler putty, and putting that Black & Decker heavy duty angle grinder you got for Christmas to good use. Oh yes, a little help from Jack Daniels might make it easier to assemble.

Sources:

Airpower Vol 28 No 5
Wings Vol 28 No 5
Boeing Aircraft Since 1916, by Pete Bowers
Boeing: An Aircraft Album, by Munson and Swanborough
"Ten Big Boeings...The Stratoliner Saga" in *Air Enthusiast Ten* (includes a nice two-page cutaway drawing)
Plus: photos by the author of the last surviving aircraft, when it was still in Pima, Arizona.

PS: You know, the more I think about it, this sounds like a model for Bill Osborn. Bill? Bill? BILL!



Golden Age Stars of IPMS #3 – Advanced Weaponry of the Stars

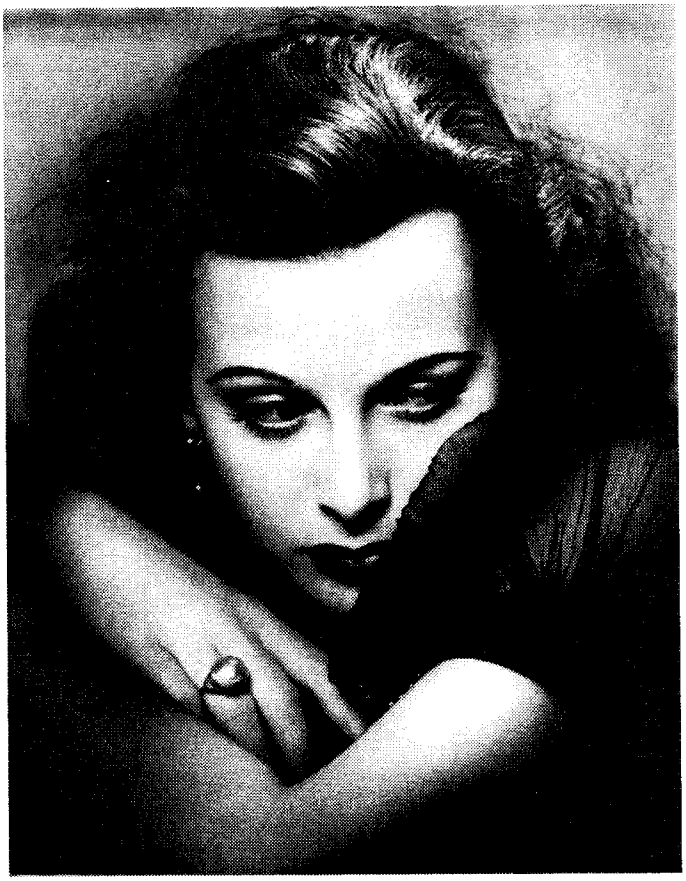
by Hans-Joachim Braun
***Invention & Technology* - Spring 1997**

[I can't take credit for this one. Greg Reynolds sent this to me, and since it fit in so well with the tone of the series, I decided to use it verbatim. Thanks, Greg. – ED]

It's the old story: A glamorous movie actress and a brash avant-garde composer get together to invent and patent a device that controls torpedoes by radio. Naturally their foray into military-technology innovation affects the way defense satellites are designed in the next half-century.

This seemingly preposterous sequence of events actually happened, but it is as little known as it is improbable. I stumbled on it while doing research on the relationship between technology and music in the twentieth century. I came across the composer and concert pianist George Antheil's 1945 autobiography, *Bad Boy of Music*, and found that in it he mentions his collaboration with **Hedy Lamarr**.

The screen star was born in Vienna in 1914 or 1913, according to some, or 1915, according to her, as Hedwig Eva Maria Kiesler. She went to Max Reinhardt's famous acting school in Berlin during her late teens, and in 1933 she showed the world her acting skills and most of herself in the film *Extase (Ecstasy)*, which quickly became notorious for its extensive nude scenes. The movie played in America after severe cutting, *[The copy in the KCLS is the censored version. Darn. - ED]* and in 1937 its leading lady went to Hollywood. Louis B. Mayer, of MGM, hired her and gave her the name Lamarr. Soon she was acting opposite such stars as Clark Gable and Spencer Tracy. Some thought her the most beautiful woman in Hollywood, but as an actress she was overshadowed by heroines like Ingrid Bergman and Katharine Hepburn. In 1966 she published her autobiography, *Ecstasy and Me*.



How did this lead to torpedo research? To answer that, I must introduce her first husband (she had six altogether), Fritz Mandl, before I get to her collaborator, George Antheil. Mandl was the most important Austrian armaments manufacturer of his time and one of the four or five leading ones of Europe. He married Lamarr in 1933. During their marriage, which broke up in 1937, Madame Mandl was an institution in Viennese society, entertaining, and dazzling, foreign leaders, including Hitler and Mussolini. Mandl specialized in shells and grenades, but from the mid-thirties on he also manufactured military aircraft. He was interested in control systems and conducted research in the field. His wife clearly learned things from him.

Mandl was a shady character. Born in 1900, he had taken over his father's armaments factory at the age of twenty-four. The Versailles Treaty forbade weapons making in Germany and Austria, so he set up subsidiaries in Poland, the Netherlands, and Switzerland and gradually became the chief armaments supplier to the Austrian army. In 1933 he and the Austrian government became the center of scandal: World War I weapons had been sold to Hungary in contravention of the Versailles Treaty. Mandl and Austria got out of that business, but soon the former was supplying arms for the Abyssinian War and the Spanish civil war. He appears to have been willing to do business with anyone on any side of any war, and because of that, the Nazis confiscated his factory even before the Anschiuss joined Austria to Germany, in 1938. Mandl moved to Argentina, opened a weapons plant there, and became a close adviser to Juan Per6n. After Argentina entered World War II, his property was confiscated, but he was given it back after the war and ultimately returned to Austria, where he died in 1977.

George Antheil, Lamarr's co-inventor, was born in Trenton, New Jersey, in 1900; his parents were from East Prussia. After studying music at what is now the Curtis Institute, in Philadelphia, he went to Europe to pursue a career as a concert pianist, heading first to Berlin and then settling in Paris in 1923. He became one of the top avant-garde composers of the time, writing and playing machinelike, "mecha-

nistic," rhythmically propulsive pieces with names like "Airplane Sonata," "Sonata Sauvage," "Jazz Sonata," and "Death of Machines." His "Ballet Mecanique" was scored for sixteen player pianos, xylophones, and percussion and was first performed in Paris in June 1926, in a version that had only one player piano but also had electric bells, airplane propellers, and a siren. It caused an uproar.

Antheil knew practically everybody in Paris's literary, artistic, and musical circles, but in 1933 he returned permanently to the United States. He became a film composer in Hollywood and a writer for Esquire magazine, producing a syndicated advice-to-the lovelorn column and articles about romance and endocrinology. He even published a book titled *Every Man His Own Detective: A Study of Glandular Endocrinology*. In 1939 he sent an article to *Esquire* about the future of Europe that proved impressively accurate: It predicted that the war would start with Germany invading Poland, that Germany would later attack Russia, and that the United States would be drawn into the conflict.

He met Hedy Lamarr in the summer of 1940, when they were neighbors in Hollywood and she approached him with a question about glands: She wanted to know how she could enlarge her breasts. In time the conversation came around to weapons, and Lamarr told Antheil that she was contemplating quitting MGM and moving to Washington, D.C., to offer her services to the newly established National Inventors Council. They began talking about radio control for torpedoes. The idea itself was not new, but her concept of "frequency hopping" was. Frequency hopping, which today is used extensively in military communications, means broadcasting a signal (which might carry commands for directing a torpedo) over a seemingly random series of radio frequencies, switching from frequency to frequency at split-second intervals. A receiver hopping between frequencies in sync with the transmitter can pick up the message, while any eavesdropper will hear only random blips. An attempt to jam such a signal - jamming was and remains a drawback to radio control - will knock out only bits of it, often leaving enough untouched to do no harm at all.

Lamarr brought up the idea of radio control; Antheil's contribution was to suggest the device by which synchronization could be achieved. He proposed that rapid changes in radio frequencies could be coordinated the way he had coordinated the sixteen synchronized player pianos in his "Ballet Mecanique".

The analogy was complete in his mind: By the time the two applied for a patent on a "Secret Communication System," on June 10, 1941, the invention used slotted paper rolls similar to player-piano rolls to synchronize the frequency changes in transmitter and receiver, and it even called for exactly eighty eight frequencies, the number of keys on a piano.

Lamarr and Antheil worked on the idea for several months and then, in December 1940, sent a description of it to the National Inventors Council, which had been launched with much fanfare earlier in the year as a gatherer of novel ideas and inventions from the general public. Its chairman was Charles E Kettering, the research director of General Motors. Over its lifetime, which lasted until 1974, the council collected more than 625,000 suggestions, few of which ever reached the patent stage. But according to Antheil, Kettering himself suggested that he and Lamarr develop their idea to the point of being patentable. With the help of an electrical engineering professor from the California Institute of Technology they ironed out its bugs, and the patent was granted on August 11, 1942. It specified that a high-altitude observation plane could steer the torpedo from above.

Putting the idea into practice was not so simple. Despite the enthusiasm that Antheil said Kettering expressed, others were skeptical. One examiner at the Inventors Council doubted the clockwork mechanism that moved the perforated tape could be accurate enough. Antheil lobbied for support for further research from, among others, William C. Bullitt, Special Assistant to the Secretary of the Navy. He argued that the Germans were superior to the Americans in naval technology and that something had to be done about it. He seemed driven in part by an urge to prove his patriotism after all his years in Europe. Hedy Lamarr meanwhile demonstrated her loyalty by raising seven million dollars in a single evening selling war bonds.

Despite Antheil's lobbying, the Navy turned its back on the invention, concluding that the mechanism would have to be too bulky to fit into a torpedo. Antheil disagreed; he insisted that it could be made small enough to squeeze into a watch. And he thought he knew why the Navy was so negative: "In our patent Hedy and I attempted to better elucidate our mechanism by explaining that certain parts of it worked like the fundamental mechanism of a player piano. Here, undoubtedly, we made our mistake. The reverend and brass-headed gentlemen in Washington who examined our invention read no further than the words 'player piano.' 'My god,' I can see them saying, 'we shall put a player piano in a torpedo.'"

In other words, it was a culture clash: the thick-headed brass hats were incapable of considering the idea that musical technology could play any part in a complicated piece of weaponry. But Antheil's explanation is too simple; the invention had other problems. To explain them requires looking at other developments in torpedo control at the time, especially in Germany.

In the first half of the 1930s, military researchers favored using wire for torpedo control. Thomas Edison had advocated this early on. Wilhelm von Siemens had suggested wireless control back in 1906, but the problems it posed included developing an antenna that could receive signals underwater.

Only very long waves can penetrate water, and even with a very strong and therefore bulky transmitter penetration could reach only a few yards. Furthermore, the plane controlling a torpedo's flight would be an obvious target for the target's own fire.

In 1935 the German navy began giving serious attention to the question of torpedo control. Although many specialists advocated wire, it presented major problems too: A wire would have to be up to ten miles long, and it would be apt to break, which would mean losing command of the torpedo. The champions of radio control developed a three hundred-foot-long antenna that a torpedo could drag like a tail. Then they tried to tackle the challenge of guiding the torpedo from the air. One solution was to have it leave bubbles or a paint streak on the water's surface, but even if good enough visibility could be ensured, the trail would likely follow too far behind the speeding torpedo to be useful.

In 1938 the German navy gave the firm of Siemens and Halske a substantial development contract for torpedo control research. As attention turned more and more to wireless control, the idea of frequency shifting emerged; it was definitely discussed at a meeting in July 1939, and it seems likely that the notion had already come up in Fritz Mandl's conversations a few years earlier. Siemens and Halske was supposed to have a radio-control system ready by the end of 1939, but the outbreak of war redirected military R&D priorities, and the project went by the wayside amid continuing uncertainties about jamming, cumbersome transmitters, and underwater penetration.

In the United States Hedy Lamarr and George Antheil, shunned by the Navy, pursued their invention no further. But in 1957 the concept was taken up by engineers at the Sylvania Electronic Systems Division, in Buffalo, New York. Their arrangement, using, of course, electronics rather than piano rolls, ultimately became a basic tool for secure military communications. It was installed on ships sent to blockade Cuba in 1962, about three years after the Lamarr-Antheil patent had expired. Subsequent patents in frequency changing, which are generally unrelated to torpedo control, have referred to the Lamarr-Antheil patent as the basis of the field, and the concept lies behind the principal anti-jamming device used today, for example, in the U.S. government's Milstar defense communications satellite system.

In short, Hedy Lamarr and George Antheil were inventors ahead of their time. Their idea needed its technological shortcomings to be overcome, which took years. But their story holds another lesson: Wartime is not always the best time for advancing military technology. If there are too many obstacles to the deployment of a new system, it will likely be cast aside, especially if the existing system, in this case wire control, works acceptably. And Lamarr and Antheil's experience offers one additional lesson: It shows that a concept or device from an utterly unrelated technological context and the most unlikely people can sometimes offer a new solution to an old and vexing problem, though you can't expect military men to realize that right away.

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Rome to Tokyo

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instead of 270 HP engine and a maximum gross takeoff weight (MGTOW) of 2,500 instead of 2,400 pounds, the SVA-9 was identical to the SVA-5. The fuselage was a plywood box from the radiator to the T.E. of the lower wing; from that point aft to the stern post it narrowed sharply to an inverted triangular cross section. The wings were conventional, fabric covered, two-spar wooden structures and the tail group was, fabric covered, welded small diameter steel tubing. The engine was an SPA 6A liquid cooled six cylinder in-line. For this flight the engine was slightly derated to enhance reliability. On the flight the airplanes were routinely loaded beyond their design MGTOW. The initials "SVA" represented the initials of the designers, Savoia and Verduzio and the manufacturer, Societa Giovanni Ansaldo & Compagnia.

According to IPMS Italy, the only kit of the Ansaldo SVA-9 is a resin kit in 1/72nd by RVHP. I have not seen this kit. There are two kits, however, of the SVA-5, which could fairly easily be converted to the -9 configuration. Pegasus have produced a very fine, delicate kit of the -5 in 1/72nd scale. This is really quite surprising as all the other Pegasus kits that I have seen have been unbuildable, being comprised of non-descript misshapen lumps of unusable plastic. Artiplast have produced a typically crude, for them, 1/50th scale kit of the -5 that is buildable, but only with a lot of effort and angst.

Italian Aviators Rome to Tokyo in 1920 by Lt. Gen'l. (Ret.) Domenico Ludovico, Etas Kompass, (for the Historical Branch of the Italian Air Force), Rome, 1970.

John McCarty Auction

by Jim Schubert

At the February meeting IPMS-Seattle will auction the unbuilt kits, and the books and magazines, of member John McCarty, who died of natural causes earlier this year. The kits are mostly airplanes, but there are several desirable car, ship, and armor kits as well. The proceeds of the auction will go to John's family with the club retaining 10%.

Norm Filer has donated to the club about thirty 54mm metal figure kits including a complete collection of **Monogram Merite** figures. All thirty figure kits will be auctioned at the end of the McCarty auction. The proceeds will be retained by the club.

For several years the executive council of the club has been discussing what, if anything, we should offer to do for the families/heirs of members with regard to disposing of the member's collection of unbuilt kits, and of their books and magazines. I will propose, at the January meeting, that we make it a policy to offer to do for the family of any member what we are going to do for John's family. Think about it; it will happen to you too.

A Note from Carlo Medina at Williams Brothers Models

via Keith Laird

"We thank IPMS for their support of our company. We will not do any more 1/53 scale models. All future kits will be in standard scales. Williams Brothers Inc. is currently forming the cast to the Folkerts Speed King SK-3 Jupiter. The plane resembles the Schoenfeldt Firecracker. We hope to have test shots completed within a year. The Lockheed Sirius, which was one of Charles Lindbergh's planes, will follow. The kit will be offered with floats and conventional landing gear. The Folkerts Racer will be offered in 1/32th scale. This will compliment the rest of our historic racers nicely. The Lockheed Sirius will most likely be in 1/48th although we are still tossing that one around."

Carlo also said that Williams Brothers will always stay 100% American produced.

The Image of Modelers

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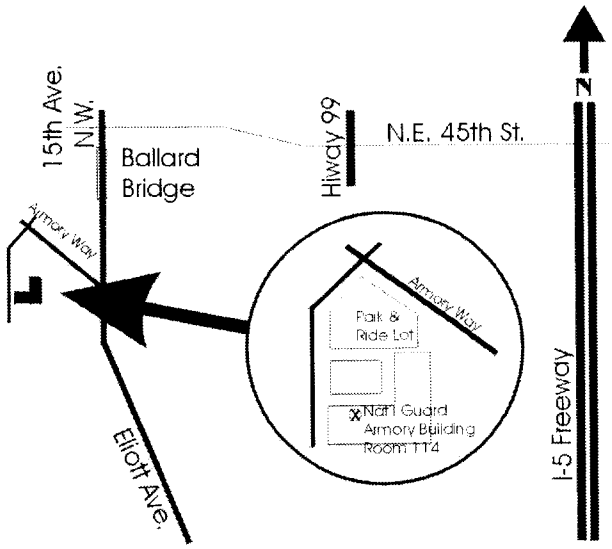
and *Star Trek*?" he says. Usually he gets a nod in the affirmative. "Well, that's exactly what I do." Instead of ridicule, he says that he experiences genuine interest from the great unwashed masses. I think this is a brilliant way of introducing your interest others. Of course, we know that the Imperial Star Cruiser consists of nothing more than fiberglass, paint, and hundreds of parts from Tamiya armor and ship kits, plus a lot of weathering with airbrushes, washes, and pastels. We model guys and gals know how to do this. And the public loves the Industrial Light and Magic model makers for it. They just don't know that the same techniques and skills also apply to miniature Shermans, P-38s, and '32 Ford Coupes.

I've also found that family members are just as clueless. As you present to your brother-in-law your latest masterpiece, the best you can hope for is a faint smile and a lukewarm, "That's nice." Or worse, you'll have to calmly tell him that no, the propeller doesn't turn and the wheels don't spin. Like that somehow makes the model better? I mean — really! To be fair though, it is a rare individual that will listen to you describe the agony you went through deciding which shade of gray was correct for the camouflage. So go on and do what you want. It's only you that decides which items are part of the "Public You" and the "Private You". Feel confident that you practice your hobby because it gives you pleasure. If you choose to share it with others, then so be it. If you don't, then that's fine too.

Meeting Reminder

Saturday, December 11, 10am



National Guard Armory, Room 114
1601 West Armory Way, Seattle

Directions: From North or Southbound I-5, take the 45th St. exit. Drive west on 45th, crossing under Highway 99 (or Aurora Ave. North) toward N.W. Market Street in Ballard. Continue west on Market St. toward 15th Ave N.W. Turn left (south) onto 15th Ave N.W. and drive across the Ballard Bridge until you reach Armory Way (just as you see the Animal Shelter.) Watch for signs. Park in the Metro Park & Ride lot.

If coming from the South, take Highway 99 onto the Alaskan Way viaduct to Western Avenue. Follow Western Ave. north to Elliot Ave. until it turns into 15th Ave N.W., then to Armory Way itself.