



## Last of the Supermarine boats: Seagull ASR.1

By Mark Schynert

The Supermarine name is inextricably linked with its classic fighter design, the *Spitfire*, arguably the most successful piston-engined fighter ever. Despite the fact that more *Spitfires* were built than all other Supermarine types combined, Supermarine's pre-war forte was not fighters, but flying

boats, and single-engined ship-borne flying boats in particular. As early as 1918, the Supermarine *Baby* established a pattern that Supermarine turned to again and again: a single pusher or tractor engine mounted near the top of a biplane flying boat, often with

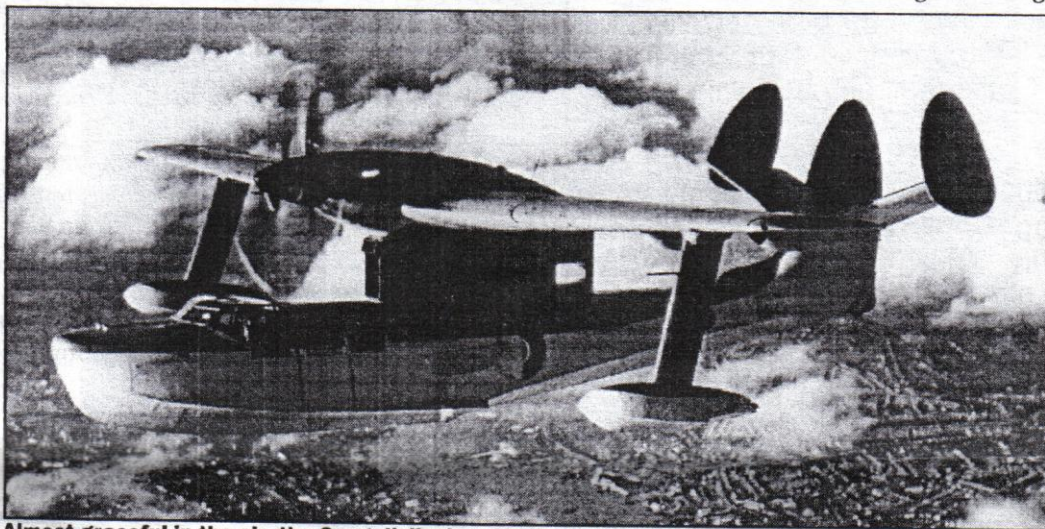
a wheeled undercarriage included as well. Over the next 25 years, Supermarine built *Sea Lions*, *Seals*, *Seagulls*, *Scarabs*, a *Sheldrake*, *Seagull V's*, *Walruses* and *Sea Otters* to this pattern, with the last two types becoming pre-eminent air-sea rescue craft during World War II.

Thus, it is not surprising that when the ASR requirement for a *Sea Otter* replacement was promulgated, Supermarine would come up with another small flying boat of the same general pattern in answer to the specification, indeed the last flying boat type to be built by Supermarine.

Supermarine returned to the name *Seagull* again: the *Seagull* ASR.1. The design took the concept of a small shipboard amphibian to its logical extreme; the *Seagull* became the first monoplane of the lineage, and combined wing folding, variable incidence, full-span flaps and slats, and a high-powered Griffon engine with contraprops. This resulted in a speed range of 35-260 mph and an appearance about halfway between a *Sea Otter* and a *Spitfire*. The first of two prototypes flew in 1948, but both (and an incomplete third prototype) were scrapped in 1952. They were not failures in and of themselves, but rather victims of official indifference and the

evolution of a much more effective ASR platform: the helicopter.

Nonetheless, this was one of the most attractive flying boats ever to fly, almost a sports car beside the school-bus-like *Sunderlands* and PBMs. So, when I discovered that *Maintrack* offered a vacuform kit of the *Seagull*, I bought the kit.



Almost graceful in the air, the *Seagull* displays the large pylon and dramatic dihedral of its horizontal tail in this photo. Both aircraft were scrapped in 1952.

This is one of the better vacuforms I've seen, though not up to the quality of true multimedia offerings such as those from *Aeroclub* or *Dynavector*. *Maintrack* does offer nice white metal for smaller parts (wheels, rudder/tailwheel, landing gear legs, arrestor

hook, four flap hinges, trunk radiator intake, three seats, exhaust stubs, six-bladed contraprop and instrument panel), a nice decal sheet covering both prototypes, a clear vac canopy (one only), and thirty vacuformed components, all of which are usable. However, the interior, which is clearly visible through that canopy, needs lots of odds and ends, so one must scratch-build several smaller windows, among other things, and the construction diagram is rudimentary. The *Seagull* went through a variety of aerodynamic modifications, flying with three or four different tail arrangements; the kit only offers parts for the final configuration, with raked aft trunk, larger central fin, smaller endplate fins and a small dorsal strake.

I was able to track down some good references in preparation for building this kit. *Supermarine Aircraft Since 1914*, by C.F. Andrews and E.B. Morgan (Putnam Aeronautical Books, 1987) provides a good overview, with lots of supplementary material in two magazine articles: *Air International*, Volume 23 (November 1982 issue) and *Aeroplane Monthly*, December 1976

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The *Styrene Sheet* is a monthly publication of the Silicon Valley Chapter of the International Plastic Model Society (IPMS). Articles and comments should be submitted to Chris Bucholtz, Editor, P.O. Box 361644, Milpitas, CA 95036, or by E-mail at bucholtzc@aol.com. Excerpts may be published only with the written permission of the editor.



# EDITOR'S BRIEF

Before we say anything else, we want to be sure that you know that this month's meeting is on Sept. 27. That's the fourth Friday of the month. We had to take that date because the Girl Scouts beat us to the reservation desk, and our alternate meeting site in Los Altos was also booked. Moving the meeting back a week seemed like the most logical way of

## CONTEST CALENDAR

September 28, 2002: **IPMS/Silver Wings** hosts its **annual model contest** at the Joseph Kerr Middle School, 8865 Elk Grove Blvd., Elk Grove, California. Special award for best natural metal finish. For more information, contact Scott Bell at (916) 428-7217 or e-mail him at [snjmodprod@aol.com](mailto:snjmodprod@aol.com).

October 13, 2002: **IPMS/Orange County** hosts its annual **OrangeCon** in Buena Park, California. For information, call Nat Richards at (949) 631-7142 or e-mail him at [richa5011@aol.com](mailto:richa5011@aol.com).

November 2, 2002: **The Antelope Valley Group** hosts **Desert Classic VI and the Region 8 Regional** at Antelope Valley College, 3041 W. Avenue K in Lancaster, California. The theme is "The Vietnam War, 1946-1975." For more information, call Bill Kelly at (661) 305-7902 or e-mail him at [v1rotate@prodigy.net](mailto:v1rotate@prodigy.net).

November 24, 2002: **The Southern Nevada Scale Modelers** host **Modeltoberfest 2002** at the Imperial Palace Hotel and Casino, 3535 Las Vegas Blvd. South, Las Vegas, Nevada. For more information, call Larry Todd at (702) 397-6113.

February 16, 2003: **Silicon Valley Scale Modelers** presents its **Tenth Annual Kickoff Classic Model Contest** at Napredak Hall, 770 Montague Expressway, Milpitas, California. This year's theme is "That '70s Contest." For more information, call Chris Bucholtz at (408) 723-3995.

May 30 and 31, 2003: **IPMS/Las Vegas** hosts its annual contest in Las Vegas, NV. For more information, call Jim Mitchell at (702) 254-6386.

April 24, 2004: **IPMS/Fresno Scale Modelers** host the **Region 9 Convention and Contest**, to be held at the Fresno Air National Guard station or, in the event of national defense conflicts, at an alternate site. More details to be announced.

coping with this situation.

If you've sent your information in for our club roster, you probably got an e-mail alerting you to this date change. That's another useful part of the roster: it enables the officers to contact the members when something odd is going on that will affect the meetings or other events. We can put it in big type in the Styrene Sheet, but some people simply do not read their newsletters closely. Want to wager on who will show up at the library on Sept. 20? I have a feeling I know who...

This month, we've seen contests in Reno and McMinnville, Oregon, and November seems equally busy. In Reno, Postoria Aguirre won a special award for his Lear business jet, the first model he's finished in 25 years, and in McMinnville, Roy Sutherland and Chris Bucholtz took firsts in both splits of 1:72 single engine prop aircraft. Bob Miller and Bill Ferrante also won awards at Reno, and Mike Burton took a special award for his four P-63 *Kingcobras*. We have some good builders in our midst, apparently!

One other bit of breaking news: Sacramento is holding a contest on Sept. 28, the day after our September meeting. The information only reached your editor on September 7 at the Reno contest, so if you go you may be one of a select few to represent the Bay Area!

Again, we'll see you on Sept. 27. If you know someone in the club or who likes to attend our meetings, please pass the word!

—The Editor

**This October, two club contests in one**

**exciting evening!**

## **Air Racers and Real Space Subjects**

**Bring out your glossy speed  
machines and your orbital  
objects and compete for  
prizes and the pride of being  
the fastest and the most out  
of this world!**

**at the October meeting**



# Halcon Peleador: the F-16 in Venezuelan service

By Gabriel Lee

The pair of camouflaged F-16As streaked from Landaeta Air Base (in Barquisimeto) to El Libertador Air Base (near Maracay). On an ordinary day the two pilots, Captain Helimenas Labarca and Lieutenant Beltran Vielma of the Fuerza Aerea Venezolana (FAV), would just be returning home from some training mission or another. Nov. 27, 1992 was not an ordinary day.

The day had started at 3:30 a.m. when Brigadier General (FAV) Efrain Visconti, with the help of the 42nd Airborne Brigade, seized control of El Libertador Air Base. This was the second coup attempt against President Carlos Andres Perez in a year. General Visconti sympathized with the imprisoned leader of the first coup attempt, Ejercito de Venezuela paratrooper Lieutenant Colonel Hugo Chavez. For weeks, he had staged the bulk of FAV striking power (F-16s, VF-5s, *Mirage* IIIs, *Mirage* Vs, OV-10Es, T-37s, T-2Ds) at El Libertador AB under the pretense of holding an air show to commemorate Venezuela's Air Force Day (December 10). Several of the pilots were also sympathetic to the rebel cause.

During the confusion of the takeover, Captain Labarca and Lieutenant Vielma managed to slip into the two alert F-16As and became airborne. They wore their uniforms and helmets, but there had not been enough time to put on their G-suits. While rebel troops took over the government TV and radio broadcast facilities in the capital city of Caracas so that leftist politicians could play taped messages from Hugo Chavez, the two jets vectored to Landaeta Air Base where loyalist troops were headquartered.

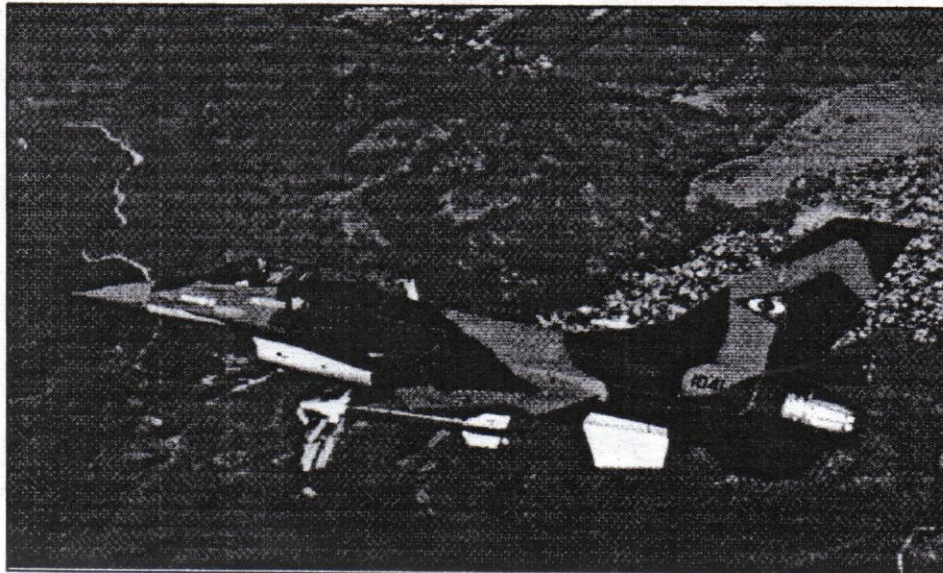
The F-16s avoided other aircraft in their 110-mile flight. Combat Air Patrol was not in this particular mission profile. As the familiar outlines of their former airbase filled the forward portion of their canopies, the two pilots went to guns on their selector. The F-16s fired their 20mm cannons at their onetime brothers-in-arms. Rebel pilots, armorers, and mechanics dove for cover as shells rained all around them.

While 20mm shells rained from the sky at El Libertador Air Base, the rebels had started attacks elsewhere. A group of aircraft had flown to the capital of Caracas and attacked the loyalist Ejercito (Army) troops rallying at Fort Tiuna. A second attack group (one pair of *Mirages* and several OV-10EV *Broncos*) strafed Landaeta Air Base in order to keep the loyalist air contingent off balance and thus out of the air.

During that attack, several aircraft were severely damaged at Landaeta.

Landaeta radioed Captain Labarca and Lieutenant Vielma that the base was under rebel attack. The F-16s turned around and roared off to defend Landaeta.

The F-16 pilots could see aircraft furiously burning in their own avgas. They could also see the rebels lining up for another strafing run. Lieutenant Vielma selected AIM-9P *Sidewinder* heat seeking missiles. He maneuvered his F-16A



A Venezuelan F-16, carrying inert *Sidewinders* on the wingtip rails. F-16s like this one thwarted the second of two coup attempts in 1992.

behind a slow-moving OV-10EV *Bronco*. After achieving weapons lock he triggered his *Sidewinder*. The heat seeking missile made a straight line to one of the *Bronco's* engines, where it exploded. The crew ejected. Meanwhile, Captain Labarca had been unable to engage a target. Lieutenant Vielma lined up another *Bronco* on his HUD and fired off another *Sidewinder*. Only one crewman

managed to escape; the pilot Lieutenant Domador, was killed in action. The rebels had been beaten back from Landaeta Air Base.

While the F-16As were dogfighting at Landaeta Air Base OV-10EV *Broncos*, AT-27 *Tucanos* and a T-2D *Buckeye* continued to hassle the loyalist forces in the capital. One rebel OV-10EV was shot down by ground fire. The crew of that aircraft ejected and were imprisoned by government troops. The rest of the rebel air force used 70mm rockets and Mk.81 bombs to damage several government buildings. Among their list of targets was Generalissimo Francisco de Miranda Air Base, known more commonly by its unofficial name of "La Carlota." This air base is located in a densely populated area, much like Moffet Field or Reid-Hillview airport. A freeway runs parallel to the runway on its northern side, another highway runs near the runway's eastern side, on the western end of the runway is a large shopping mall, running parallel to the runway's southern side are many houses and apartment buildings that average 12 stories tall. The rebel attacks were endangering civilians' property and lives. This had to stop.

The F-16s piloted by Labarca and Vielma landed at Landaeta Air Base. They were quickly refueled and rearmed. Soon they had their orders: vector to Caracas and prevent attacks against loyal army troops. They were back in the air for another sortie; it wasn't even noon yet!

The tide had turned for the rebels. Loyalist troops had retaken the TV and radio station. Rebel command had more bad news: loyalist columns were headed to El Libertador Air Base to take it from the ground. In desperation they launched



an attack on incoming Army units and on the presidential palace.

The F-16s arrived over Caracas. High above the fray Captain Labarca assessed the situation. The geography of Caracas presents problems for those engaging in air combat. It is located in a narrow valley with a large mountain called Avila to the north, with numerous tall hills within, and large houses and buildings on top of these tall hills. It is densely populated. To complicate matters he was under orders not to cause collateral damage to the civilian population below while engaging the rebel aircraft. He realized that all those buildings afforded an excellent place to smash himself and his aircraft into red pulp if he did not pay attention to his surroundings. The slower moving *Broncos* and *Tucanos* had the advantage. Like most fighter pilots he realized that it would not be good to fight on the enemy's terms.

With a tremendous advantage of height, speed and weaponry he dove his F-16A straight at the OV-10EV *Broncos* and *Tucanos*. They maneuvered smartly to avoid the incoming F-16. As a hill full of houses rapidly filled his windscreen, Capt. Labarca had no choice. He pulled on his joystick and pushed his throttle forward. The F-16A went straight up and broke the sound barrier. A loud pair of booms broke most windows in the immediate area.

The F-16A turned and acquired a T-27 *Tucano*. Captain Labarca selected guns and locked on the slow moving *Tucano*. From what is described by witnesses as extreme long range (1000 meters), he fired cannon rounds into the *Tucano*, and he did not stop firing until he was approximately 400 meters from his target. The *Tucano* went down in flames.

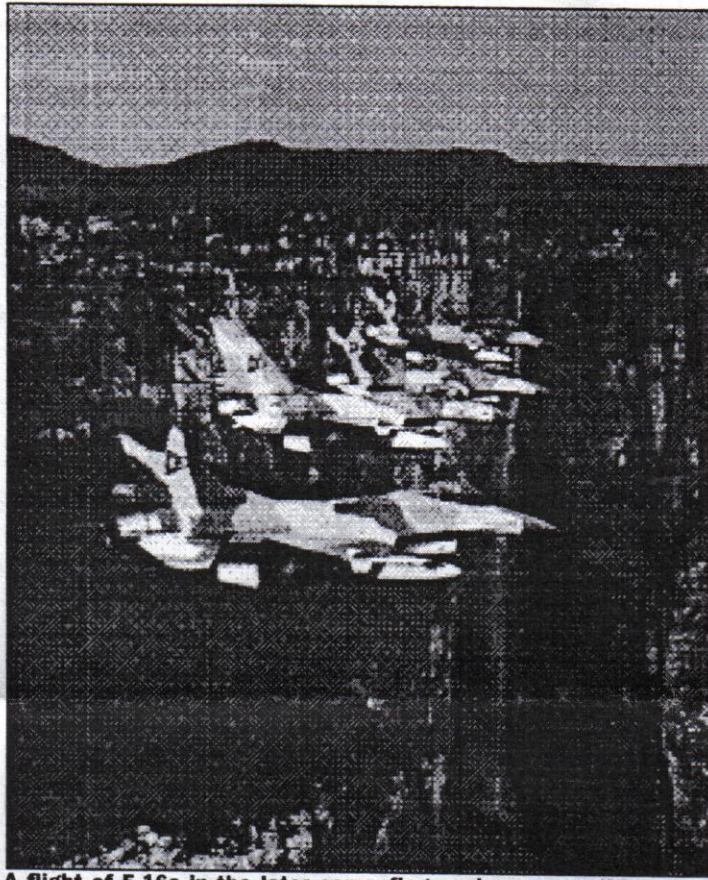
After the *Tucano* had been shot down, Captain Labarca noticed he was running low on fuel. He felt he had enough fuel on board to deal with the *Mirage III* he had noticed earlier. Missiles were out of the question since the aircraft would pose a danger to civilians as it hurtled out of the sky and into the ground.

The F-16 managed to get into the *Mirage III*'s "six." The *Mirage* pilot bobbed and weaved between buildings and residences. It did not matter, the F-16A stuck to his tail. The two aircraft roared in unison as a building filled their HUDs. The *Mirage* pilot realized two things: if he kept on flying straight, he would be committing suicide, and speed is life.

The *Mirage* pilot throttled up and simultaneously pulled on his stick. The F-16A followed suit. As both planes avoided the building and climbed, they broke the sound barrier (along with a number of windows).

Captain Labarca realized that he had to break contact in order to make it back to base. He vectored to Barquisimeto. On the ground at La Carlota, fighting was still going on. Loyalist troops had shot down another OV-10EV. The crew bailed out and was captured. Rebels had control of part of the airfield.

By 1300 hours, all rebel aircraft in the vicinity departed the airspace over Caracas. The two F-16As descended like angry birds of prey on La Carlota airbase and strafed rebel ground positions.



A flight of F-16s in the later camouflage scheme over the rugged Venezuelan terrain.

At 1500, the pair of F-16As returned and strafed Aerea el Libertador again. General Visconti was beginning to see the peril of their situation. With 92 other officers, he boarded a C-130 cargo plane and flew to Peru. Other rebels fly to Aruba and Curacao. Still other crews flew their helicopters out of the base and abandoned their aircraft in various fields around the country. The loyalist troops entered El Libertador Air Base and arrested approximately 1000 rebels. The coup was over.

By law, all rebels were separated from their service. Their families would not be receiving any pensions for their years in service. Pilots could not work for the national airline.

Lieutenant Colonel Hugo Chavez was imprisoned for four years. He was pardoned by President Carlos Andres Perez's successor, Rafael Caldera, who is said to be his

godfather by baptism. He ran for office in 1998 and was elected President of Venezuela. He is a mercurial and controversial leader who has succeeded in polarizing his country.

Brigadier General (FAV) Efrain Visconti was also pardoned by President Caldera. He later became mayor of Caracas.

Captain Hilemenas Labarca later went AWOL. He was captured and found to have mental problems. He was placed in a mental institution. It is unclear if he is still a patient there.

Lieutenant Beltran Vielma: was sent to the U.S. to work with the US Navy to become a T-2D *Buckeye* instructor. It is said that he ran into language difficulties and was sent back to Venezuela. It is unclear if he is still serving the FAV.

A law was passed in 2000 allowing all the ex-rebels to rejoin their former service branch. The families of those killed in action would be paid a pension. The same applied to the rebels maimed or severely wounded during the uprising. Why not? The President of the republic was the top rebel himself.

On April 11, 2002 there was a power vacuum in Venezuela that occurred after several deaths were reported at an anti-Chavez protest. For several hours an interim Government set itself up and tried to make what was felt to be too many



changes too fast. The F-16 squadron pilots felt openly that Chavez was the lesser of two evils. This changed the balance of power and so the chaos fizzled. Chavez was back in power.

Venezuela first purchased their General Dynamics (currently Lockheed Martin) F-16s in 1982. The U.S. government tried to convince the FAV that the F-16/79 was the way to go. Wisely, the FAV declined this offer. The F-16/79 was a program employing the F-16 airframe and utilizing the GE J-79 engine then in use with F-4 *Phantoms*. Most countries realized that an F-16 with the J-79 would not be an optimum combination.

The FAV had been searching for an aircraft to replace the ageing *Mirage III*EV/5EV then in their inventory in the fighter/bomber role. In the end, they ended up upgrading the *Mirage* jets to *Mirage 50s*, retiring the BAC *Canberras*, and adopting the F-16.

Twenty-four Block 15 jets were purchased in both A (18 single-seaters) and B (6 twin-seater/trainer) versions. On Nov. 15, 1983 the first F-16s were delivered to Grupo Aereo de Caza No. 16 (16th Fighter Group). Two squadrons were set up within this fighter group: Escuadron 161 (161st Squadron) Caribes (named for a fierce native tribe for which the Caribbean Sea is named for, and also the local name for Piranha fish) and Escuadron 162 (162nd Squadron) Gavilanes (a bird of prey of the Sparrowhawk family).

By Nov. 20 1985, the order for 24 aircraft was completed. From 1983 until 1985 aircraft were ferried from the United States to El Libertador Air Base at the rate of four to six aircraft at a time. On June 18, 1992 the FAV F-16s were invited to Red Flag.

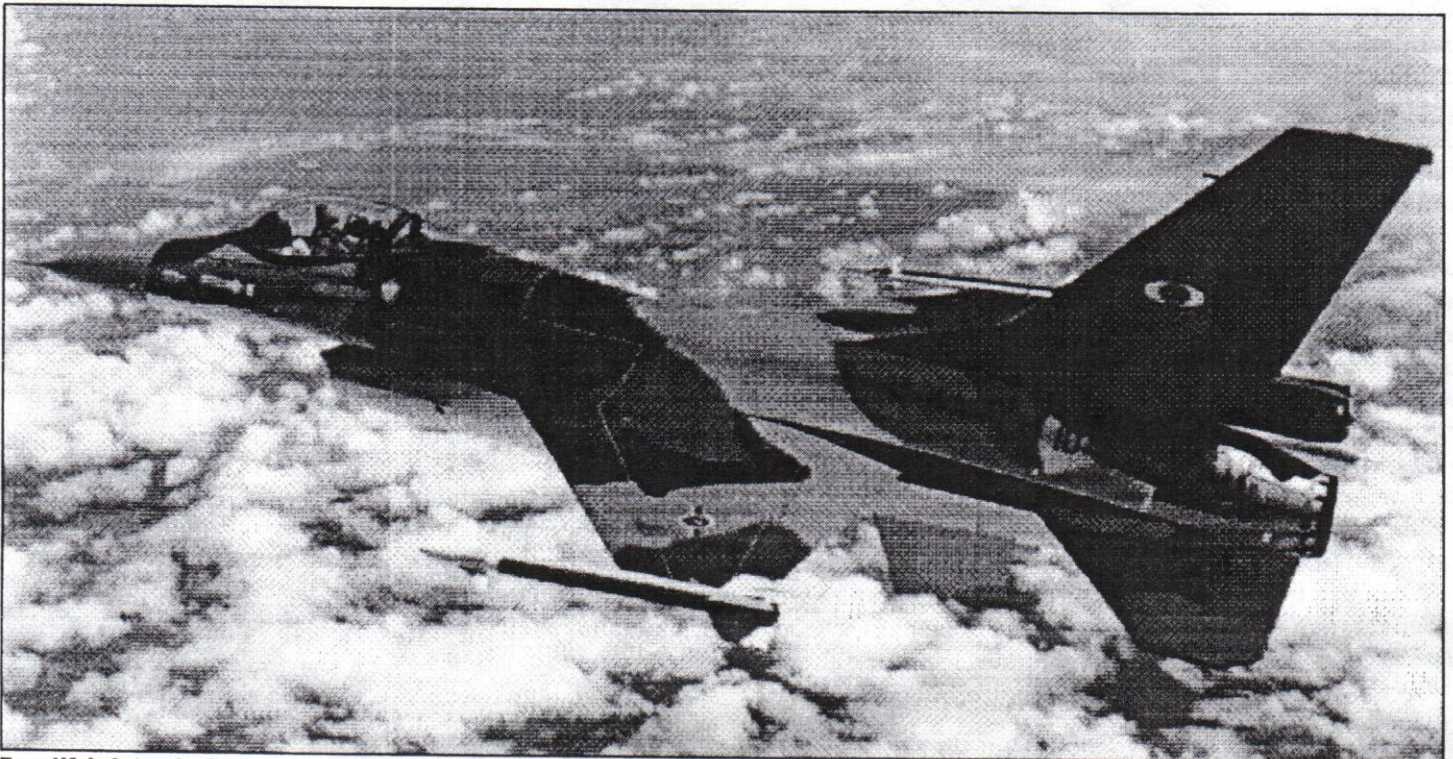
The year 1992 was an eventful year for both the FAV and Venezuela. On Feb. 4, Chavez launched his abortive coup against President Perez. The attempt was stopped quickly and forcefully, Lt. Col. Chavez was imprisoned, and there was no air combat. Nov. 27, 1992 was a different story alto-

gether. There was air combat over different areas of the country. The aftermath, as far as the F-16A was concerned, was 3 kills. There were other aircraft losses, but none in air-to-air combat. No F-16s were downed.

When first delivered the Venezuelan F-16s were painted in standard FAV colors that reflect the Venezuelan terrain. It was a striking wrap-around color scheme seen on most of the FAV aircraft in service: Dark Green (FS34079), Medium Green (FS34102), Dark Tan (FS30219), and Light Gray undersides. Venezuela is located very close to the equator. El Libertador Air Base (where they are headquartered) is situated on an arid plain that is has very few shade-providing plants. Usually the sun beats down on the aircraft sitting on the concrete runway or, alternately, it rains very hard. This environment is harsh on most paint jobs and so things must be painted every so often. The F-16s of the FAV were no exception.

By 1994 it was noted that the 24 F-16s were looking a little worse for the wear. The Venezuelan climate had taken its toll, the extremes of harsh sun exposure and rain had taken enough paint off the aircraft that bare metal showed in spots (particularly the leading edge of the rudder). The F-16s were then painted in a similar scheme but with slightly different colors; the undersides still retained their light gray color, and the pattern itself had not changed. The new colors were: SAC Dark Green (FS31042), Pale Green (FS34373, and Pink Sand (FS36642). It was hoped that the lighter colors would survive Venezuela's climate a little better. The current camouflage scheme is now showing wear and tear, too.

Up until November 1997 the FAV had a spectacular record with the F-16. It had flown 200,000 hours without a single accident. This changed in 1997 when an F-16B crashed at an air show at El Libertador Air Base, killing the original squadron commanders. The next year another F-16B crashed during training exercises. Currently the FAV is seeking to upgrade their F-16As and F-16Bs to F-16C and F-16D standards.



Beautiful air-to-air shot shows off the camouflage pattern of the FAV F-16. Note the gray radome and the small national insignia on the wing.



The author had already built and therefore was familiar with *Italeri's* 1:72 NATO F-16A/B. The kit has its flaws: the cockpit is not detailed (particularly the seats—they barely resemble an ACES II ejection seat), the fuselage-to-exhaust attachment makes painting somewhat complicated, etc. It might sound like a zen statement but the kit's strength came from its weakness. It did not have the "antennae farm" on the parabrace housing like the Israeli and Belgian F-16As do.

Did I mention that the aircraft needed a parabrace housing? Venezuelan F-16s do have this feature, as do most of the operators that have short or unimproved runways. Many of the F-16A or F-16B kits out there lack the parabrace housing. The Venezuelan F-16 is an early model, lacking any of the doodads and gizmos present in non-third-world nation F-16s. In short it was not so much a choice as it was a lack of options.

The kit itself was built mostly out of the box. I improved the cockpit somewhat (getting the seat to more closely resemble an ACES II, adding a *Hasegawa* pilot figure, and adding a HUD), and built (and consequently painted) the kit in sub-assemblies. The intake was painted white (for logistical purposes all white parts were painted at this time too: landing gear wells, landing gear, missiles, wing tip missile rails) and then assembled to the rest of the fuselage. Likewise, the exhaust was painted before attachment to the fuselage, sealed, and then masked before cementing.

With the canopy and already-painted parts masked, the kit was painted the traditional way: Light gray was sprayed over all surfaces, then a "skirt" of masking tape and Parafilm was applied to protect the undersurfaces. Dark Tan was sprayed over the top surfaces. Parafilm was placed on the parts that were to remain tan as per the standard FAV pattern for this aircraft. Medium Green was sprayed over the upper surfaces. Without removing the Tan parafilm protection nor the "skirt," the parts that were to remain Medium Green were themselves protected by parafilm. Dark Green was sprayed over the upper surfaces of the aircraft.

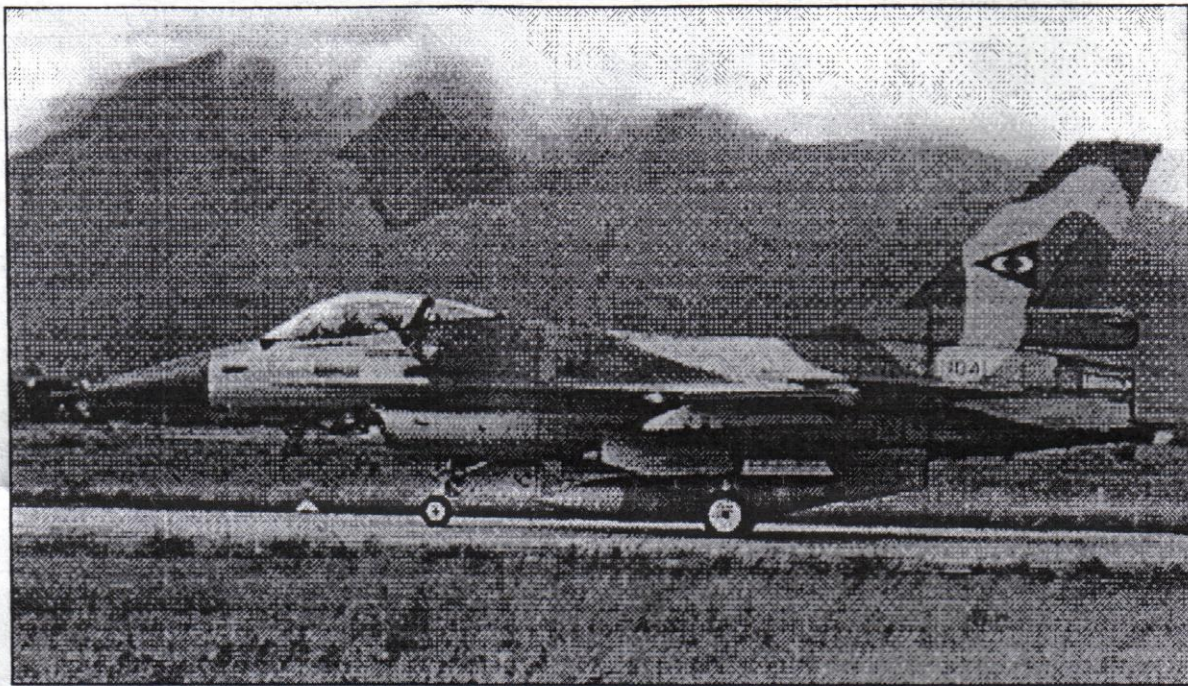
When dry from the last coat, the skirt and Parafilm were taken off from the aircraft, with the exception of the canopy. *Testors* Glosscote was sprayed over all surfaces of the aircraft.

Decals were also not so much of a choice, but more of a lack of options. The author was able to find a nearly extinct *Microscale* sheet with the required decals. *Microscale* (72-520),

*Decals Carpena*, *FCM* and *Aztec* all make (or made) decal sheets of FAV aircraft. They are mostly F-16 and VF-5 decal sheets, some of which can be used for other FAV aircraft.

F-16A FAV1041 was "chosen" using the same strict criteria as was used for the kit and the decals. This particular aircraft was the first F-16A delivered to Venezuela and by extension the flagship of their F-16 fleet.

After decals were applied (and were given a chance to dry), the model was again sprayed with *Testors* Glosscote. Using a technique learned from a member of SVSM at a Kickoff Classic long ago, the model was weathered. The technique is messy but yields results. Water-soluble black ink and gray ink were dissolved in a small bottle with water (not too thick though, eventually you want it to come off). The entire top



**Wear is starting to become apparent on this FAV F-16A. Hot sun and driving rain conspire against anything left in the open.**

surface and side surfaces of the aircraft are smeared with the ink, applied with a brush, until black. Then, using a damp cloth patch (available at most stores that deal with sporting goods; firearm owners use these patches to clean the bores of their guns), wipe off the excess in the direction of air flow. This will darken your colors somewhat. It will also show your panel lines. When the model is dry, spray *Testors* Dullcote.

Additional weathering was done at this point: silvering to show wear and tear and charcoal dust to show cannon fire. Dullcote was applied one more time. After it was allowed to dry for 24 hours or so, the airplane's canopy was carefully scored at the canopy support in order to separate the mask from the layers of dullcote that had been applied. The Parafilm mask was then lifted off the canopy.

The F-16 left an indelible mark in Venezuelan consciousness. The seal of the town of Palo Negro (outside the gates of El Libertador Air Base) carries the F-16's silhouette. As for the average Venezuelan, there is a slang expression for a fast, sharp and smooth operator—"Ese tipo es un F-16! (That guy is an F-16!)."





Shermans proved invaluable in combatting Japanese bunkers and fortified emplacements. This M4A2 displays the wood and concrete supplemental armor used late in the island-hopping campaign.

## Turning *Italeri's* Sherman into a USMC M4A2

By Laramie Wright

Part 1 of 2

In an earlier article I gave my impressions of the then-brand new *Italeri* U.S. Marine Sherman. This is the description of the build. I decided to build an M4A2 Sherman using the extra engine deck and applying a different style of wood plank armor based on a photo of a USMC M4A2 in an old Osprey volume, *U.S. Camouflage and Markings 1917-1945*, by Steve Zaloga.

I began by cutting out the M4A3 engine deck from the hull, a job made easier by deep scoring molded on the bottom side of the deck. The opening was dressed and trued using sanding sticks and files. The new deck fit pretty well, but benefited from strips of styrene glued in underneath to provide a strong joint. I had to clean up a bit of excess here and there to restore panel lines, but this was no great task.

Based on drawings in Hunnicutt's Sherman book, I cut the rear hull plate free and changed the angle of the rear of the hull side plates by moving the bottom side in by 10 degrees. This resulted in a more vertical angle for the rear. The rear plate was cleaned up and mated to the new profile. Once all appeared right, it was cemented in place, followed by superglue reinforcement. After the joint was cured I re-established the weld seams and added bolt detail, again based on draw-

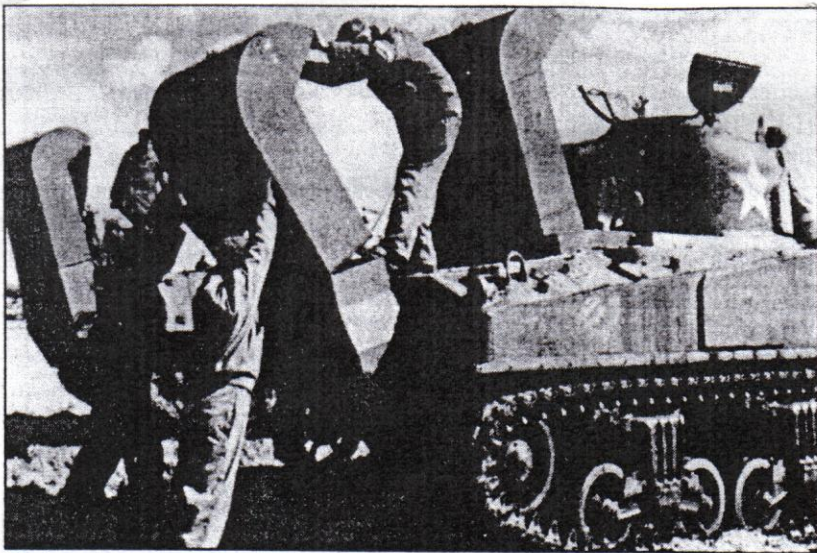
ings in the Hunnicutt book.

All of the weld seams needed enhancement. They are molded as panel lines with an attempt at indicating weld beads alongside—not too convincing. I added weld beads by gluing stretched sprue in the engraved lines and then softening the sprue with liquid cement. I used the pointy tip of a pair of tweezers to add some detail to the welds. I went lightly on this step, as weld beads on U.S. tanks are pretty smooth.

The next area of concern was the angle of the side plates. On an actual Sherman the plates are exactly vertical. In the plastic molding process parts are sometimes not molded perfectly straight up and down in order to allow the part to be pulled from the mold. Usually one has to really get down and measure to be sure, but to my eye, the *Italeri* hull had a definite outward slope from the top deck to the bottom edge of the plate. By measurement, there is a 2-3mm difference in width between the top and bottom edge of the hull. The slope would be amplified with the addition of the wooden armor on the sides, so I had to come up with a solution.

I sanded off the raised ribs at the bottom of the side plates. These indicate the location of strip brackets for mounting sand shields and as they would be covered I dispensed with them. I next glued lengths of .020 *Evergreen* strip along the top edge of the side plates. After they cured, I used them as the





Marines remove the wading trunks from a Sherman following an amphibious landing.

new upper width markers. I used *Tamiya* putty, applied in two coats with an industrial razor blade, to fill the low areas between the new top edge and the bottom of the side plates. I used sanding sticks to level and smooth the dried putty, taking care to maintain sharp, clean edges and straight surfaces. Once done, the hull sides presented a much better surface for attaching the wood armor.

One weak area of the *Italeri* kit is their interpretation of the hull roof above the driver and bow gunner's position. The real article was made of cast pieces, having a slight but definite raised, rounded appearance. The purpose of the shape was to promote drainage of rainwater away from the hatches, making for better crew conditions in poor weather. The *Tamiya* M4A3 has captured the look beautifully, but *Italeri* missed it. Never fear though, for with copious applications of partially-evaporated Mr. Surfacer and judicious sanding, a pleasing result will follow. I probably made five or six applications until the build up was right, then finished with fresh Mr. Surfacer out of the bottle.

The front glacis required some minor changes. I removed the mounting collars for the lift rings and filled the resultant holes with styrene rod. I measured and marked the new locations a quarter inch inward to reflect the correct fitting for this model. I also removed the mounting points for the rear-view mirrors, as the prototype did not have them. As the reference photo shows the headlights absent from their sockets, I decided to show the protective cap plugs in place. I used two diameters of .020 styrene disks made with a punch and die set, the smaller atop its larger base. Those were then cemented over the headlight sockets.

Other work included the removal of prominent raised lines

surrounding the locations of the travel lock and brush guards for the headlights and horn. They were way outsized and would detract from the finished appearance of the model. I marked the locations in pencil to aid later addition of the parts.

The transmission housing was textured with Mr. Surfacer 500 to improve the cast appearance. I added steps to the tow shackle mounts using styrene strip and placed a tow cable bracket on the left side of the housing.

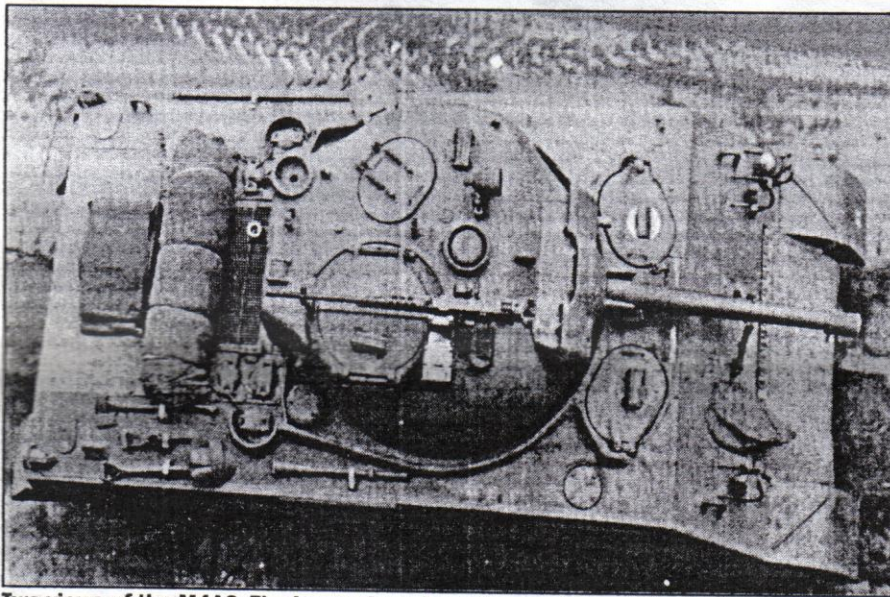
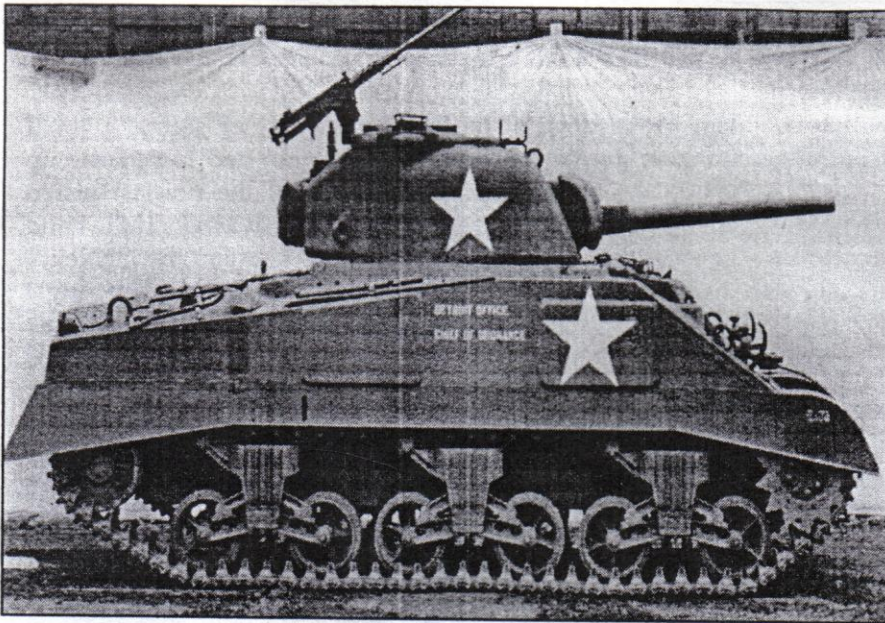
I tackled the supplemental wood armor next. Using balsa wood strips in two different widths, I assembled a three-piece panel for each side with white glue. After the panels were dry I used the hull sides as a template to mark the outline for the finished appliques. I carefully cut out the simulated oak plank armor, then dressed the edges and sanded the faces to remove fuzz and rough spots. I built a frame on the back side of each from balsa, leaving a space at the top to be filled with Milliput in simulation of the three inches of concrete that was poured between the hull and planks to improve stand-off protection against shaped charges. The mounting bolts that were used to secure the prototype armor on the real tank were done by drilling tiny holes in the wood and inserting *Grandt Line* bolts dipped in superglue. The wood armor was attached to the hull sides and after curing I painted it with some light brown enamel to fill the very open grain somewhat and to waterproof them for following step. I mixed up some fine Milliput, rolled it into thin ropes and pushed it into the gap left between the frame and hull. I evened out the putty with a spatula and used a large paintbrush and water for smoothing. I wasn't terribly neat about finishing the "concrete" as the crews were not union tradesmen laying a sidewalk. A bit of rough and ready work seemed appropriate here.

The rear lower-hull plate in the kit is for an M4A3. I considered building a whole new M4A2 plate, but since the exhaust trunk will cover most of the plate I decided to use the



An official photo of an M4A2, complete with the sand shields. These were usually removed in the field.





Two views of the M4A2. The lower view shows the position of the towing eyes and the drivers' hatch.

kit part, suitably modified. I cut, ground and sanded off the molded details, then filled any nicks with putty before sanding smooth.

Once these modifications were complete it became apparent that the wading trunk would no longer fit. It had been designed to go over the M4A3 exhaust deflector and needed re-work to meet the M4A2 configuration. I had cleaned up and assembled the intake and exhaust trunks earlier, filling several major ejector-pin holes on the inner surfaces. While the kit includes nylon mesh for them, my references indicate that there were no debris screens on the trunk openings so I dispensed with them. The parts fit well, requiring careful assembly and sanding. For the engine intake trunk, the only addition was to attach thin strips of tape around the joint where the stack meets the engine grill cover.

The exhaust trunk required the addition of sheet styrene to extend the lower end of the trunk until it met flush with hull. I added two sections of *Evergreen* square tubing to the hull plate approximating the location and dimension of the M4A2 exhaust. The trunk mouth fit snugly over them and lined up

nicely.

The next task was to come up with sand bags to cover the rear deck of the tank. The fuel tanks were located in the sponsons on either side of the engine and were vulnerable to satchel charges tossed onto the deck. Two layers of bags were laid down to protect them. I decided to use Milliput putty (which by the way is the greatest modeling export from the UK, with the possible exception of Robin Powell). I was having the devil of a time manipulating the medium; it clung to my fingers tenaciously even with plenty of water until I tried latex gloves. I made sure of a snug fit and they worked great. The sticking problem disappeared. I played around with mix until I found the right amount to use for a 1:35 sand bag. I patted it into a rectangular shape then used flat nosed tweezers to pinch pull out a small amount of putty on one end to make the gathered neck. Once the basic shape was there I applied the bag to the tank and refined the folds of the neck with a wet toothpick. I added seam detail and used a section of old panty hose to impart texture to the bags. I was sparing in this detail as I feel many modelers over do the effect.

I tried to drape the bags over projections realistically and make them look as though they were carefully stacked, tamped into place or wedged to fit, rather than having too uniform an appearance. I lightly smoothed them using a wet paintbrush. The actual application of the sandbags was over three sessions and I noted that it became easier to produce acceptable products each time. Practice, practice, practice....

The bogie assemblies were put together without the wheels. I have sometimes found it difficult to eliminate seams on the bogie truck assemblies with the wheels in the way. It is also more difficult to paint the wheels once they are

installed. I tried an experiment to see if there was a method to make it easier to accomplish those two things. The assemblies were allowed to set, and then I reinforced the joints with superglue. After that had cured I carefully cut through the axles with a razor saw, then used a set of sprue shears to cut the stubs back to about 1/16". That left enough axle to snap the wheels in place and have them hold securely.

I spent some extra time cleaning up the track skids on each bogie assembly. They have a prominent step and seam underneath that is not very pretty. I added two bolts each to the front and rear skid mounts. I also drilled four holes on the corners of the front face of each bogie. The M4 bogies were designed to be interchangeable by mounting the return roller bracket on the appropriate "rear" side. As a result, there are four unused holes on the opposite side. The kit-supplied pressed steel roadwheels were selected. I filled the slight depression that goes around the circumference of each wheel, a result of mold slip and shrinkage. Once cured, I scraped and sanded them nice and round.

*Next time: the turret, addition of photoetch, track and painting.*



# Mastering Maintrack's Seagull ASR.1

Continued from page 1

issue. The latter provides a cutaway drawing which is helpful to getting details of the interior right, while the *Air International* article has a good three-view drawing.

The first step with vac components is to fill anything that needs filling for structural integrity. With older vac kits, this means dealing with the likes of hollow propeller blades, though anyone in their right mind will find a spare or aftermarket prop instead. In the case of this kit, the only pieces needing filling were the bulkhead between the flight deck and the navigator's compartment, and the dorsal strake. I used a mix of superglue and microballoons, which allowed me to proceed very quickly.

The second step with vac components is to separate them from the carrier sheet. I ran a fine point Sharpie pen around the edge of each piece, then cut out pieces with carrier still attached. I next sanded off the remaining carrier, using a piece of 2 x 4 wrapped with 180 grit wet-and-dry sandpaper as a sanding block. When the Sharpie showed through on the underside, I was able to bend off the thinned carrier, and thus avoided oversanding the vac pieces. I then finished the edges of the piece with successively finer grits. Using a rotary motion, I developed my arm muscles with about two hours of vigorous exercise to get all the pieces off the carrier. This is a good time to use wet sanding, because otherwise you will create a vast quantity of styrene dust that will linger in your work area forever (or until you actually vacuum, whichever comes first.) It is much easier to dispose of wet styrene sludge.

The most physically taxing part of the build over, I began to test-fit parts. I found only one obvious problem: the central trunk and nacelle comes in two halves, but the halves were too shallow. I inserted a 30-thou piece of plastic card; this rectified the problem, so I traced the outline of the front half of the trunk/nacelle onto the card, then cut it out. Because of the tracing process, it was a little wide on all the margins, which I would deal with later in the assembly process. For now, I sanded the back half of this shim down to about half its original thickness, tapering to no reduction towards the front, because the aft end of the nacelle/trunk comes to a sharp edge.

Another challenge were four small windows, outlined but not provided with the kit. Two were simple flat panels in the lower aft end of the nacelle/trunk, about 3mm x 4mm; this tiny passage up behind the Griffon engine was the access to the manual incidence change gear, in case the electrical sys-

tem broke down. The lucky navigator or second pilot (I imagine they drew straws for this job) had to squeeze up inside the trunk, right behind one of the noisiest piston engines ever to reach service, and ratchet away on the hand gear, sighting through the windows to attain the incidence desired by the pilot. After looking at the cutaway drawing, I concluded the manual gear was high enough inside the trunk

that it wouldn't be visible through these little windows. The windows themselves were simple enough to modify from glazing in the spares box, after opening up the window frames with various Dremel attachments and riffler files.

Two more windows reveal details of the navigator's compartment. Un-

like the trunk windows, these have a curve at the top, fairing into the roof of the hull. After playing around with various flat scraps of clear plastic, I found some that was malleable when heated and stayed that way long enough to press against the outside of the hull at the location of the windows. I got two rough pieces with the right curvature, and only then cut out the apertures. I didn't trim or install the windows yet, as other interior detail took precedence.

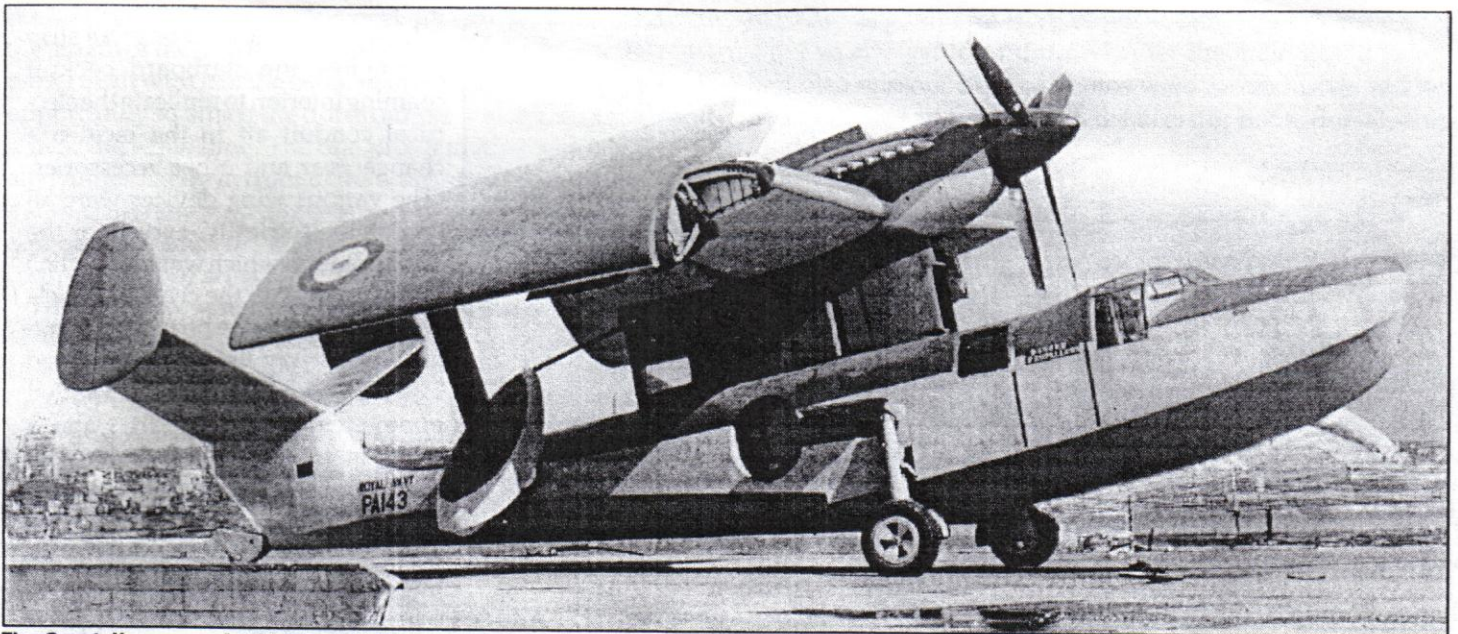
After attaching the trunk windows with Alene's Jewel-It white glue, I used *Testors* liquid cement to assemble the trunk halves and central shim. I first glued the shim to the right half of the nacelle, and reduced that seam, following up by attaching the left half and again reducing the seam. The trickiest part was not sanding away the cowling exhaust headers so typical of Griffon installations. Once the main part of the nacelle was together and sanded out, I added the white metal radiator intake on the front of the trunk. This is the first time I've had to blend a piece of white metal into a styrene component. I relied primarily on superglue and microballoons again, and it worked well enough, though metal filings got rubbed into the filler, giving it a very funky gray look. I touched up one area with *Dr. Microtools* putty and sanded to a scratch-free sheen.

At this point, I realized that the model (as opposed to the actual airplane) had a major engineering issue; the wings were butt-joined to the nacelle/trunk, which in turn was butt-joined to the top of the hull. Not the most secure arrangement, especially considering the size and protuberances of the wing, and likewise of the hull. I could foresee the nacelle/trunk getting a lot of flexing and torquing incidents during later construction and still later in incidental handling, so I needed to increase the strength of the joins. Out came the



A Seagull with the number 54 emblazoned on the tail competes in the 1950 Air League Cup Race at Sherburn-in-Elmet. The aircraft set a closed-circuit course speed record for amphibians.





The *Seagull* was required to be able to be stowed on the Royal Navy's older carriers. This shot shows how the wing and float could be folded inwards to reduce the amount of space it would have used on carriers.

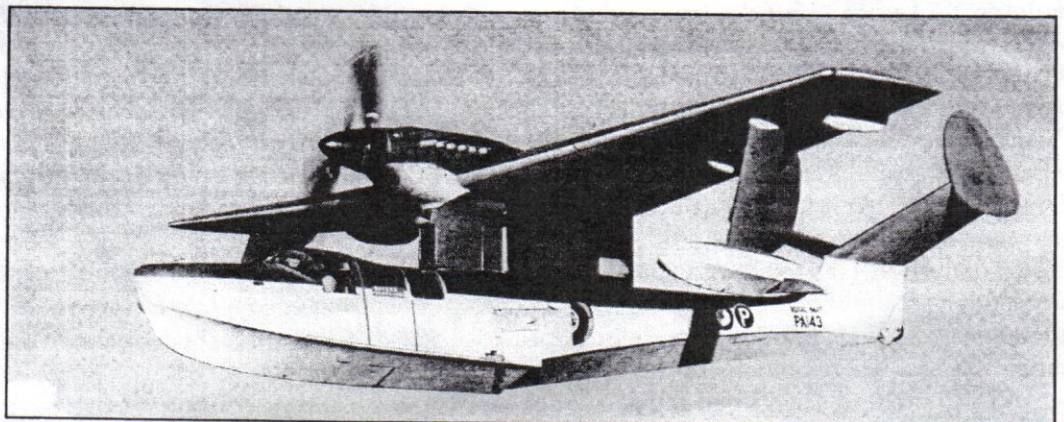
Dremel Mini Mite; I drilled a hole through the forward wing root bed on one side of the nacelle and out the other side in the same place, and slipped a length of 1/8" *Contrail* tube through the hole to act as a stub spar. Next, I ground out an even larger hole in the bottom of the trunk, offset to starboard to minimize stress on the seam, and placed a short length of 1/4" *Contrail* tube there. Lining up this protruding tube with the hull, I was able to mark the area to be cut, so I drilled that out next. On dry fit, the tube slid right into the new hole, giving me exactly the right alignment for the nacelle/trunk.

I began my assault on the interior by painting the instrument panel, then attached its pedestal to the front of the cockpit floor. I attached a photoetched auxiliary panel to the pedestal top, and added a throttle lever to port. Two bulkheads went on the floor next: one between the flight deck and the navigator's station, and the second at the back end of the floor. The latter I had to scratch-build from plastic card, including the cutting of the passageway further aft. The navigator's small table was easily built from styrene scrap and attached to the port aft side of this bulkhead. A small piece of scrap styrene was added next to port under the instruments as a mount for rudder pedals. I then attached two deck extensions; one, aft, extended past the wheel wells, while the other went forward into the bow section. The forward extension required a bit of shaping so its taper would match the bow of the hull. Uncertain how visible this area in front of and just below the instrument panel would be, I fabricated and attached an anchor windlass from a crane base from the old *Revell Bismarck* kit. I also came up with an anchor from the same kit, which looked remarkably in-scale, placing this next to the windlass. All of this except for the instrument panel, pedestal

and the anchor got a coat of British Interior Gray Green; the panel was black with white dials, the pedestal and its attachments black, and the anchor was done with *Polly S Oxidized Aluminum*. I then set the interior aside for a while.

I quickly mated the halves of both endplate fins and the central fin and sanded away some minor mating-edge imperfections. I found it necessary to sand down further the trailing edge of the stabilizer pieces. The top of the stabilizer is one piece with a fold line in the middle, with two bottom pieces to mate to it. I combined them, again with little difficulty. And so I turned to the wings.

Although it would be possible by dint of ambitious scratch-building to drop the slats or to fold the wings, I am not insane. Gluing the wings together proved quite simple, although I did sand the trailing edges a bit first. I used a fair amount of superglue and microballoons to seal leading edge gaps, but this went very quickly. I then drilled holes in the two wing endplates and dry-fitted them over the stub spars to the nacelle. The fit would be the envy of far too many injection kits; I saw that I would be able to achieve the correct dihedral on each side with no problem, and without excessive underwing gaps. To facilitate getting the dihedral right, I attached the wings with superglue, achieving a strong bond in less



*Seagull* before the addition of the center vertical fin. Note the "P" for prototype had an ESDG background.





Even with a modern flying boat, coming aboard still requires a lot of manual skill. Note the six-blade propeller in the contraprop spinner.

than a minute. Of course, since the wing is variable incidence, the entire wing-nacelle seam joint properly remains visible—a real luxury!

The wing floats also presented an engineering issue. The two floats each come in two halves, attached to the wing in each case by a thin aerofoil strut, also in two halves, all of it butt-joined. To provide sufficient strength, I ran a length of styrene rod between the two strut halves, with about 3/16" protruding on each end. I mated the trailing edges of the strut; the leading edges didn't quite meet because of the rod inside. I dealt with this by applying superglue and microballoons, then sanding to conform. I followed the same procedure with the second strut.

The float halves, when mated, revealed a mismatch of the planing surface steps. In both cases, the step was mismatched a couple of millimeters. Sanding and superglue and more sanding put them right. After seam eradication, I attached each float to its strut with superglue and resolved the seams. Although not provided for by the kit, the pitot sticks out of the front of the port float strut, so I scratch-built this from thin *Evergreen* rod stock and attached it. At this point, I also attached the four white metal flap hinges to the underside of the wings, and added scratch-.005 card.

I decided to paint the wing assembly before attaching it to the hull, as otherwise some of the airbrush angles would have been inconvenient. The exterior is an attractive combination of Extra Dark Sea Gray (EDSG) on upper surfaces, and Sky underneath. I masked off the trunk windows with Liquid Mask, using *Polly Scale* for both colors. I sprayed the Sky first, then masked that off and sprayed the EDSG. I likewise painted the floats while they were still separate.

Turning back to the interior, I concluded that the bulkhead separating the pilot from the navigator needed some work. A dry-fit of the cockpit interior as built to this point showed significant gaps between the shoulders of the bulkhead and the top of the hull. I ran a strip of .020 x .040 strip along the top and sides of the bulkhead and sanded it to conform, then added more to the shoulder areas with repeated doses of superglue and microballoons, until the gaps were closed when I dry fitted it. Then I had rather a lot of sanding and filling to do to restore the front and back of the bulkhead to relative flatness.

I now ran some flat *Evergreen* strip just below the starboard cockpit coaming interior, to replicate the electrical conduit aft to the incidence change gear and other accessories. (The various wing devices were all operated electrically, except for the wing-folding, which was hydraulic.) I also dressed up the central console with a compass; the bezel was simulated with very light green, topped by a teensy bit of white glue. I added photo-etch rudder pedals, and a white-metal pilot's wheel from an *Aeroclub* accessory pack. After detail painting of the seats and belts (the latter from the *Reheat* RAF set), I attached the belts and then the two

front seats. I also added a small fire extinguisher behind and to port of the pilot, on the bulkhead. This last was scratched from styrene rod and painted red.

I then turned to the navigator's compartment, where so far only the chart table was in attendance. Apart from the navigator's seat, I had no information on what to put there, but, thinking about the mission of the airplane, I added things you'd expect to find: first-aid cabinet, a cask of water, hot beverage flask, and a long flat locker that could double as a stretcher support. I placed a compass divider (one tiny bit of photo-etch I had looked convincing in this role), chart (a small bit of decal paper), and a scratch-built heavy china mug on the navigator's table. I put a radio decal on the bulkhead over the table, and a Red Cross marking on the first-aid cabinet, and used generic photo-etch seat belts on the locker-cum-bunk. It's all speculative, but RAF flying boat operators tended to be somewhat ad hoc in their practices, so I don't think I went too far out on a limb. It certainly disposed of this feeling that the interior looked empty, gazing through the navigator cabin's windows.

Which brought up the matter of attaching said windows. Although I had molded windows to shape, and by now had cut them down to the right size, the actual mounting required interior framing to lodge the windows. Four snippets of .020 x .030 strip quickly went in place at each aperture's top and bottom.

After giving everything a dry fit and being satisfied, I cut out the cockpit canopy. For the most part it fit well, but either there was an error on my part in cutting the fuselage halves, or else the kit isn't quite right, as the corners of the windshield were separated from the sloped edges of the foredeck by gaps. No problem, as it turned out, for a little sculpting with *Evergreen* strip and superglue filled the missing areas. At this point, I also dipped the canopy in Future and set it aside to dry.

I returned to the navigator's windows. Careful shaping yielded a satisfactory result, and the windows slipped right into place, being secured with Alene's Jewel-It gem-to-cloth glue. Once that was dry, I painted Future on the inside surfaces of the windows.

I now attached the 53-part interior (but who's counting?) to the port hull half with superglue, and after that cured, mated



the starboard hull half to the port. Of course, the seam went the length of the hull both dorsally and ventrally. For the most part, I dealt with it in the usual manner, though I also took this opportunity to attach the dorsal strake well aft, so as to blend it in at the same time. The one problem area was laterally, immediately in front of the instrument panel; I put a slice of styrene strip into this gap, then filled around it and sanded smooth. In the process, I dislodged the control column/wheel, so I set that aside for later.

The tailplane assembly needed to sustain a dihedral of 40 degrees—or so I thought. I blithely and very precisely attached the stabilizers with that much dihedral, finished the seams beautifully, then looked at what I had. It looked really, really odd. It didn't match the photos. It didn't match the drawings. In fact, all it matched was the initial engineering study, which contemplated a V-tail without any fins or rudders. The actual airplanes were built with 20 degrees of dihedral and endplate fins because it seemed to offer the best balance of stability in all three axes; in fact, the central fin and dorsal strake were added later because of the aerodynamic and water-taxiing problems the type encountered. In any event, I now had a major problem, involving sawing off the sturdy, symmetrical, but completely wrong tail components, then cleaning up the havoc that caused, then refitting everything, and correcting the seams and such. This set me back at least a week. Once the tailplanes and central fin were finally in the right positions and secure, I added the endplate fins.

Once again, it made more sense to paint the hull separately rather than to attach the wing and pylon first, particularly as the trunk was Sky and the top of the hull EDSG. Apart from masking off the cockpit area and the side windows, the process was straightforward.

I next attached the wing floats to the wing, and then the wing assembly to the hull. The seams cleaned up easily. A little bit of touch-up painting was followed by my gluing on the undercarriage members. Preparation of these had been simple, except for the need to snip an extraneous axle and an

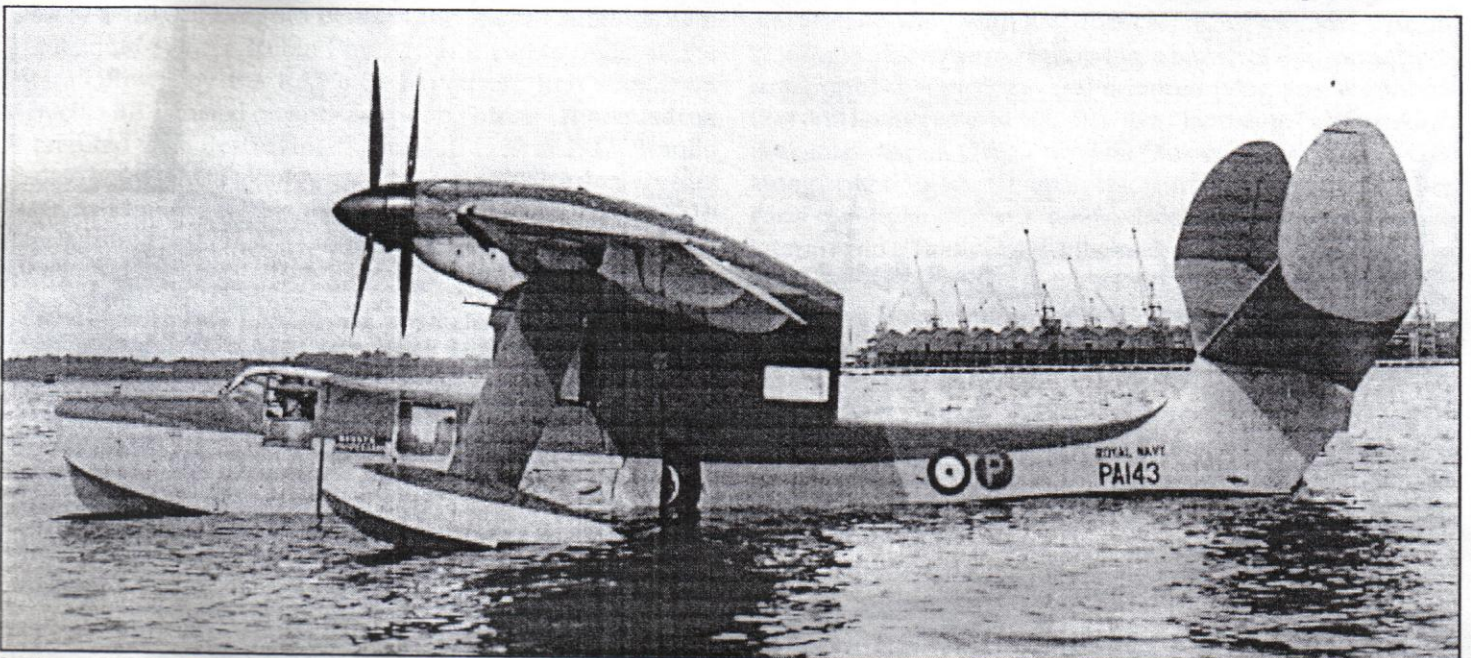
extraneous pivot arm from opposite sides of each main gear leg. I've also yet to confirm whether the main gear actually had oleo scissors, but the photos were inconclusive, so I left them on. I also now attached the arrestor hook, dorsal whip



The Seagull's unique triple tail configuration came about late in the test program.

aerial (.005 rod), engine exhausts and a few small fittings on the bow. The exhausts were painted with Polly S Metalline Graphite, and the last stub for each was drilled out and given a flat black interior. The control wheel went back in. I handpainted the canopy framework with EDSG, attached it with Aleen's Jewel-It, cleaned up the seams and touched up the paint. Finally, I painted black the front and back propellers that combined to form the contraprop, glued the two together, and attached them to the engine front with superglue.

And there I stand as of press time—the decals are just about ready to go on. The sheet will allow for either prototype, but I'm probably going to go with PA147, because I actually have a picture of it as an air racer—it placed fourth in the Air League Cup Race, a handicap event, at Sherbern-in-Elmet on July 22, 1950. If I go that route, I'll have to track down a suitable pair of black "54" decals. Then I'll have a different sort of competition machine, and a harkening back to yet another Supermarine tradition—Schneider Cup racers.



In the water, the Seagull was slightly less awkward looking. The plane was designed as an amphibian with carrier landing capabilities.



# Airfix does justice to the Spitfire Vc/Seafire III

By Robin Powell

Much awaited, causing lots of breath-holding among *Spitfire* fans, this new release from *Airfix* aims to close a significant gap in the *Spitfire* kits available. For those less intoxicated with the wonder of this marvel of wartime weaponry, the much-kitted *Spitfire* Vb was created as an expedient stopgap, marrying the Merlin 45 series engine with the Mark IIb airframe. The "b" wing was the same as had been fitted to the Mark Ib, with a drum-fed British Hispano cannon replacing the inner pair of .303 Brownings in each wing; hence the large bulges above and below the mainplane.

The intended recipient of the Merlin 45 was the much-improved Mark Vc. This introduced the "c" or "universal" wing which could be fitted with either one belt-fed British Hispano 20mm cannon and two .303 Brownings in each wing or two cannons. In practice it was found difficult to provide adequate gun bay heating to the outer cannon bay so 4-cannon *Spitfire* Vc's were used only in the Mediterranean theatre. The Vc also debuted the enlarged elevator balance horn seen on later *Spitfires*.

The "c" wing can be distinguished by the much smaller and cleaner bulges over the cannon breeches on the upper wing surface and the absence of any bulge on the underside. The outer of the Browning bays is also re-positioned to the out-board side of the appropriate wing rib.

The Vc formed the basis for the *Seafire* III, the first of the fully navalised *Spitfire* derivatives with folding wings, a four-blade Rotol propeller and six-stack exhaust manifolds.

*Airfix* has chosen to offer the Vc by adding four new sprues of parts to their existing *Spitfire* Vb kit. Although somewhat dated, this old kit is actually the only accurate 1:48 early *Spitfire* kit on the market, with the *Tamiya* and (to a lesser extent) the *Hasegawa* kits both showing serious size and shape errors despite their exquisite moulding. All of the old Vb parts are included in the new box so you do get a lot of plastic. The old parts feature raised panel lines but the fuselage of a *Spitfire*

had very few external panels, so re-scribing is a very simple operation. The new parts have recessed panel lines, which, while not up to Japanese standards, are quite presentable and very accurate.

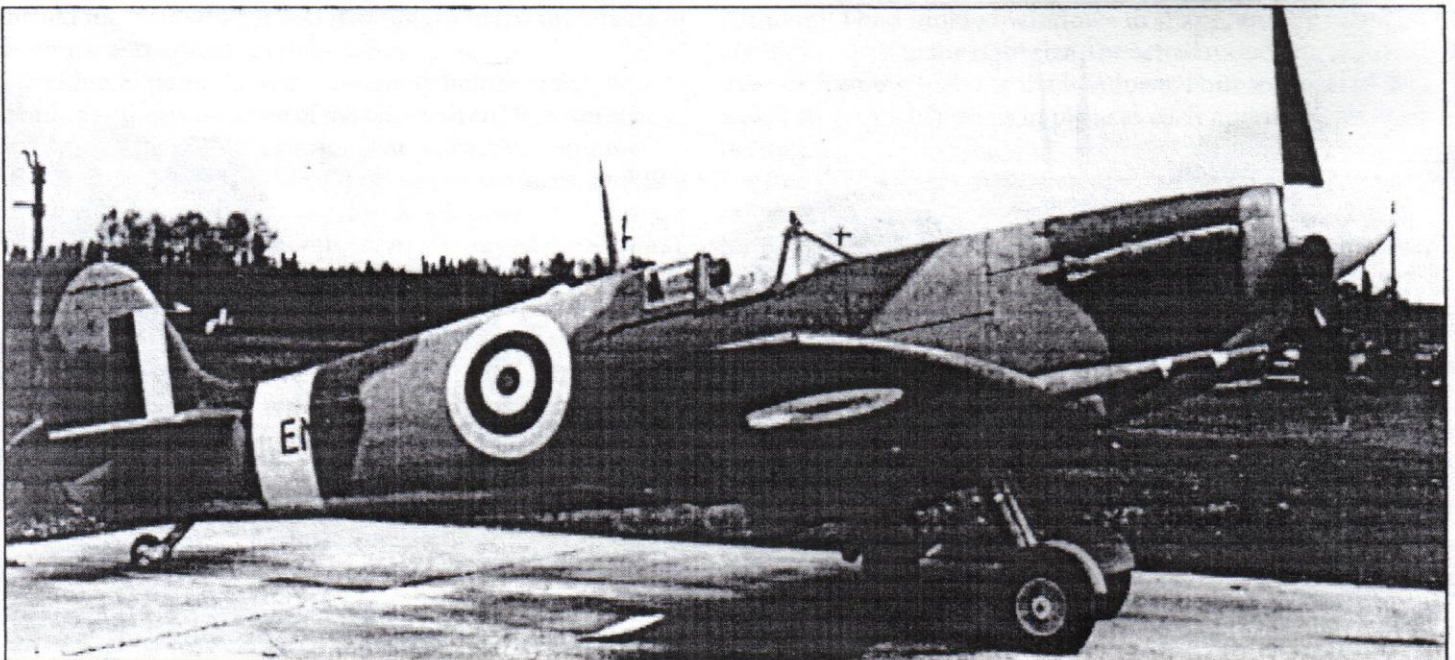
The new wing is offered as a one-piece lower surface with separate uppers and also includes no less than four alternative wing tips. Only two of these profiles are called for on the four marking options included in the kit, so either *Airfix* has another boxing planned or they are just providing modellers with extra *Spitfire* goodies they may find useful. Standard wing tips are called for on three of the decal options with the extended tips for one. The others are the factory-fitted clipped tips and the more rounded, locally produced wooden tip fairings used in North Africa.

Separate cannon bay covers are included with both the narrow and broad (twin cannon) shapes. While good in plan, in profile these bulges are too flat-topped and will benefit from a little sanding to correct this. This is more marked on the narrow bulges. The new wing is offered with separate flaps, which are quite useable though not a replacement for an *Eduard* etched set. Either way, you won't have to perform surgery on the wing to build your model flaps-down.

Four types of air intake are included, the temperate and the huge Vokes filter are found on the "old" sprues while the "new" ones add the Aboukir tropical filter and the later "universal" type. Both standard and tropical sized radiators come on the old sprues.

Also included are the fuselage underside for the *Seafire* arrester hook (for which you have to cut away a thinned section of the original fuselage), the hook fairing and hook, four cannon barrels, six-stack exhausts, link type gear legs, wheels with hub covers and the four-blade propeller assembly. The spinner looks great, but I'm not quite convinced about the blade profile as it does not seem quite tapered enough, but maybe this is because mine is still on the sprue!

Missing from the new parts is a new tailplane. Most *Spitfire*



A factory fresh *Spitfire* Vc prior to the application of squadron codes. This universal wing is fitted with two 20mm cannon per wing.



Vc's and all *Seafire* III's flew with the later enlarged elevator horn balance but the only tailplanes in the kit are the old early type. To convert them you will have to scribe a new chord-wise line near the tip from the leading edge to the elevator hinge and fill the outboard portion of the old hinge. It's not hard. You could of course use the leftover tailplane from an ICM *Spitfire* IX if you build an early one of those.

The decal sheet offers some great options: a 79 Squadron RAAF aircraft complete with girlie nose-art; a 2 Squadron SAAF (blue and orange roundels) four-cannon aircraft; a stripped-down, lightweight, Ju 86 killer from No 103 MU Aboukir; and a *Seafire* III from No 887 Squadron FAA on HMS *Indefatigable*, South West Pacific Fleet. A good selection of

## AUGUST MINUTES

At the August meeting, we had a recap of the nationals and the awarding of some past model of the month trophies (to Chris Bucholtz and Frank Babbitt), and then we launched right into model talk.

Bert McDowell, as a compliment to his article in the August Styrene Sheet, brought in three of his camouflaged battlewagons in 1:700: the U.S.S. *Hornet* as she appeared in 1944, the U.S.S. *Fletcher* around 1942, and the U.S.S. *Bogue* in Design 4A camouflage from 1943. Adding to the small scale fleet was Brian Sakai's flush-deck destroyer U.S.S. *Ward*, painted in Measure 1 camouflage using dark gray 5-D. Brian started with the *Classic Warships* kit and scratchbuilt the main armament, among other things; each gun has 17 parts! Peter Wong's *Swordfish* is not from a recent kit but is the old *Smer* molding; he says it went together with only a small gap in the trailing edge of one wing. Ron Wergin used the *Eduard* detail set to improve the interior of *Academy's* Fw 190D-9, although much of it is not visible once the model is done, he says. Ron also built *Hasegawa's* Fw 190F-9 without all the white metal parts, and *Revell's* Fw 190A-8; on the A-8, he used *Tamiya* paints and *AeroMaster* decals. Roy Sutherland's *Airfix Spitfire* 24 is almost ready for decals, but many of these will require fixes since the *AeroMaster* sheet is so riddled with errors. Gabriel Lee is planing to use *Comet's* kit of the *Nautilus* from Disney's "20,000 Leagues Beneath the Sea" to build his own giant squid-fighter. Robin Powell has a yen to build all the aircraft flown by the RAF's 39 Squadron; first stop is an *Aeroclub* BE.2C used on anti-Zeppelin patrols. The squadron is credited with destroying the airship L-32 in 1917. Braulio Escoto started his *Fujimi* A-6A *Intruder* in 1990; a dozen years later, he's finally finished it! Braulio also brought in two F11F *Tigers* from *Hasegawa*, a -1 from the recent issue with a resin short nose and a -2 depicting a Moffett Field *Tiger* in 1960. Chris Bucholtz has finally finished the *Obscureco* detail set of the *Hobbycraft* CF-100 *Canuck*; the parts for the cockpit, intakes and main gear bay were on the table. Laramie Wright is adding some details to the *Tamiya* M41, like brass hand rails and a mantlet made of Milliput. He says the dimensions of this kit are good, but the detail is softer than the *Tamiya* M41. Laramie's also made further progress on his *Italeri* M4A3 "Marine Sherman;" see the article earlier in this issue for details. Ed Hubbard intended to use his *Monogram* F-86 as a testbed for practicing metal finishes, but he ended up scratch-building the cockpit and painted the pilot. Ed also did a 1:16 pilot figure from *Tamiya*, employing pastels to get some of the

stencilling is also included.

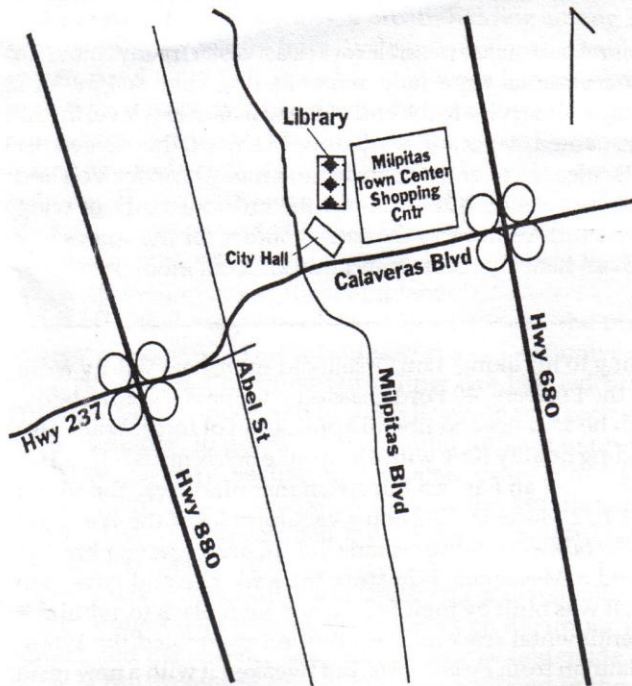
What else will you need? I would recommend a *Cooper Details* cockpit, a *Squadron* or *Falcon* canopy, *Eduard* flaps, *Moskit* exhausts....usual stuff even if you are used to *Hasegawa* stuff.

This release makes possible (or at least easier) many colourful *Spitfire* variants especially remembering that *Spitfire* Vc's remained in service to the end of the war as at low level the LF Vc remained a potent warplane. Many of the *Aeromaster* sheets released over the years have actually been for Vc's and at last one can be built without the arduous work of wing conversion. Add to this the extra goodies for the spares box and I can heartily recommend this kit to all modellers.

shading to his liking. Lou Orselli did some heavy-duty work to fit the *Lindberg* '40 Ford chassis on to the *AMT* Ford body, which he said needed liberal application of force. Lou's also spending quality time with a soap-like *Beechcraft* BT-13, a 1:48 IAR-80 from an Eastern European manufacturer., the recent *Italeri* 1:72 *Macchi* C.202 and a vacuform kit of the *Westland Pteradactyl* swept-wing biplane. John Carr's younger brother rescued a *Monogram* T-28 from the junk pile and gave it to John; it was built by their father, and John plans to rebuild it for sentimental reasons. Paul Burnett assembled the 1960s-era *Batman* from *Polar Lights*, but tweaked it with a new resin head, resin utility belt parts and other accessories to make him look more like Adam West. Paul also finished of *Catwoman* from "Batman Returns," starting with the *Tsukuda* kit and painting it with *Model Master* acrylics. The finishing touch was a little cat from the dollhouse department to keep *Catwoman* company. Bill Bauer's *Audi* A-4 from *Quickskins* was an "absolute bear," he said. He used *Alclad* on the wheels to create a very convincing replica of the 1996 championship car. Chris Hughes is whiling away his lunchtimes by working on a *DML* IS-2M, which he will finish as an out-of-the-box build. Tom Trankle is befuddled by the instrument panel in *Accurate Miniatures* SBD-5 *Dauntless*; he couldn't quite figure out how to apply the instrument dial decal to the proper side and instead went with an *Eduard* set. Kent McClure's future gaming will involve the following: a bunch of African natives, some primitive men, several armored penguins, a gunboat that will have tracks to function as a "landship," and an *Airfix* universal carrier. Greg Plummer took on *Azur's* *Cierva* C.30 autogiro and finished it up in colorful Spanish markings. Ben Pada quietly snuck in a *Tamiya* P-51 *Mustang* with a *Jaguar* interior and a *Tamiya* F4U-1 that required him to do quite a lot of scratchbuilding to get an acceptable result. Postoria Aguirre hasn't finished a model in a long time, but his *IMC* Lear business jet is pretty close to being done. P.A. removed the rivets, rescribed the control surfaces and removed the roof to show off the interior. Cliff Kranz is going to get ribbed—and strutted, and crossbraced—in building his *Kolibri* HO-scale heavy lift cranes. The kits have a lot of pieces and odd instructions, but since we throw the instructions away, that ought not to be a problem. And the model of the month goes to... Ben Pada, for his *Hasegawa* 1:48 A-4K *Skyhawk*. Ben put together the Royal New Zealand Air Force markings himself, and had to mix the paints to get a proper match for the camouflage scheme.



**ATTENTION! UNUSUAL DATE!!!**



Next meeting:  
**7:00 p.m.,  
Friday,  
September 27**  
at the Milpitas  
**Public Library**  
**40 N. Milpitas Blvd.**  
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**Don't forget: If your renewal date is red, it's time to pay your dues!**