



## History lesson: Monogram's Spitfire IX

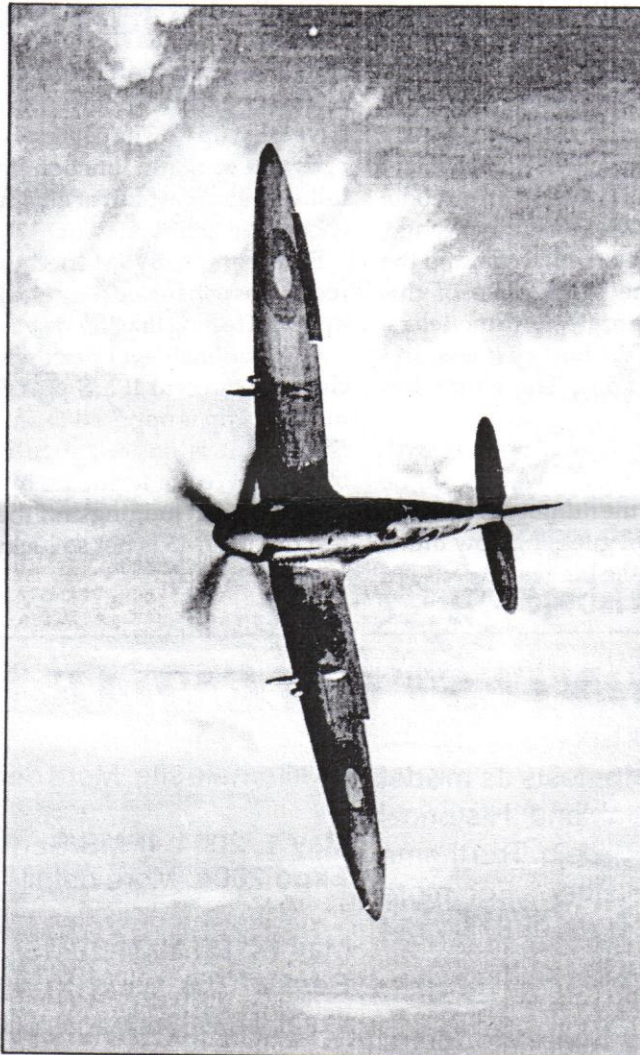
By Laramie Wright

Back in the mid-1960s when I was a young modeler, the acme of model kits was *Monogram Models*. In particular, its 1:48 line was just great, with many working features and interesting subjects. Many kits came with the additional parts to build multiple versions. Their Focke-Wulf Fw 190, Hawker Hurricane and deHavilland Mosquito were amazing treasures at the time they were released. I am sure I built at least several of each in the 1:48 line.

Recently, I saw an article on Hyperscale ([www.hyperscale.com](http://www.hyperscale.com)) in which a modeler had revisited the old *Monogram Mosquito* and produced a very nice end product. I thought it was a cool premise and, suffering from a case of A.M.S. burnout, I decided to try building one of the old *Monogram* kits right out of the box. I had a couple of *Monogram Spitfire Mk. IXs* I had bought for a pittance, and the notion of some relaxed modeling called to me.

The original production date was 1962 and, for its time, the *Spitfire Mk. IX* was a very nice kit. It was produced in medium gray, good-quality styrene with one tree containing the wheels, cannon, propeller, spinner and drop tank in silver. Fit was generally very good and the surface was highly detailed with raised panel lines and zillions of rivets. In those days, lots of rivets were the mark of an "accurate" detailed model. The model is not accurate in the current sense as compromises were made to accommodate working landing gear, and some other things were simplified. The nose shape is too narrow, the under-wing gull section is not present, the

wings are too thick, the wheels are too large and the canopy is a scale six inches thick, but this is a simple build. Remember the absolute joy of completing a model in a weekend and then flying fighter sweeps against your brother or friends? *Takka-takka-takka-takka...*



The *Spitfire IX* provided the RAF with a fighter to counter the Fw 190. Here, a *Spitfire IX* frolics in the skies above England, 1943.

Construction commenced by freeing parts from the sprues and cleaning them up. My kit was produced in the mid-1970s and showed no flash. Moldings were crisp and the surfaces excellent except for a couple of small sink marks here and there. They were small enough that I was able to fill them with Mr. Surfacer 500 and blend them in without destroying the rivet detail. Careful clean-up and fitting resulted in a minimal amount of filler being used in assembly.

The armor plate bulkhead was fitted to one side of the fuselage and the radio antenna was fixed on its peg inside the fuselage. Then, the interior was shot with *AeroMaster* British interior grey-green. The spinner mount was installed in the nose. I had made sure the fuselage halves were flat on their mating surfaces so they went together cleanly using *Tamiya* extra-thin cement. I reinforced the interior of the fuselage seams with superglue. Only small amounts of Mr. Surfacer 500 were needed to smooth a few places, saving most of the raised detail surrounding the seams.

The mold seams on the working landing gear struts were cleaned up and the pivot polished with 2000-grit wet-or-dry sandpaper in preparation for installation. The wing comes as two upper halves and one full-span lower wing. I made sure the mating surfaces were even and free of blemishes, then placed the struts in their brackets in

Continued on page 12

*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](mailto:bucholtzc@aol.com). Excerpts may be published only with the written permission of the editor.

## EDITOR'S BRIEF

Your editor apologizes for his absence this month, but John Heck will be filling in for him. If he asks your name during the course of model talk, please don't take it personally. One of the benefits of being editor for 11 years is that one gets to know the names of the members pretty well; it's just simple repetition!

The past month has seen contests in Lancaster and Elk Grove that our members turned out for in large numbers, and the delayed Vallejo show is coming up on Dec. 6. We should be proud of these attendees, and especially proud of those who volunteered to judge. These are the people that allow the contest to happen; without their efforts, the event has no climax, no finale and no logical finish. They help us do what is good in models by looking carefully for flaws, filling in for him. If he asks your name at a raffle and, overwhelmingly, the del talk, please don't take it personally. Nothing could be farther from the truth. We are the real draw. The editor has problems with these ideas.

Speaking of judging, some people in the U.S. think the second-third award system is passe and should be replaced at the national level with a gold-silver-bronze system. This new system (sometimes referred to as "Chicago-style judging") evaluates a model against a set of criteria and scores the model against a set of points. If the model scores in an upper range, it gets gold; silver and bronze are the next two levels, and the model may be awarded nothing. The proponents of this system say it would distribute more awards to more modelers, the awards would be cheaper and cost the host club less, and it would obviate the need for categories. The editor has problems with these ideas.

Firstly, there is no guarantee that any more people will win in a G-S-B contest. It is just as likely fewer awards will be presented. With this uncertainty about the number of awards, the host chapter is faced with the task of guessing how much to spend on trophies or medals. This is the biggest expense in

ay contest, and making it impossible to plan for would put the hosts at a disadvantage. While the system would make categories obsolete, it might also discourage the participants in these categories from competing. If your garage-produced science-fiction kit had to compete against a brand-new *Tamiya* P-47 on a level playing field, would you stand a chance of winning? Perhaps, but to many the perceived answer might keep them from entering in the first place.

The assumption that G-S-B is needed because more people need trophies is on its face a slap at the integrity of those who bring these things together in one place and an opportunity to show off what we modelers have been up to. The contest is not a means to assuage tender egos that can only function if they are given a trophy; these folks are the least fun at any event and we should do little to encourage their behavior.

Furthermore, SVSM tried this approach 12 years ago. The result was exhausted judges, angry winners, angry losers and a general feeling that the system had not worked as advertised.

This national-level discussion is unlikely to result in any changes; a recent IPMS poll revealed that 65 percent of the membership is opposed to any changes to the way we judge. Even so, it is important to be aware of how the wind is blowing. We are fortunate in Region IX to have a degree of consistency in judging and the criteria that are used, but the rest of the IPMS is not so lucky.

—The Editor

## CONTEST CALENDAR

Dec. 6, 2003: **IPMS/Mt. Diablo** hosts its **model contest** at the Vallejo Naval and Historical Museum, 734 Marin Street in Vallejo. The theme is "100 Years of Aviation History." For more information, contact Bill Nist at (510) 672-7154 or by e-mail at [nistisus@aol.com](mailto:nistisus@aol.com).

Feb. 22, 2004: **Silicon Valley Scale Modelers** host the eleventh annual **Kickoff Classic** at Napredak Hall, 770 Montague Expressway, San Jose. The theme is "Stars and Stripes." For more information, call Chris Bucholtz at (408) 723-3995.

March 27, 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.

May 1, 2004: **IPMS/Santa Rosa** hosts **Model Expo 2004**. More details to be announced.

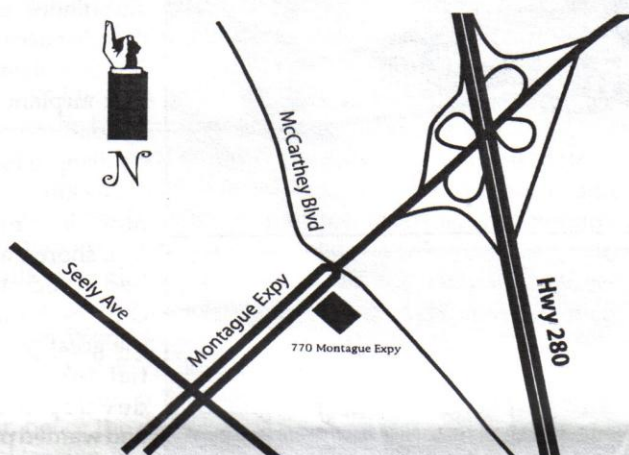
May 14-15, 2004: **IPMS/Las Vegas** hosts **The Best of the West XI** at the Imperial Palace Hotel, 3535 Las Vegas Blvd. South, Las Vegas, Nevada. For more information, call Warren Pratt at (702) 871-6797.

May 22, 2004: **IPMS/Fremont Hornets** host the **2004 Tri-City Spring Classic** at the Newark Community Center, 35501 Cedar Blvd., Newark, California. For more information, Call Mark Schynert at (510) 796-3351 or e-mail him at [mass22@earthlink.net](mailto:mass22@earthlink.net) with the subject "Tri-City Contest" in the subject line.



# SVSM 2004 Kickoff Classic

**Sunday - February 22, 2004**  
**Napredak Hall - 770 Montague Expwy**  
**San Jose, CA 95131**



## Theme - "Stars 'N Stripes"

Anything involving Stars or Stripes in markings, insignia, etc.

- Racing Stripes,
- Invasion Stripes,
- Anniversary Schemes

### Air Forces such as

- United States
- Israeli
- Yugoslav
- North Korea
- North Vietnam
- Chinese (ROC & PRC)
- USSR
- Angola
- Cuba
- US Army
- Chrysler Corp (Dodge/Plym/Chrysler),
- Mercedes-Benz vehicles,
- Zebra dazzle ship camo schemes

### Schedule of Events

9am to Noon -Registration, Contest/Vendor rooms open  
12:30pm - Judge's Meeting  
12:45-3:15 - Judging (Room will remain open)  
4:15 pm - Awards Presentation

Model Building "Make N' Take" and other possible activities will be announced and scheduled "Day of Event"

### Fees

Seniors: \$5 Registration, \$1 per model entered  
Juniors: \$1 Registration, \$.50 per model entered  
Spectators: Free  
Display Models if space available, will also be free and welcomed.

### General Rules Briefly:

IPMS/USA rules and criteria will be used for this contest. • Handling of models will be limited to the builder, no models will be handled by the judges without permission. • SVSM encourages members of other chapters to participate by joining our judging teams. • The Contest Director will make the final ruling on all disputes during the contest, may also split or combine categories based on the number and nature of entries. • No model that has won an award at an IPMS National Contest is eligible, nor are any models that were first entered in any Region IX competition prior to Feb. 22, 2003. • SVSM appreciates the honor system and hopes the participants will as well. • All work done on model entries must be the work of the entrant. SVSM asks that all contestants avoid the judging teams during judging to insure impartiality and expedition of process. • Interference by contestants will be handled per IPMS/USA rules, and could render the offender's models ineligible for award consideration. • Most importantly all participants and staff must have fun.



### Special Awards - in addition to our numerous traditional special awards

- Best CONTEST Theme Stars 'n Stripes subject
- Best Russo and or Japanese War Subject
- Best Mustang
- Best 1944 subject
- Best Night Fighter

### Vendors Tables:

\$50 each if paid before December 20, 2003.  
\$60 each if paid between Dec 21 and Feb 15, 2003.  
\$65 on day of event, if available.

**Vendor Contact** - Jim Priete, Weekdays 9am and 3:30 PST  
at (925) 323-1845

For more information visit the SVSM website at: [www.svsm.org](http://www.svsm.org) or call Chris Bucholtz at (408) 723-3995

# Tony Fokker's groundbreaking transports

By Jim Lund

Most people with an interest in aviation know of the "Red Baron" and his Fokker triplane, and the Fokker D.VII, the most feared of all World War I fighter planes. However, the fame of their designer, Anthony Fokker, goes far beyond his WWI exploits.

History finds that the "Flying Dutchman" was more of an entrepreneur and salesman than an aeronautical engineer. He took credit for the synchronized machine gun, which made its debut aboard his famous Eindecker (monoplane). History agrees that it may have first seen use on a Fokker aircraft, but whether Fokker himself actually invented it is in doubt. His bravado and ebullience were so overpowering that it's been very difficult to separate fact from fiction. Fokker had the ability and vision to employ the finest aviation

minds in Europe, and this is what made his Dutch company so successful.

After Germany's defeat, Fokker fled back to his native Holland, taking as much of his aircraft factory equipment as he could smuggle out. Here he started his new Fokker company, making peace-time transports. The Europeans took to the air with gusto and enthusiasm, and airlines were formed with great speed. Air Union (later to become Air France) Imperial Airways (later British Airways), Lloyd (Lufthansa, KLM and others brought airline service to the continent.

In America, the feeling was that "If God wanted man to fly, he would have put wings on his back, just like the birds!" Here in the U.S., where the airplane had been invented, fear

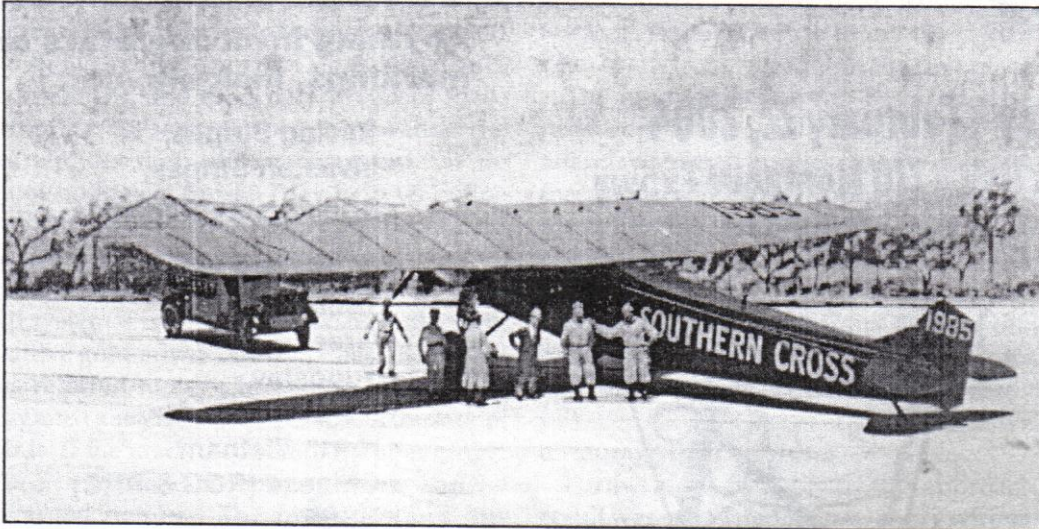
of flying prevailed. Fokker came up with a "Jumbo" single-engine transport, the F.IV, and built a couple of examples. Finding no market for it in Europe, Fokker looked to the U.S. He found a buyer in the U.S. Army Air Service, which purchased both aircraft. Since they were powered by

American-built Liberty V-12 engines, the deal made sense. These planes were re-designated Fokker T-2s. One example became an army ambulance and the other became famous as the first airplane to fly coast-to-coast non-stop in 1923.

Fokker was now on American shores, and he loved the country. He saw the great potential for airline development and wanted part of it. After all, his Fokker F.VII/3m was the world's first trimotored transport (actually, the Junkers G-23 might make that claim as well). The F.VII/3m had beaten all competitors in the Ford reliability tour and

was the first to fly over the North Pole (a claim now in dispute). Fokker made the decision to form Fokker U.S.A. with a factory in Hasbrouck Heights, New Jersey.

As luck would have it, Charles Lindbergh approached Fokker for the use of an F.VII for his non-stop New York to Paris attempt. Tony turned him down, as he did not want to risk his fine reputation on the young but inexperienced daredevil. This turned out to be a huge mistake because Lindbergh turned out to be a skilled, highly disciplined intellectual, and that combined with a 6'2" body and a face like a Nordic God made him the first popular culture celebrity and quite possibly the premiere historic figure of the 20th Century. A single-engined Fokker F.VII named "Old Glory," flown by Lloyd Bertaud, did take off from Old Orchard Park, Maine in



Jim's model of Charles Kingsford Smith and Charles Ulm's Fokker F.VIIb/3m "Southern Cross," which made the first California-to-Australia flight between May 31 and June 29, 1928. The kit is by Frog.

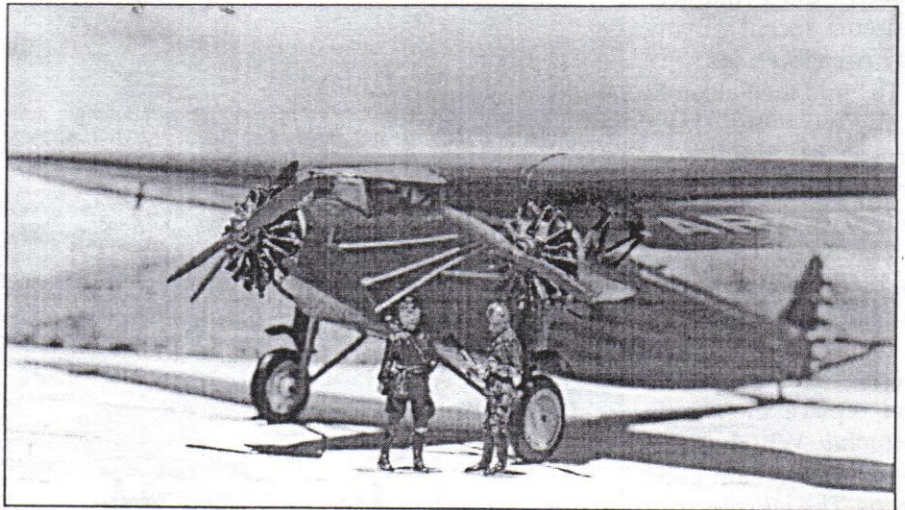
September 1927 for an attempt at Paris and crashed into the Atlantic 500 miles off the coast of Newfoundland, killing all aboard.

Tony's "Big Mistake" turned to good fortune, because the fabulous success of the Lindbergh flight awakened the sleeping giant of the U.S. to the wonders of flight. Airlines would be formed and Tony's new factory would go into production with his American-built Fokker F-10. The F-10 was basically an enlarged and refined F-VIIB/3m, with wooden wings with a fabric-covered steel tube fuselage powered by three Pratt & Whitney Hornet engines.

Next up was a truly America designed and built aircraft, the Universal. Canadian Robert Noordyun was the principal designer, and it evolved into the Super Universal. Fokker changed the company name to Atlantic Aviation to avoid the stigma of his own name, which still held out the negative image of the hun guning down American heroes.

Soon Atlantic Aviation was bought out by General Motors. The automotive giant wanted to expand for the future, and aviation seemed to define the path to tomorrow. The company was renamed General Aviation, and all the Fokker designs in the mill were given G.A. titles. Later, the company was reorganized and became North American Aviation, and much later, after World War II, it became Rockwell.

The Fokker F.VII is known in aviation circles as "the Magnificent Seven." It evolved from a single engine to a tri-motor, hence the designation F-VIIa/3m. Later, with a four-foot extension in each wing, it became the F-VIIb/3m. This design became famous in 1928 as the "Southern Cross," the first plane to cross the Pacific Ocean, and as the military model, the Atlantic C-2 "Bird of Paradise." In 1927, it became the first to fly from the mainland to Hawaii. In the same year, a C-2 named "America" was flown non-stop from New York to Paris, but because of fog returned to the French coast and



Maitland and Hegenberger's C-2A "Bird of Paradise," which completed the first California-to-Hawaii flight in 1927. This is a modified Frog kit.

safely ditched in the surf. That was the famous Byrd flight. We must not forget the "A" version's exploits at the north pole. The fact that an entire tri-motored aircraft was granted a U.S. patent caused an enormous lawsuit against the Ford Motor Company's tri-motor. The F.VII was indeed an awesome creation.

I believe that the *Lines Brothers* in England manufactured the first plastic model kits. Originally, they manufactured flying models and named the company *Frog*, an acronym for "Flies Right Off the Ground." When they went to plastic kits in the late 1930s, the name was retained but expanded to *Frog Penguin*, in reference to the kits' flightlessness. I might add that these kits were very pricey and out of reach for all but the wealthy. However by 1964, injection-molded styrene plastic was inexpensive.

The *Frog* 1:72 kit of the "Southern Cross" was released at about that time, and it is the basis of no less than seven of my historical models. This kit has been in continuous production for 40 years! *Frog* went bankrupt in the early 1980s and the molds were sold to the Soviet Union. There, the kit was

produced under the brand name *Nova*. After the dissolution of the Soviet Union, the model continued in production in Russia with a new company name of *CBIT* which, when translated from the Cyrillic, is pronounced "svit!" This company went into the hands of *Chematic*, which produced the kit under that label, and my most recent kit from Russia is titled "3BE3AA," which translates to *Zvesda*. If you don't believe me, just ask Vladimir Yakubov. No matter the label, it's still the same old kit.

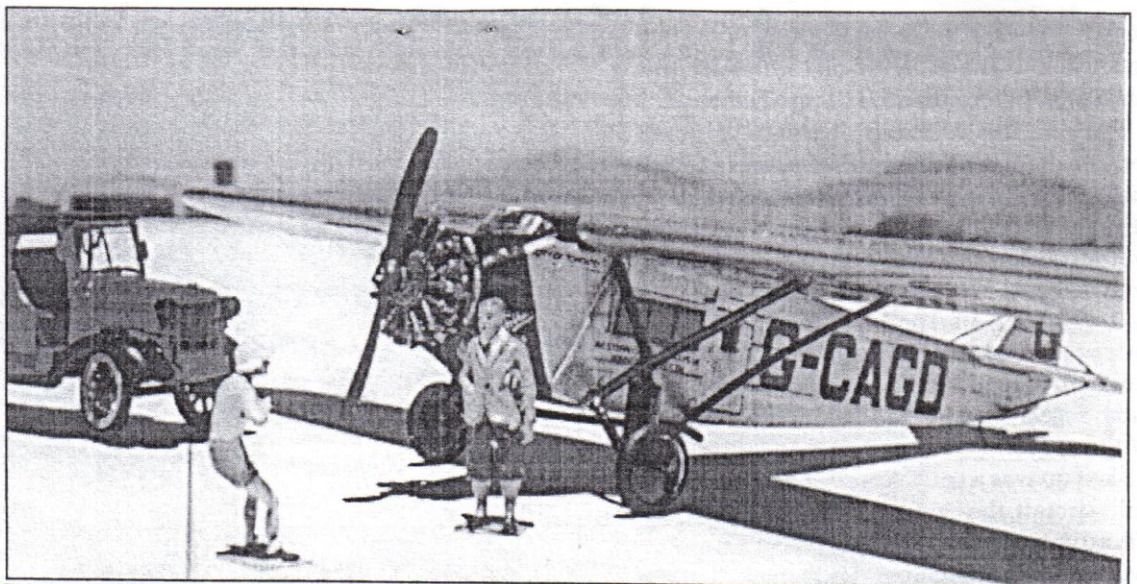
To make the variants I wanted to make, the natural starting point is some good drawings. These drawings were made by the late Ken Blackwell. Ken was a great aviation historian, writer, local



The C-2 "America" flew from New York to Paris, in 1927, but fog in Paris forced the crew to ditch the plane off the French coast. This is Jim's modified Frog kit.

resident and a volunteer museum docent at many Bay Area locations.

To build the Fokker F-VIIb/3m "Southern Cross:" use the draws. The wing is good and the incorrect fuselage outline is easily corrected by building up the top turtledeck just behind the wing. Throw away the engines and propellers and replace them with *Aeroclub Whirlwinds*; these also contain good props. The wheels, strut and empennage and decals are okay.



This jaunty U.S. Fokker Universal, which was designed by Canadian Bob Noorduyn, was built from the VLE Models vacuform kit.

To build the Atlantic C-2 "Bird of Paradise:" Same as above with these exceptions: scratchbuild a new cockpit with extended glazing. Scratchbuild a new larger rudder per plan. Make new bullet-shaped nacelles for the wing-mounted engines.

To build the C-2 "America:" Same as above, but you should replace the wheel centers with photoetched spokes.

To build the F-VIIb/3mw "Friendship:" same as above except you should use *Monogram* Ford Tri-motor engines and nacelles and make spinners for the three props. Use the "Southern Cross" windshield. Scratchbuild flat-topped floats per drawings.

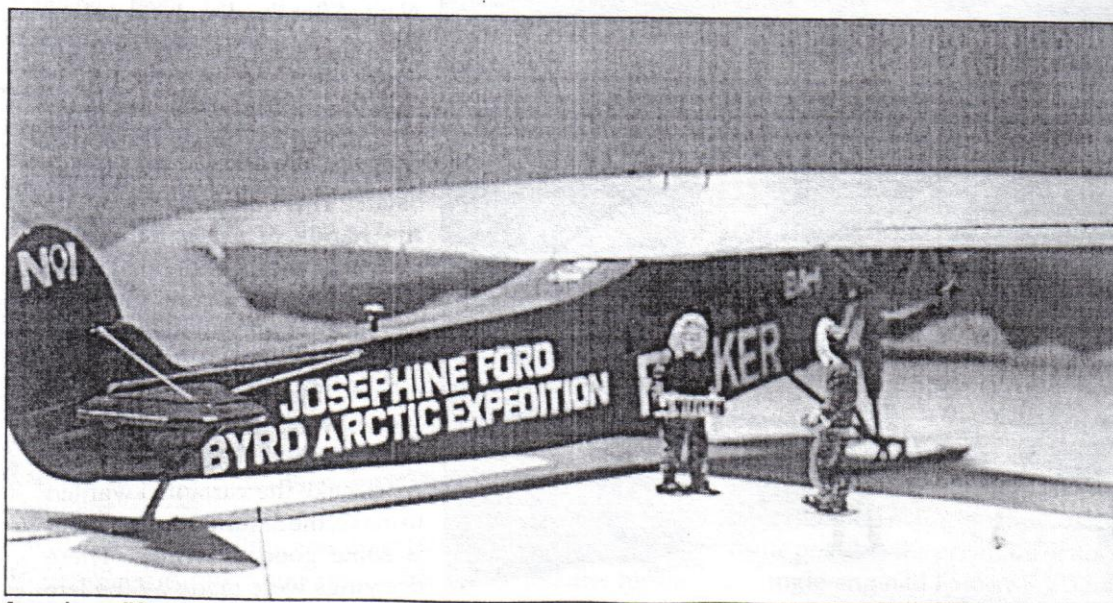
To build the C-2 "Question Mark:" Same as above with these additions: extend the cabin glazing. Because this plane was to remain in the air for so long (over 150 hours) with in-flight re-refueling, you must add the special railing and hand and foot supports for in-flight maintenance on the engine by a brave mechanic!

To build the F-VIII/3m "Josephine Ford:" use "Southern Cross" windshield, shorten the wings and scratchbuild skis.

To build the F-10 "Western Air Express," see the drawings. This is a more complicated conversion. you must scratchbuild long, streamlined nacelles for the two wing-mounted engines. Also, you'll need three *Aeroclub* Pratt & Whitney Hornets with three-blade props. The fuselage must be extended and deepened. Side cabin windows and a new windscreen must be fashioned with .010 clear plastic stock. Also, you must make a Western Air Express decal.

The Fokker Atlantic Universal can be made straight from the bag. In this case, it's a VLE vacuform kit complete with floats and a white metal engine, struts and wheels. Also included is a nice set of decals for several aircraft. The kit can be ordered from VLE Models at 43105 Binkley Circle, Leesburg, Virginia 20175-6411.

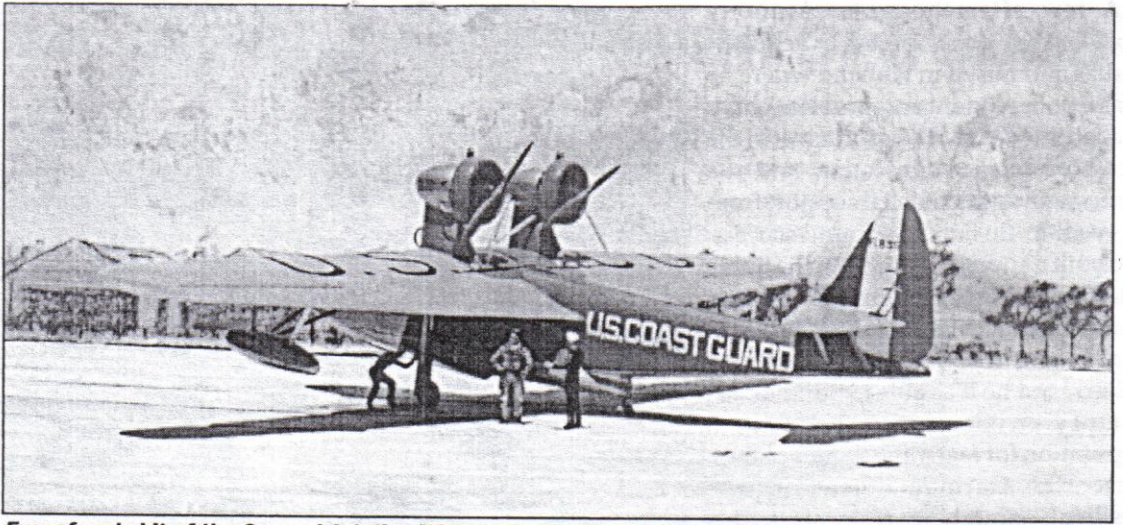
In 1928, Tony Fokker felt that Fokker should move up and build an airliner that could take on this great nation and fly coast to coast in a grand and opulent way. Tony wanted a big plane, the largest land plane made in America. Of course it wouldn't fly non-stop, because its range with a payload was



A much-modified Fok kit was the basis for this Fokker F.VIIa/3m, which Richard E. Byrd and Floyd Bennett flew over the North Pole in May 1926, or so they thought. The claim is disputed today.

limited to 800 miles. This was to be the F-12, but for the sake of drama and panache it was called the F-32, because this giant would carry 32 passengers in grand style. America was on a roll, the stock market was soaring and capital was king. Fokker's entrepreneurial instincts said, "go for it!" So was born the F-32. By the time it was ready for service, the stock market had crashed and America had been plunged into the great depression. If that weren't enough, there were mechanical

problems and design flaws. Undaunted, Fokker forged ahead with the program, teaming up with Western Air Express for an advertising blitz featuring publicity shots of a chorus line of Ziegfeld beauties dancing on the F-32's huge wings. Western Air Express emblazoned in gold letters on the fuselage sides, "Fox Flying House Party New York to Hollywood." Nothing worked; the market for such lavish endeavors was gone. The F-32 was a flop.



**Execuform's kit of the General Aviation "Flying Life Boat" of 1934 was the basis of this model.**

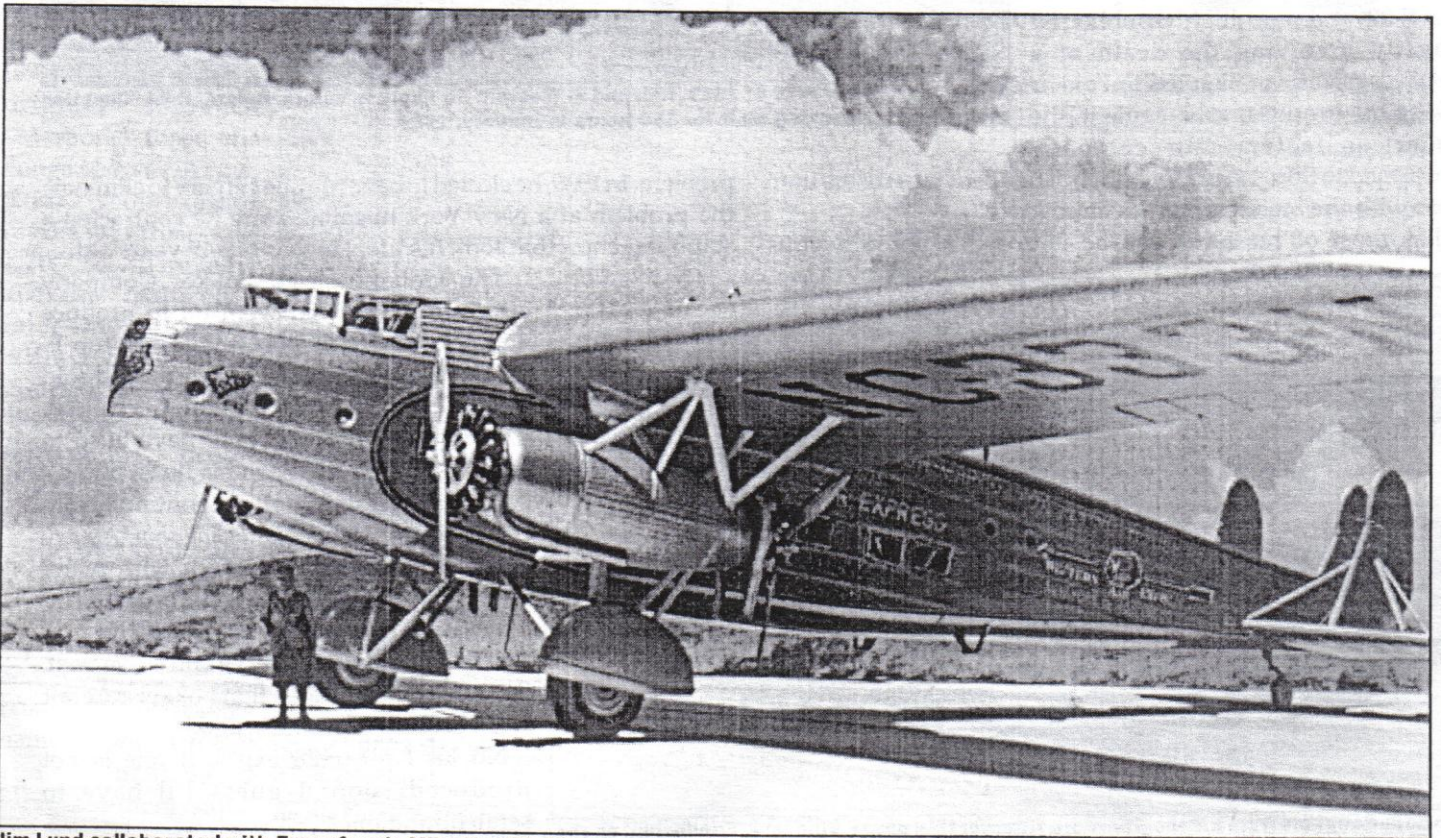
Of the seven built, one lived on for a few years as a gas station on Wilshire Boulevard in Los Angeles.

The Fokker F-32 is available from Mike Herrill of *Execuform Models*. This is not a kit but merely a vacuformed fuselage, wing, empennage, nacelles and wheel spats. You must provide all the details and decals and plans. Mike and I used 1:72 plans, drawn by W.F. Hepworth and taken from *Fokker—the Man and the Aircraft*, written by Henri Hegener and published by Harleyford in 1961. All raised detail, corrugations and ribs were made with 1/64 chart tape. Again, *Aeroclub* provided the four Pratt & Whitney Hornets and propellers. The exhausts were made from solid-core solder found at Orchard Supply Hardware. The wheels came out of the spares box. My decals were hand drawn and produced at the local copy shop. My F-

32 was painted bright maroon with silver wings and tail. All clear parts were made from .010 clear plastic sheet and the windshield proved to be very tricky.

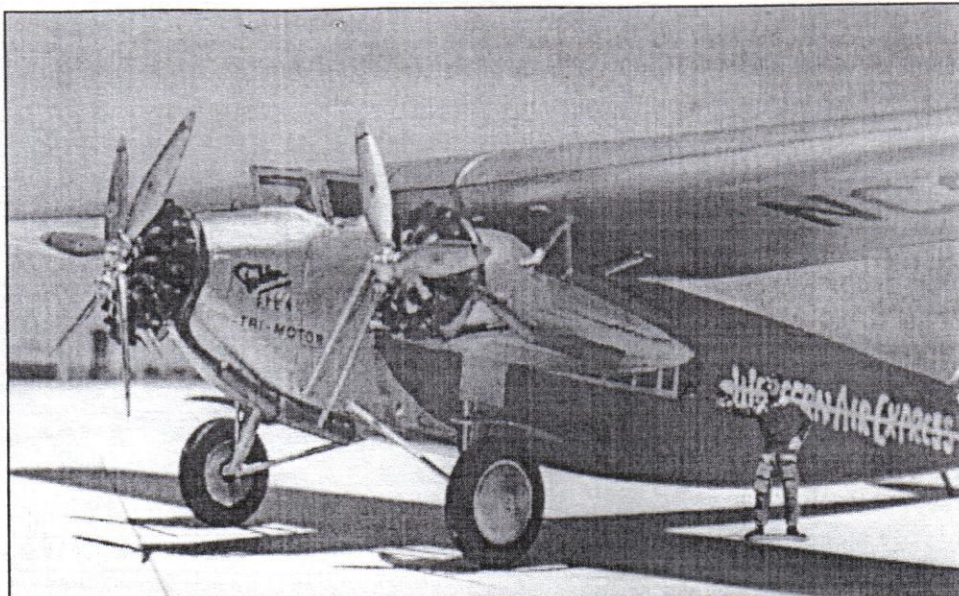
Another Fokker U.S.A. model was the F-15. This was on the assembly line when the company was bought out by General Motors and named General Aviation. So the F-15 was renamed the G.A.-15. One version, a pusher, was designated the FLB (Flying Life Boat) or PJ-1. This aircraft was the last of all Fokker types to be built in the U.S.

A model kit of the FLB is available from *Execuform*. It's a vacuum kit complete with white metal engines, prop beaching gear, but it has no decals. It can be completed as the Coast Guard FLB or Navy PJ-1. I chose to do the FLB pictured here.

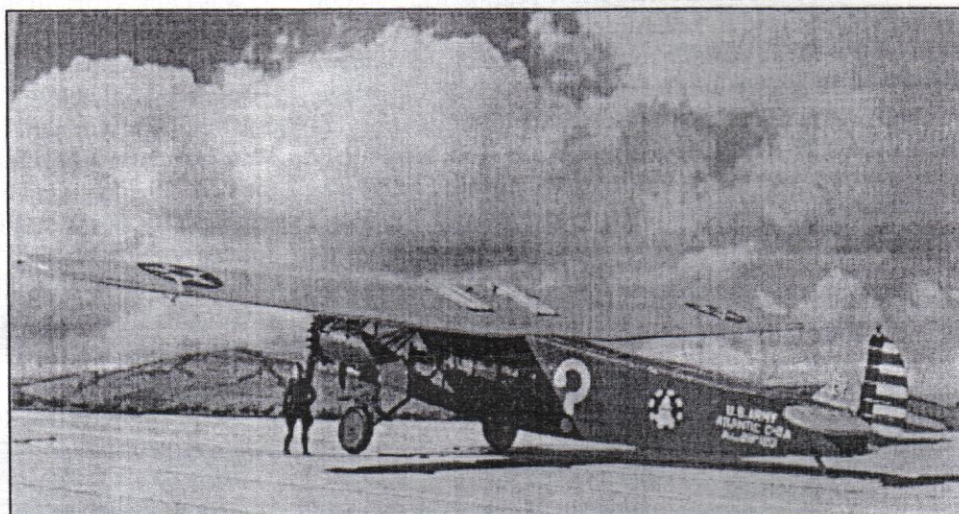


**Jim Lund collaborated with Execuform's Mike Herrill of the creation of this Fokker F.32. The four-engine airliner may have seen its greatest success as part the decor of a Los Angeles service station.**

A few after thoughts: Anthony Fokker was born in the Dutch East Indies and raised in Holland where he was a poor student and problem child. He did, however, find an interest in the newborn science of aviation, and at a young age with financial support from his well-to-do father he found success. He built a successful aircraft, the Spine III. That was just enough to get him started. Along the way he picked up real talent, like Reinhold Platz and others, and he was able to build up his factory in Germany and gain a reputation for fearsome fighter planes. After the German defeat he was resilient enough to re-locate to his native Holland and produce state-of-the-art transports.



He honestly loved America, but in march 1931 disaster struck. Knute Rockne, the famous coach of Notre Dame's Fighting Irish football team and a staunch advocate of air travel, was killed along with seven others when a TWA F-10's wooden wing failed due to wood rot and crashed into a hillside near Bazaar, Kansas, to the horror of many witnesses. The wooden-wing F-10s were grounded, never again to carry passengers in the U.S.



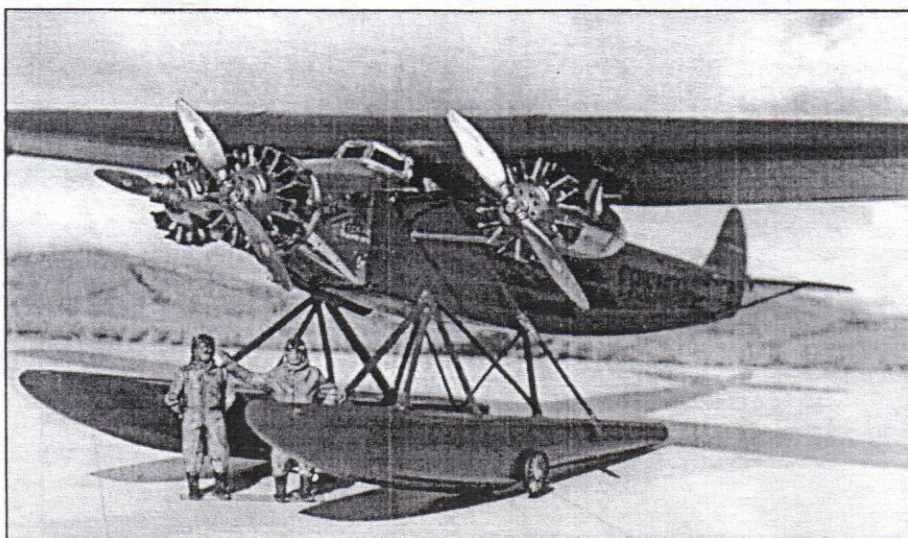
At top, the Fokker F-10 of 1929, finished in Western Air Express colors. Below, C-2A "Question Mark," which remained aloft for 150 hours in January, 1929.

The Great Depression, the failure of the F-32 and this highly-publicized tragedy involving the death of a beloved American icon led to Fokker losing his proudest achievement, the American factory. His company continued to flourish in Holland, but he spent most of his time here with the aviation cronies he so loved.

problem. In 1939, he elected to have routine surgery to eliminate the problem at a New York hospital. Here he contracted a staph infection that took his life. He was but 49 years old.

For most of his adult life he endured a chronic sinus

The Holland-based Fokker Company survived WWII and went on to produce another great transport, the turboprop F-27. It was so good that it was built and sold in the U.S. under license as the Fairchild F-27 *Friendship*. If Tony could have lived to see it it would have been his finest hour.



Jim added engines from a Monogram Ford Trimotor to create F.VIIb/3m "Friendship" as she appeared in January, 1928.

Fokker aircraft of Holland continued into the jet age with its F-28 *Fellowship*. A very successful airliner, in service with many airlines world wide, the F-28 is operated by American, United and others in the U.S. The F-28s continue to serve and serve well. Sadly, it must be noted that Fokker Aircraft went broke a little while ago.

No kit f the F-28 exists; if one is not produced soon, I guess I'll have to scratchbuild one!



# Disposable but long-lived: Ryan's Firebee

By Bill Abbott

The Ryan *Firebee*/*Firefly*/*Lightning Bug* family of target, reconnaissance, decoy and strike uninhabited air combat vehicles (UACV) dates back to a joint Army/Navy/Air Force program for a turbojet powered target started in 1948. The

first flight was in 1951. A total of 1,280 Q-2A/KDA-1/XM-21 *Firebees* target drones was delivered to the three U.S. services and the Royal Canadian Air Force. These first *Firebees* featured

stubby, cylindrical fuselages and sharply swept flying surfaces, with plain air inlets in the nose. Army and Navy versions had a different engine than the Air Force Q-2s, with a prominent hemispherical fairing in the upper center of the inlet. All were remotely controlled from a ground station and employed two-stage parachute recovery initiated on command, when the engine or control signals stopped or when damaged.

In February 1958, the Q-2C began development as Ryan's Model 124. It was intended to have increased performance in all aspects and featured an updated version of the Continental J69-T that also powered the Q-2As, T-37, TT-1 *Pinto* and, in its

original French "Marbore" form, the *Fouga Magister*. A new, axial, compressor increased thrust to 1,700 lbs. The new airframe featured a finer-lined fuselage with a chin intake underneath a shark-like, fiberglass, nose, somewhat larger wings and refined details.

The first Q-2C flew in December, 1958 and quickly met expectations. The new and improved *Firebee* retained the original's name. It was a metal and unstressed composite monocoque with wings swept to 45

degrees at quarter-chord. One hundred gallons of fuel could be carried in the main fuselage tank and a further 25 carried in an optional, auxiliary tank for a range of approximately 600 miles. It weighed 1,500 lbs. empty and had a maximum launch weight of 2,500 lbs. Navy and Air Force *Firebees* were

usually launched from DC-130 drone-director aircraft, while the Army's were ground launched with an 11,300-lbs. thrust JATO bottle. In keeping with the slightly informal



The most famous *Firebee*, "Tomcat," which survived 68 missions before failing to return from North Vietnam. BQM-34s performed admirably in the reconnaissance role during the Vietnam War.

nature of drone operations, the Army version could be equipped with extended wingtips and higher-thrust solid boosters without changing the Q-2C designation. Later, the same engine and control systems were mounted in a much sleeker, longer and heavier airframe to produce the supersonic *Firebee II*, at which point the Q-2Cs became known as *Firebee Is*. This leaves the original Q-2A/KDA-1/XM-21 as *Firebee Os*, but nobody ever refers to them by that name.

In 1962, the Q-2C, KDA-1, etc, was re-designated, for all services, BQM-34A.

Although *Firebee* targets are destroyed in training and

testing duty, the basic target is designed to be recovered. The parachute system is triggered by airframe damage and brings the drone back to earth wings level, right side up. A steel keel under the engine is designed to take landing impact. For anti-aircraft gunnery training, the *Firebee* tows a cloth sleeve on a cable. Towbee radar/IR targets may be mounted and deployed in flight for missile practice. IR flares are mounted on a wingtip for missile target use, giving the missile an easy to see,



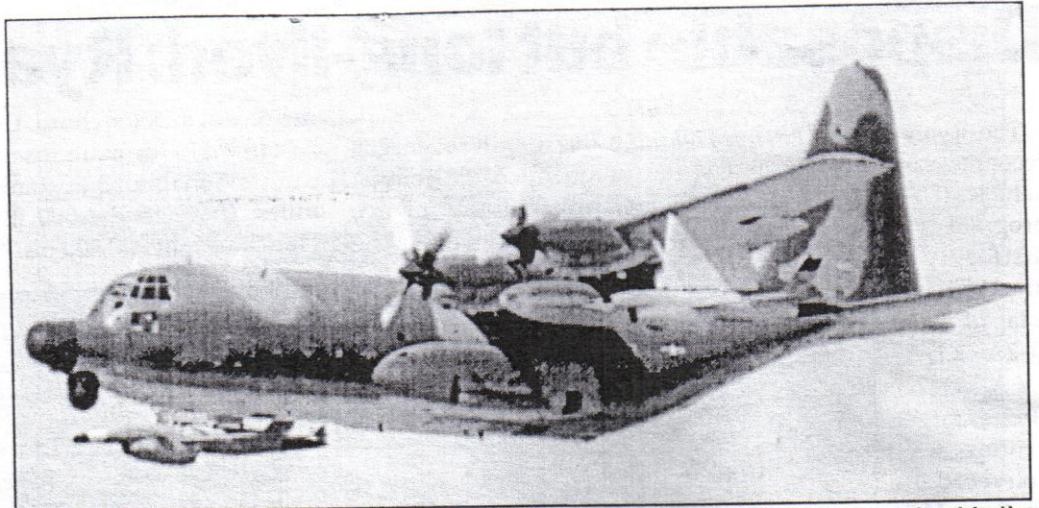
An Air Force H-3 makes a mid-air recovery of a *Firebee* after a reconnaissance flight. Note the *Firebee's* external tanks.

low-cost spot to hit. A traveling wave tube can be installed to amplify and retransmit radar waves to make the *Firebee* appear larger on radar than its actual size. A scoring system that detects objects that come close to the drone can be used as well.

In 1955, during Q-2A production, Ryan tried to interest the USAF in a reconnaissance derivative of the *Firebee*, but they found no interest. Ryan tried again in 1959. Their proposal couldn't have been better timed: only a few weeks after they spoke with the Air Force, Francis Power's U-2 was shot down over the Soviet Union.

A month later an RB-47 was shot down over international waters off the coast of Norway. Ryan got a development contract and designed the stealthy Model 136, but the incoming Kennedy administration cancelled the program in 1961.

Ryan's breakthrough into reconnaissance surveillance came in 1962, when they finally hooked up with the Air Force's Big Safari program. Big Safari is a low-cost, rapid reaction, "cando" outfit within the USAF Material Command that provides and operates reconnaissance hardware in close partnership with suppliers. They couldn't afford an SR-71, or even a Ryan Model 136, but they could pay for a 35-inch stretch to the basic BQM-34A, adding 68 gallons of fuel. Someone arranged to



**A DC-130 Hercules carries two Firebees at the start of a mission over Vietnam. In contrast to the brightly-painted DC-130s used stateside, this wears full SEA camouflage.**

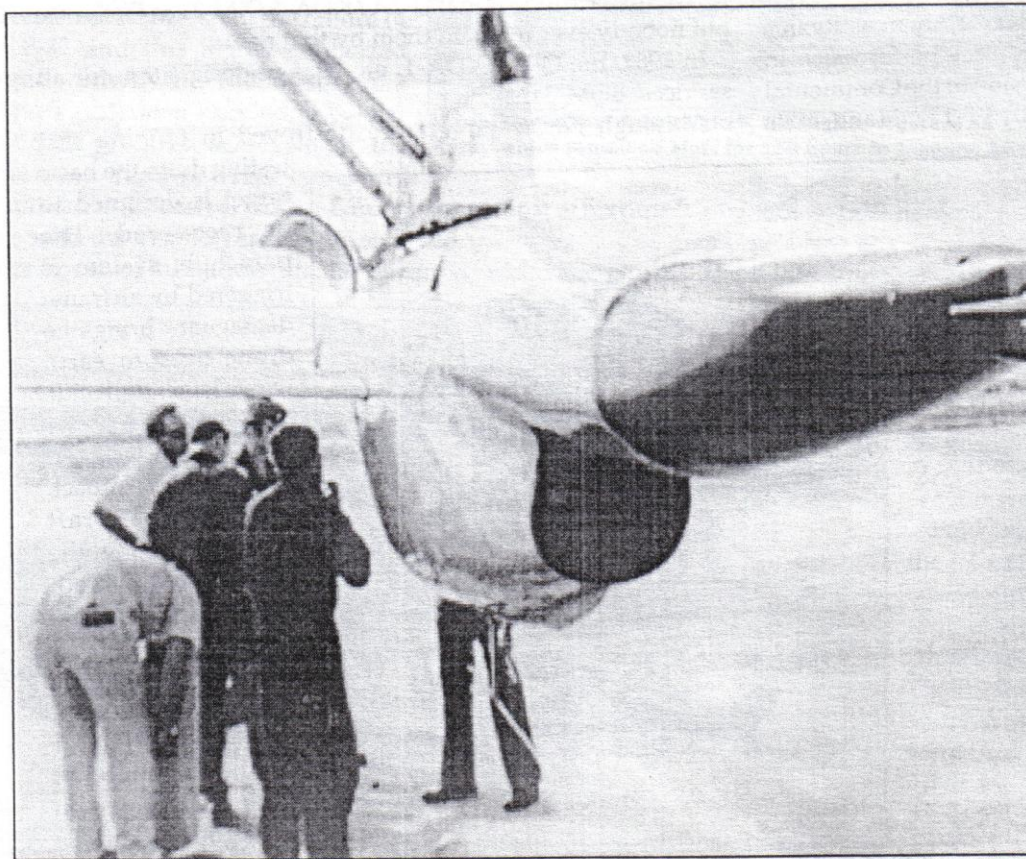
"borrow" some extended wingtips that the Army had paid for, and range went over 1,000 miles. A compass and timer replaced the ground control link and a Hycon camera was borrowed from the U-2 program. A fully configured vehicle, Model 147, was flown 75 days after the contract was signed, and the four new Model 147Bs were declared operational 91 days after signing.

After some false starts, Model 147s, with intense Ryan and USAF support, became reconnaissance stalwarts over Vietnam. Models 147E,G, H,J, NP, SA, SB, SC, SD, SK and T were produced for high-altitude, low altitude, medium altitude and night missions.

Model 147s brought back photos of North Vietnam, of MiG-21s flying beneath them, of SA-2 Guideline missiles approaching and exploding. Some Ryan people wanted to get the Model 147 granted "ace" status, since at least five North Vietnamese fighters were known to have been lost trying to bring-down the drones. One model 147SC, nicknamed "Tomcat," complete with a big, toothy, grin painted on its jet intake, completed 68 missions before failing to return.

The basic BQM-34s made their combat debut in 1965 as Model 147N decoys, launched in tandem with an AQM-34/Model 147G. The first model Ns were not expected to return and carried sandbags instead of parachutes, but more than one did, forlornly circling over friendly territory until it ran out of fuel. Subsequent batches had parachutes installed and were recovered and re-used.

BQM-34s were again flown in combat in 2003, when land and air-launched drones were used in the first two days of the recent war against Iraq to make and



**Ground crew fuss over a BQM-34 before a flight in Vietnam. The scale these men provide give an indication of why enemy gunners mistook downed Firebees for destroyed manned aircraft.**

maintain chaff and jamming corridors for friendly aircraft to fly through. The drones, and time-expired Predator UCAVs, were programmed to keep flying until they ran out of fuel. Pieces of the crashed remains were exhibited on Iraqi TV to bolster claims that US aircraft had been shot down.

I know of four BQM-34 kits: those that come with the *Airmodel* 1:72 vacuum-formed conversion set for DC-130s, those that come with the 1:72 and 1:48 *Italeri* DC-130 kits and a *Czech Master* resin kit which may or may not be the basis for *Airmodel's* vac models. I have only seen the injection molded *Italeri* kits myself. They are identical, other than being different scales. They consist of eight pieces with fine, raised details. Two of the raised lines are locators for the decal turbine-warning stripe, but the rest appear generally accurate. The weakest point is that the intake and exhaust have flat plates to block them on the inside, rather than an intake trunk or engine exhaust. The very rich web-site [www.sml.lr.tudelft.nl/~home/rob/models/m34.htm](http://www.sml.lr.tudelft.nl/~home/rob/models/m34.htm) recommends the *Italeri* kits as the best available and shows how to convert a 1:72 example

to a AQM-34/Model 147SC.

There's a number of color schemes for the basic BQM-34, insignia red overall with black nose and black fin tip, light gray with black for externally identical AQM-34Ns, or dark gray with black for the 2003 sacrificial ECM versions. Color information for Army drones is a minor mystery, and diligent researchers can find more schemes, I'm sure.

Opportunities to improve the basic *Italeri* kit include a better engine exhaust, boundary layer bleed slot above the intake, chaff and flare dispensers and Towbee IR/radar targets. External fuel tanks under wing, and external ordinance (Mk. 82 500-pound bombs and TV-guided *Maverick* missiles were tested in the 1970s) are also appropriate. Ground launch

by JATO bottle and larger solid booster isn't covered by any of the known kits, which are all C-130 oriented. Backdating a BQM-34A to a Q-1A is also possible. The only difficulty is that you get four *Firebees* and a C-130 in one box, and you have to pay for all of them!

### Firebee References

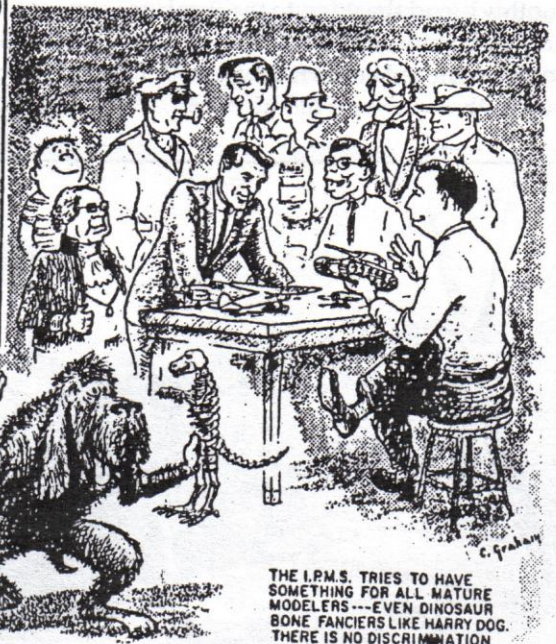
*Lightning Bugs and Other Reconnaissance Drones*, by William Wagner. Copyright 1982, Aero Publishers/Armed Forces Journal International, ISBN 0-8168-6654-6

*Jane's All the World's Aircraft 1975-76*, John W. R. Taylor, Editor, Jane's Yearbooks, Franklin Watts Inc., New York, 1975, ISBN 0-531-03250-7

[www.sml.lr.tudelft.nl/~home/rob/models/m34.htm](http://www.sml.lr.tudelft.nl/~home/rob/models/m34.htm) (see also [m34a.htm](http://m34a.htm), [m34b.htm](http://m34b.htm), [m34c.htm](http://m34c.htm))

[www.airbase.uka.ru/hangar/usa/tra/firebee/](http://www.airbase.uka.ru/hangar/usa/tra/firebee/) (search for this using "airbase" and "Firebee." You can't just cut and paste it. It's the old Ryan site, translated into Russian, with original pictures and artwork.

## ATTENTION ALL DOGS with Plastic-Model-Building bosses... ... is this your problem?



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# A trip down memory lane with Monogram's Spit IX

Continued from page 1

the "up" position and assembled the wings using *Tamiya* cement. The wings were taped and rubber banded to make sure there were no weak spots and that the friction pins securely engaged the pivot points on the landing gear legs. I let the assembly dry overnight before even thinking of cycling the undercart.

I assembled the prop and spinner, which has a nasty join line behind the prop blades. I had to use some filler putty and do a lot of careful sanding to match the front and rear halves. In the end, it looked good but not perfect. I cleaned up and slightly thinned the four prop blades, eliminating the mold seams and small sink marks at the bases of the blades.

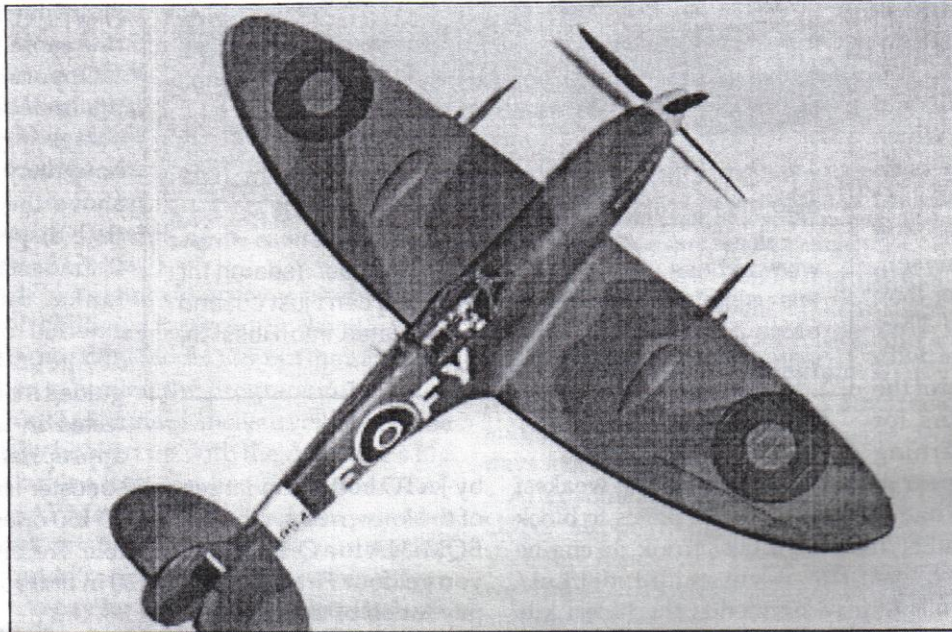
The wings were unwrapped and mated to the fuselage. I needed a small amount of putty and Mr. Surfacer 500 for the wing roots. I taped off the surrounding areas on the wings and fuselage before sanding, and when the filler was dry I was able to smoothly blend the wing to the fuselage without losing more than a tiny amount of molded detail. The rear joint with the fuselage required some filler as well. I added the carburetor scoop to the wing and blended it in.

Next came the attachment of the tail planes. The left side fit well but the right side had an alignment problem with the fit of the tongue into the fuselage slot. As molded, it caused a slight downward tilt to the stabilizer. I removed small amounts of plastic from the mating surfaces until they lined up correctly.

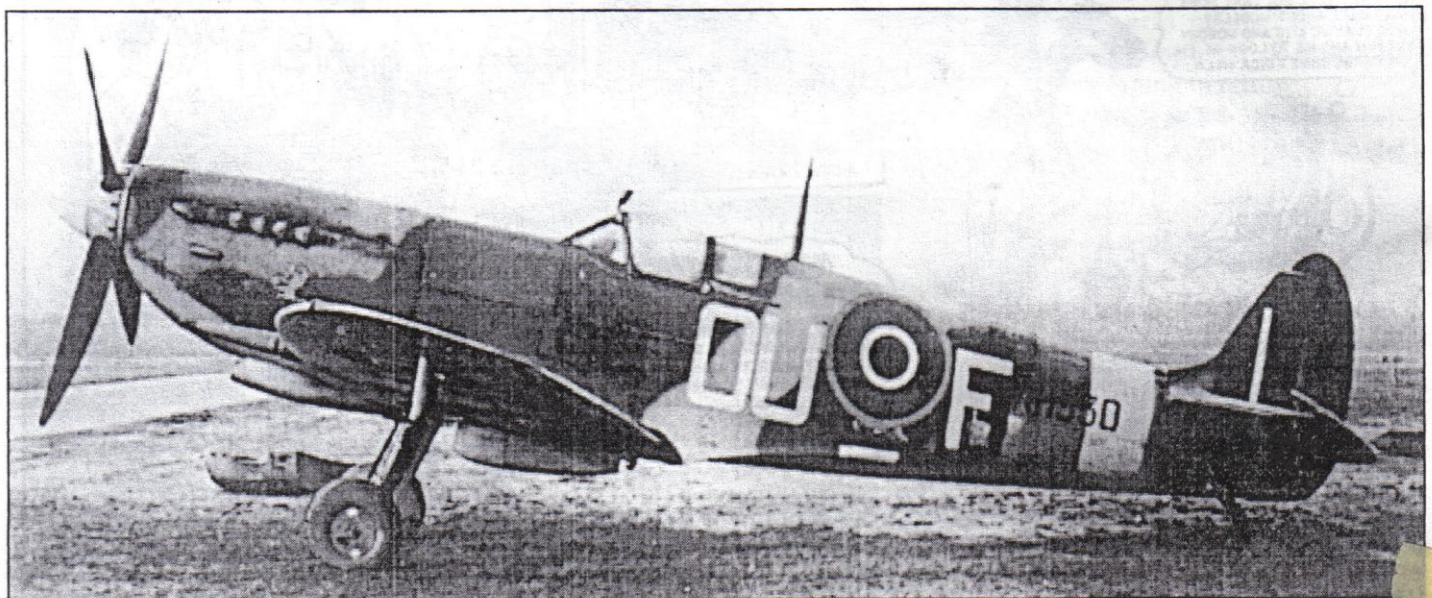
I then cemented the parts together. A small amount of Mr. Surfacer and light sanding resulted in a nice fit.

I decided to use *Model Master* enamels for the paint job and elected to use the kit decals for markings. I shot *Model Master* Ocean Grey on the upper surfaces, then sprayed the Dark Green freehand. I was able to get a nice tight pattern by thinning the paint

and adjusting the air pressure. The next day, I hand-brushed the *Model Master* Medium Sea Grey onto the undersides. I was pleased with the coverage and ease of hand brushing. It looked a little on the light side but sometimes the color changes as the paint dries. After it dried, this paint still seemed too light, and damned if it wasn't a light blue! I wound up masking the topsides and sprayed the undersides with *Tamiya* Medium Sea Grey from a rattle can. I was pleased with



Laramie's model was built using the kit decals, which represent FY-Y BS435 as flown by Squadron Leader Hugo "Sinkler" Armstrong, the Australian commander of 611 Squadron.



A well-worn 435 Squadron RNZAAF Spitfire Mk. IX.. This mark was the most widely-used of all Spitfire variants.



A photograph showing four 611 Squadron aircraft in flight over London, Dec. 9, 1942. Armstrong's plane (the subject of Laramie's model) is leading the flight. Armstrong was lost on Feb. 5 1943 off Boulogne, the victim of Fw 190s from JG 26.

using *Polly Scale* decal softener and lots of swear words. The decals finally settled down and there was very little silvering, even over the many rivets and lumps and bumps. The fuselage roundels were terribly out of register, but as I had a second set available I was able to remove the red centers from one and fit them to the other, achieving even spacing between the red and white sections. An overcoat of Future was applied, followed by a flat coat. Weathering was minimal.

The pilot was painted in an approximation of an RAF uniform and I added him to the armor plate slot provided for that purpose. I attached the canopy with white glue, then added the painted rear-view mirror. And yes, I did get caught flying my Spit around the model bench, chasing

the result; this was the first time I had used the spray lacquer and it worked well.

I sprayed the prop blades *Tamiya* yellow and after they dried masked off the tops and shot the blades in flat black. I also shot the main wheels black and their hubs Medium Sea Grey. The next day I masked the blades and painted the spinner *Tamiya* Sky. After the paint dried, the tape came off and I had a very nice-looking fan.

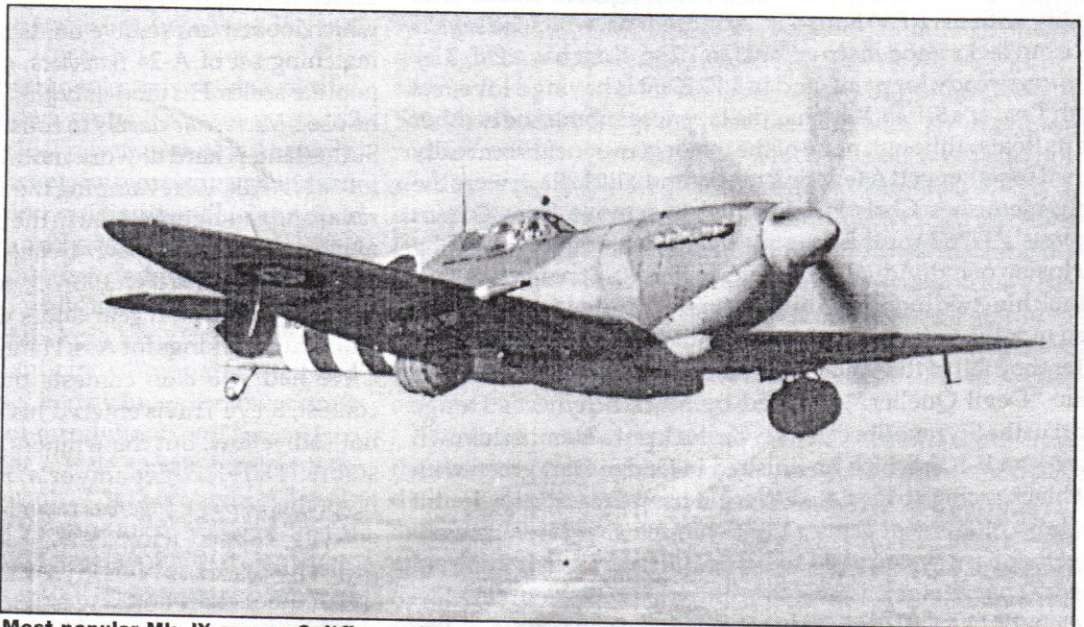
Various details were brush painted, such as the carb intake and exhaust stacks. The canopy was polished and frames hand-painted first with a coat of interior grey-green, then dark green. I masked the ID panels on the outer wing leading edges and shot a coat of light gray followed by yellow once the gray was dry. Doped patches over the four .303 gun ports were simulated with hand-brushed *Model Master* Guards Red flat acrylic paint.

Future floor polish was hand-brushed onto the locations for the decals. I used the kit decals and was able to get a good application by

imaginary Bf 109s and Fw 190s. However, my wife loves me and indulges such minor departures from reality with minimal teasing.

In sum, I had a lot of fun with this little project and heard some nice compliments at the *Monogram* Madness club contest at the September meeting.

So, don't despise older kits just because they aren't up to current standards. Take a break and give 'em a whirl.



Most popular Mk. IX ever: a *Spitfire* equipped with two 18-gallon beer barrels delivers cold brew to the troops in Normandy, 1944.

# OCTOBER MINUTES

At the October meeting, Steve Travis told the assembled throng of more than 40 modelers that our Veterans Hospital Drive delivered models to VA facilities in San Francisco and Martinez over the last few months. We also auctioned off some race car models during the course of the meeting to raise funds for this worthy cause.

In model talk... Daniel Pada's Gundam S was built straight from the box in a single evening. His dad Ben has been just as busy, adding a *Black Box* interior to the *Monogram* F-86 *Sabre Dog*. He says the kit is very nice and has soft plastic, which is easy to work with. Ben also outfitted his *Tamiya* Fw 190A-4 with a *Cooper Details* interior and he finished off his *Hasegawa* Ki-84 *Hayate* with *Gunze Sangyo* paints. Brad Chun and his son Travis are both building the AMT "Fast and the Furious" Mitsubishi Eclipse. Travis is doing his as the movie car, while Brad is building a "non-custom" stock version. Bill Ferrante struggled through the 1:48 *Italeri* YF-22 *Raptor*; he says the best thing about the kit are the decals! Bill built his *Raptor* straight from the box except for some tape seat belts. Bill's also painted and decalled his *MPM* PT-19 *Cornell*; he's going to have to make new windscreens, because the kit windscreens don't fit the model. Chris Bucholtz is turning the *Tamiya* *Mosquito* FB. Mk. VI into the 57mm gun-equipped Mk. XVIII; he's used parts from the *Airfix* *Mosquito* and an *Italeri* B-66 to make the conversion. Tom Trankle's *Tamiya* P-51B has an interior by *Jaguar* with an *Eduard* instrument panel. Tom is honing his skills by adding his first vacuformed canopy to the *Mustang*. Greg Plummer has been cutting scale sheet metal again; he took a *Monogram* '64 Pontiac GTO and re-shaped it to look like an Econoline pickup in much the same style as the Dodge D'Oro. Greg also took a *Revell* Shelby Series I sports car and replaced the roof with one taken from a Dodge Stealth; this will be Greg's entry in the Custom Clinic contest, which he has done very well in the last two years. Kent McClure re-painted and weathered a toy from the movie "Atlantis" for use as a gaming piece, as will his electrostatic steam weapon, which he made from a flea market toy and gave a WWI French-style camouflage scheme. Kent's ground weapons veered into reality with his *RPM* Ford TFC armored car, which he says is nice but lacks good instructions. In 1:144, Kent has a DC-3 by *Minicraft* ready for paint, and in 1:72 Kent is having a love-fest with *Tamiya's* *Seiran*. Kent has the Japanese submarine bomber on its floats, although none of the major components are really glued together yet! A few sink marks and a little flash were the only blemishes Chris Hughes had to remove from *Eastern Express'* PT-76B amphibious tank. Chris was impressed by the inclusion of individual track links in this kit. Steve Travis said it took him two months to build *Minicraft's* 1:144 Ki-44 *Shoki*—two months to build, and two months to find the little parts after they fell off the table! Even so, Steve enjoyed building his little "Devil Queller." Inspired by Mark Schynert's Dodge Dart in the Styrene Sheet, Andy Kellock put a Hemi in his own *Dart*—an F-106, which he finished in Dodge Dart green with fat black racing stripes! Ron Wergin used *Gunze Sangyo* paint to finish off his neat *Tamiya* 1:35 Schimmewagen, which went together easily compared to his 1:72 *Revell* Tiger I. Ron said the 1:72 panzer took as long to build as his 1:35 example! Mike Fletcher's been at work on his Pearl Harbor attack group trio

since 2001, but his *Fujimi* D3A1 "Val" and his *Hasegawa* A6M2 Zero are getting close to completion. The two models wear a browner version of the Ame-Iro paint inspired by bits of real wreckage Mike saw in Hawaii. Cliff Kranz is grafting a B-29 tail and wings to the *Academy* Boeing KC-97 to build the XC-97 prototype, a conversion that's required much work with a saw and a lot of putty. Bert McDowell showed off the pattern for the bow extension that *Trumpeter* will use to make a long-hull *Essex* carrier in 1:350. Bert used *Magiscuplt* putty for much of the "bodywork" for the carrier. After many years, Eric McClure has his M3 half-track conversion into a gun motor carriage for a 75mm gun complete and ready for paint. The model was based on a *Tamiya* M3 and a *Kendall Model Company* conversion. Eric's also using multiple manufacturers for his Sherman, which has a *Chesapeake Model Designs* turret, *Tank Workshop* dished wheels and *ADV Designs* sandbags, which forced him to rebuild the gun cradle. Mike Burton is building a pair of *Lockheeds* side-by-side in 1:144: the *Minicraft* *Electra*, which will eventually wear PSA livery, and the *LS/Arii* P-3C *Orion*. Mike is also working on a *Revell* Texaco/History Channel-sponsored Porsche racing car, although he says this has presented him with some fit problems. Mike Meek is working on fitting the *Hi-Tech* cockpit set originally intended for the *Heller* F4U-5 *Corsair* into the superior *Hasegawa* kit of the same subject. John Carr is getting an education on auto building with his 1970 *Superbird*; he painted the body *Tamiya* blue, added three clear coast and, when all was dry, went after it with polishing sheets ranging from 1200 to 120,000 grit. This was the first time John had ever done this and he was very pleased with the results. Vladimir Yakubov did a lot of kitbashing (and, he says, spent \$50) to build a 1:72 T-35/57, which features a Hull by Eastern Express, an *Italeri* turret, bits from a *Fujimi* kit, *Extratech* photoetched parts and an *Armo* barrel. Vladimir is also in the finishing stages of an *Ace* BMP-20, as used in Afghanistan; he says the extra armor helps hide the kit's awful suspension! Also among Vladimir's ground forces are an SMK, a largely scratchbuilt project just under way, and a *Planet Models* SA-2 surface-to-air missile, which looked impressive on its launcher. Greg Lamb built a matching set of A-24 *Banshees*, one in each of the two most popular scales. His models both came from *Hasegawa*, although he used *Microscale* decals to finish the smaller of the two. Roy Sutherland is hard at work modifying a 1:48 *Tamiya* *Mosquito* into a NF. Mk. 19, revamping the interior with the appropriate radar and radio equipment in the cockpit. These modifications may someday be a *Cooper Details* set. Roy's also painted and decalled a *Tamiya* Fw 190A-3, replacing the propeller and spinner, wheels and gear doors with his own line's products and using markings for Assi Hahn's machine by *Eagle Editions*.

We had two club contests this month. In the air racers contest, Steve Travis entered his *Mooneyes* Bf 109, finished in hot rod yellow, but the winners all came from Mike Meek's stable: Daryl Greenamy's *Bearcat* "Conquest I," the Hypothetical F7F *Tigercat* racer "Miss Real Doll," and a new entry, a clipped-wing P-39, took third, second and first, respectively.

Our other club contest was "October Oddballs," and it was shockingly well attended. Bill Abbott spent many hours

many years ago converting an *Airfix* P-39 into the XFL-1 *Airabonita*, the Naval version of the *Airacobra* that never went anywhere, using a "very bad" article from now-defunct *Scale Modeler* magazine. Bill also brought in a Styrofoam "paper plane" of the Avro CF-105 *Arrow* which "sort of flies." Larry Roberts' 1:48 *Shinden* pusher fighter was finished using *Humbrol* paints; his 1:72 Sukhoi Su-1 high-altitude aircraft took a lot of work to go from its crude Russian origins to the nice model Larry had on the table. Mike Burton almost completed two oddballs for the contest, a *Mach II* SNECMA Coleopter VTOL fighter and the *Trumpeter* F-107 Ultra Sabre. Vladimir Yakubov built his A-7-3A autogyro twice; this Russian kit depicts the first combat autogyro. Another application of technology in the wrong direction was Vladimir's T-35 "land battleship," a multi-turreted tank that the Germans must have taken great delight in shooting. Kent McClure's tape dispenser tank is finished, complete with an ex-soldier stuck to the bottom of its steam-roller wheel. Kent

also had an odd little T-15 Belgian Light tank, made from a kit by *SHQ*, and a Cosworth F.1 car from 1969 that tried to solve the formula by using four-wheel drive but failed to ever qualify. Kent finished the car with *Snj* and *Bare Metal Foil*. And the winners... In third place was Andy Kellock's Billet Proof Custom truck. Andy, using pictures of the real car, converted a '29 Ford truck into the military-themed rod, then showed the model to the owner of the real item for a true check of his accuracy. In second place was Chris Bucholtz' 1:72 XF-85 *Goblin* parasite fighter. This model came from the *MPM* kit, and it took some doing to open up the cockpit on this real-life eggplane thanks to the kit's engineering. And in first place was Vladimir Yakubov's 1:700 *Novogorod* monitor, a round ship used to shore up shore defenses during Russia's war with Turkey in 1875. Vladimir built the ship from scratch from the hull up; he says there's nothing to the story that the ship spun around when the guns fired!

## Special Hobby scores with its 1:72 IA.58 Pucara

By Chris Bucholtz

Built to a specification similar to that which yielded the OV-10 *Bronco* a few years earlier, the IA.58A *Pucara* was built with the mission of counter-insurgency (COIN) in mind. It was designed to function from unprepared airstrips, provide great visibility to the crew and be very agile if not fast.

Taking to the air for the first time in 1969, four *Pucar*as helped stem the flow of communist guerrillas into Argentina from Bolivia in 1975, and in 1978 they were deployed to Patagonia to serve as a show of force against Chile during a period of tensions.

Despite these effective episodes (and similar incidents in Sri Lanka, where the government has used the aircraft against the Tamil Tiger rebels), the *Pucara* is best known for its role in the 1982 Falklands Islands War. During the war Argentina lost five in the air and 13 on the ground. As a result, most residents of the northern hemisphere who have seen the *Pucara* in person have seen it in a British military museum (five were brought back as trophies). Still, for the COIN mission, the *Pucara* represents a very successful indigenous design, and the aircraft is still in service in Argentina 35 years after its first flight.

*Special Hobby's* IA.58A is a first in injection molded plastic. The kit has 73 injection-molded parts, 12 resin parts, 63 photoetched parts and a very clear injection-molded canopy. The cockpit features two somewhat simple resin ejection seats that are each outfitted with two ejection handles and four photoetched seat belts. The control panels and side consoles are formed with a mixture of photoetched panels and levers attached to plastic shapes, and well-done rudder pedals and control columns finish out the cockpit.

The fuselage of the *Pucara* is split into three parts, a left and right half with a lower belly plug that includes the lower wing roots. The scribing is restrained throughout, and the surface is slightly rough, meaning that a little sanding might help with painting later on. The placement of the cannon bulges is troublesome; they will impede the sanding of the seam just at the wing root. The wings have the nacelles molded into them, and the main wheel bays have a roof and an outer bulkhead to prevent a see-through wing. The fronts of the nacelles are

provided as halves, and the distinctive protruding engines are given as resin parts.

The landing gear struts are decent enough, but the wheels (all five of them) are provided as halves. If you can cast resin, I'd suggest getting one wheel to look right and then making five copies to simplify your clean-up efforts.

The wings and horizontal stabilizers butt-join to the fuselage, although the wings have an extra step created by the lower wing-belly insert that should provide a little extra support. The underwing pylons come in halves, and there is no ordnance provided in the kit.

The propellers are six-part assemblies, constituting three soft-looking plastic blades, a hub, a backing plate and a spinner. Photoetched parts finish the build by providing static discharge wicks and antenna. Oh, and one more part: the canopy. This is an absolutely clear molding that would be at home in a box from *Tamiya* or *Hasegawa*. The only way it could be better would be for a second canopy and windshield in the open position to accompany it.

The decals include four Falklands *Pucar*as: A-511, which wears a light brown/light green banded camouflage pattern and light blue undersides, which was shot down May 21 by a *Harrier* (or by a shipboard missile, depending on sources); A-549, finished in a similar scheme but with an aluminum rudder and patch on the spine, which was captured and now resides at the Imperial War Museum at Duxford; A-520, an overall aluminum aircraft destroyed in the SAS raid on Pebble Island; and A-568, a second aluminum-finished machine that flew from mainland Argentina during the war and survived the conflict. All aircraft wear roundels on the fuselage and the upper left and lower right wings and sport an Argentinean flag on the vertical fin. The decals are reasonably in register and the colors appear accurate.

The down sides of this kit are the wheels molded in halves, the absence of ordnance and the very noticeable omission of the centerline weapons pylon. Other than these fairly easily overcome issues, *Special Hobby's Pucara* is a very nicely engineered and detailed model that could present intermediate modelers with a fun challenge and fill in a hole in the admittedly small line-up of aircraft that fought over the Falklands.

**Back to Milpitas we go...**

Next meeting:

**7:00 p.m.,**

**Friday,**

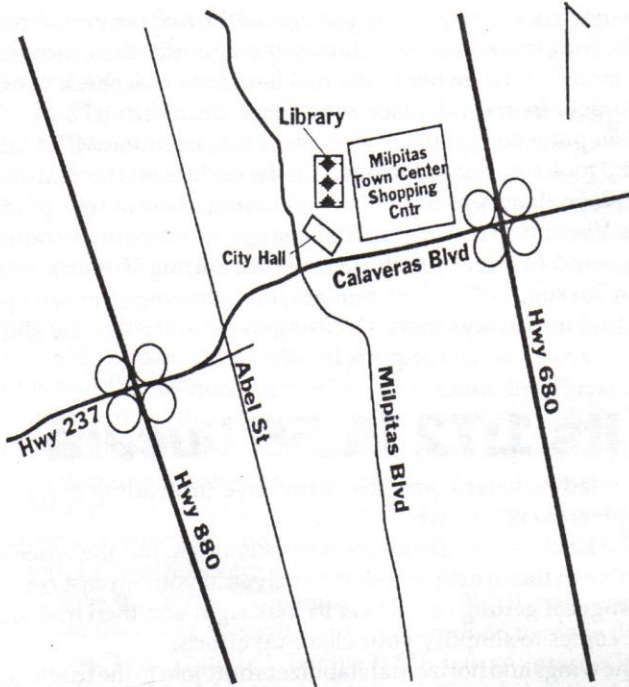
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