SILICON VALLEY SCALE MODELERS

THE STYRENE SHEET

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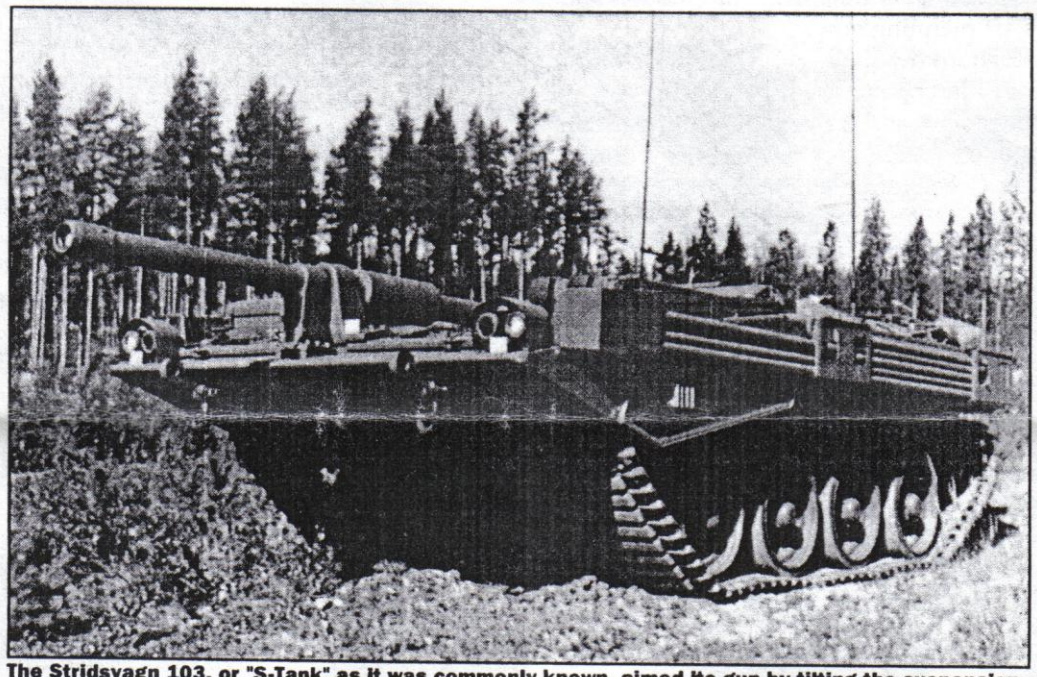
Turretless tank: Sweden's Strv 103 in 1:35

By Greg Plummer

The Swedish Stridsvagn 103 "S-tank" is idiosyncratic to say the least. Taking lessons learned in World War II about tank survivability, Bofors designed the 103 in the late '50s with maximum crew safety in mind.

One of the more vulnerable sections on a tank is the turret—it has a high profile and a weak point at the mounting ring—so the S-tank designers simply got rid of the turret. The 103 had a 105mm L7 autoloading main gun fixed in the wedge-shaped hull. Aiming was done by turning the tank and tilting the hull via a hydraulic suspension system. The end result turned out to be highly accurate, though the hydraulic system was complex and prone to breakdown. It also meant the gun could not be aimed if the tank threw a tread.



The Stridsvagn 103, or "S-Tank" as it was commonly known, aimed its gun by tilting the suspension and turning the vehicle toward the target.

To add to the oddity of the design, the 103 also had two main engines. A Detroit Diesel two-stroke V-6 mounted in the right side engine bay powered the hydraulics and the "fine" movement of the tank, while a Boeing/Caterpillar gas turbine on the left provided the power for road speed. The automatic transmission was in front of the engines, and the crew compartment in back. In addition to the commander, the driver could fire the main gun, and since the tank could go backwards as fast as it could go forwards, a backward-facing rear driver was provided for as well. The hydraulically operated 50-round main gun magazine was in the very rear and was reloaded from the outside.

Almost 300 S-tanks were built for the Swedish Army during the '60s. In the mid '70s the tanks got a major rebuild, becoming the B models, and another extensive upgrade in the '80s resulted in the C model.

By this time, however, the vulnerabilities of the 103 were starting to show. The front armor, though very well sloped, didn't stop the newer Soviet rounds. In Swedish tests, these rounds could penetrate all the way to the main gun magazine with unhappy results.

In addition to the aforementioned troubles with the hydraulic system, the S-tank also had limited off road mobility due to the use of only four road wheels per side. Many military experts saw the 103 more as a self propelled anti-tank gun than a true main battle tank in the first place.

The 103 was completely taken out of service by 2001, being replaced with the Leopard A5. Even if its battle effectiveness was somewhat doubtful towards the end, the S-tank was a unique armored vehicle that served for a long time, and no doubt had influence in the design of newer tanks like the Merkava. It is still Sweden's only native MBT.

Armor fans have been waiting a long time for a 1:35 S-tank, and *Trumpeter* has come through with two versions: the B model and the splinter-camo C model. The 103B kit reviewed here came with three sprues of parts and a lower and upper hull, all molded in an olive green. Also included are two vinyl treads, a set of poly caps for the road wheels, and a small set

Continued on page 9

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

The Kickoff Classic is almost upon us once again, and another gift exchange is in the books. That means the club is coming up on yet another aniversary; since the club was started in April, 1964, that will make SVSM 39. Of course, we were San Jose Scale Modelers for most of that time. Even so, SVSM is still the second oldest modeling club in the U.S., and we are still going strong.

This year's contest calendar is becoming quite full, but you'll notice that many of the events are a little ways away from home base in the Bay Area. If you have a family, these contests can serve as great excuses for a mini-vacation. Ask Laramie and Keiko Wright: they turned last year's OrangeCon into a week-long Disneyland trip. With such picturesque locales as Seattle, Vancouver-Portland and Las Vegas on the docket, you can get some quality time with your models and your family if you start planning now.

You should also start thinking about runing for a club office now. Terms expire in March, and we'll be electing a new president and vice president, and if anyone is willing to run for secretary/editor or treasurer, they're welcome to throw their hats into the ring. Greg Plummer has done an outstanding job as president, but our club rules preclude a president from holding back-to-back terms. If you want to run, be there in March.

Thanks go out to Greg, Mike Burton, Frank Babbitt, Mark Schynert and Vince Kaufman for their contributions this month. Keep them coming, folks! Your participation is what makes the Styrene Sheet a vital publication and a good read. Your editor has the pleasure of getting to read everything before the rest of the club, something he looks forward to each month.

Finally, kudos to John Heck, Frank Beltran, Steve and Anita Travis and the many other members who are making our Veterans Hospital model drive a continued success. SVSM is more than just show and tell—we actually help people!

—The Editor

LETTERS TO SVSM

On behalf of the patients and staff of the San Francisco VA Medical Center, I would like to take this opportunity to express our sincere appreciation for your kind and generoug donation of 25 model kits for our hospitalized veteran patients onJuly 30, 2002.

Thank you for your support. Your donatin will help us to provide the highest quality of care for our veteran patients.

Sincerely,

—Sheila M. Cullen
Medical Center Director

CONTEST CALENDAR

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.

March 14-15, 2003: **The 2003 SCHAMS California Show**, held at the Doubletree Hotel, 100 The City Drive, in Orange, California. For more information, see the website at www.schams.com.

April 19, 2003: **IPMS/Seattle** hosts **ReCon 7**, the IPMS Seattle Spring Show 2003 at the Renton Community Center, 1715 Maple Valley Highway, Renton, Washington. For more information, call Jon Fincher at (206) 439-0565 or visit the website at www.ipms-seattle.org.

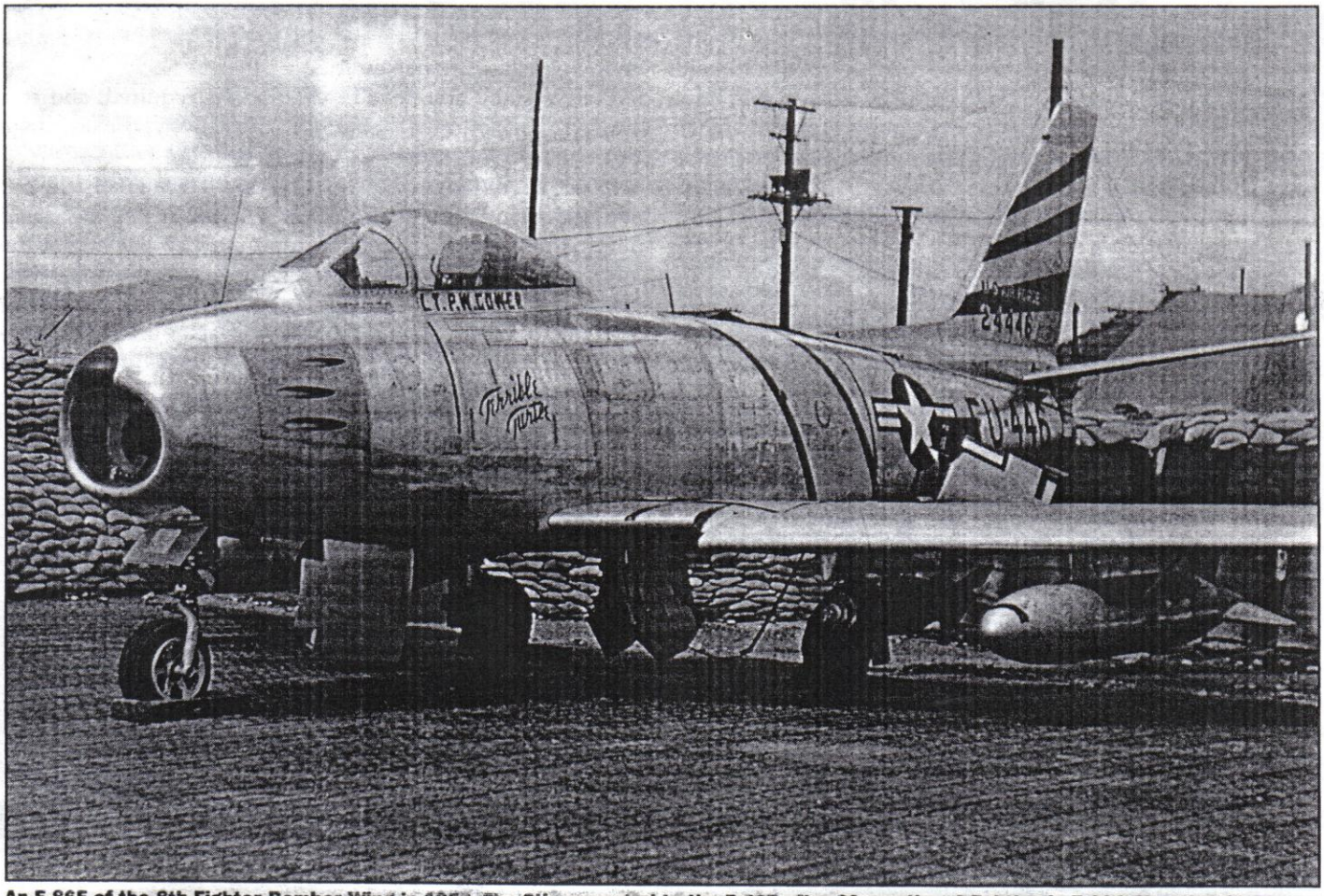
May 10, 2003: **IPMS/Santa Rosa** hosts its 2003 Model Expo. More details as they become available.

May 30 and 31, 2003: **IPMS/Las Vegas** hosts its **annual contest** at the Imperial Palace Hotel and Casino, 3535 Las Vegas Blvd. South, Las Vegas, Nevada. For more information, call Jim Mitchell at (702) 254-6386.

May 31: 2003 **IPMS/Washington Alexander Pearson Modeleers** host their **Invitational Model Show and Contest** at the Jack Murdock Aviation Center at the Pearson Air Museum, 1115 E 5th, Vancouver, Washington. This year's theme: The100th Anniversary of Flight: the First 20 Years (1903-1923). For more informaton, call Pascal Valadier at (503) 282-9371 or visit the website at www.angelfire.com/wa3/ipmspearsonmodeleers/2003%20invitational%20page.htm.

June 21, 2003: **IPMS/Ontario** (formerly IPMS/Chino) plans to hold a contest. More details as they become available.,

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.



An F-86F of the 8th Fighter-Bomber Wing in 1953. The 8th converted to the F-86F after 30 months of fighting in F-80C *Shooting Stars*.

The *Sabre* that set the standard: F-86F in 1:72

By Mick Burton

Mention the F-86 *Sabre* and like the *Mustang*, even people who are otherwise uninterested about aviation history may have a spark of recognition. One of the great planes of all time, North American's magnificent swept-wing fighter series had a less than stellar start.

Although the F-86 was not an exact copy of the FJ-1 *Fury*, the original straight wing, tubby form was symbolizes what might have been had North American's designers not taken some risks.

Thanks to the wisdom of several individuals, including North American's Larry Green, Head of Design Aerodynamics, and Harrison Storms, NAA design engineer, the sleek swept wing *Sabre* was born. Green's work in translating captured German data included wind tunnel research on transonics and the advantages of using swept surfaces, which Storms recognized and included in the XP-86 proposal. The rest, as is oft said, is history. The USAF ok'ed the XP-86 prototype and its 35-degree wing sweep, with numerous models in large batches of production evolving into many different versions, all unmistakably *Sabres*.

Thanks to its splendid record in jet combat over Korea during the early 1950s, many people even today know at least a little about the F-86 family, and incredible amounts have been written, filmed and spoken about this classic jet.

Although designed and manufactured initially by North American, *Sabre* models made by Canadair, Fuji Industries and others saw action in many theatres beyond Korea. Republic of China F-86Fs armed with *Sidewinder* heat-seeking missiles drew blood against Red Chinese MiGs in one 1958 engagements.

U.S. Naval *Sabres* didn't end with FJ-1 *Fury*. The swept-wing design was "navalised" into the FJ-2, -3, and the FJ-4 heavy fighter/bomber which was from the outset intended to carry nuclear weapons.

While the A, D, E, H, K, and L models were all major versions and served well, it was the F-86F which embodies the supremacy of this classic. It was this model that formed basis for the Mk. 5 and Mk. 6 from Canadair, with Orenda engines, and the CA-26/27 from Australia's Commonwealth Aviation, with Avon engines, which were considered in some circles to be the ultimate *Sabres*.

While there are other kits of this classic out there on the shelves, and yes, I have built them too, it's *Heller*'s kit which is a "best buy/build" for those who are trying to get a collection of multiple *Sabres* together on a budget while you still are seeking a quality model. Available for many years in the *Heller* and *Testors* labels, this kit comes to you with raised panel lines, which is why it seems to get overlooked these days, but otherwise is it very much still viable. The canopy comes in two parts (windscreen and canopy) so you can pose it open, closed or anywhere in between. The air brakes can be

posed open or closed, with good detail on insides of doors/bays. Two sets of drop tanks are provided along with a wealth of basic detail. Decals for the editions I have have one set in USAF Korean War markings and one set of Luftwaffe markings, which are different in the *Testors* and *Heller* kit releases.

Not being in ther mood to measure it all out, whether this kit is an "exact" replica in 1:72 is still not something I can attest to. However, it does sure looks like one once it is built!. The fuselage is in halves, with half the vertical tail on each side. A tube exhaust part is provided, and while this is not greatly detailed it fits well and has enough depth to fool the eye. The front intake trunk is in two halves split horizontally. This assembly fits atop the nose gear bay, itself a nicely detailed single part. The assembly rests in one fuselage half where the mold designer left a slight recess.

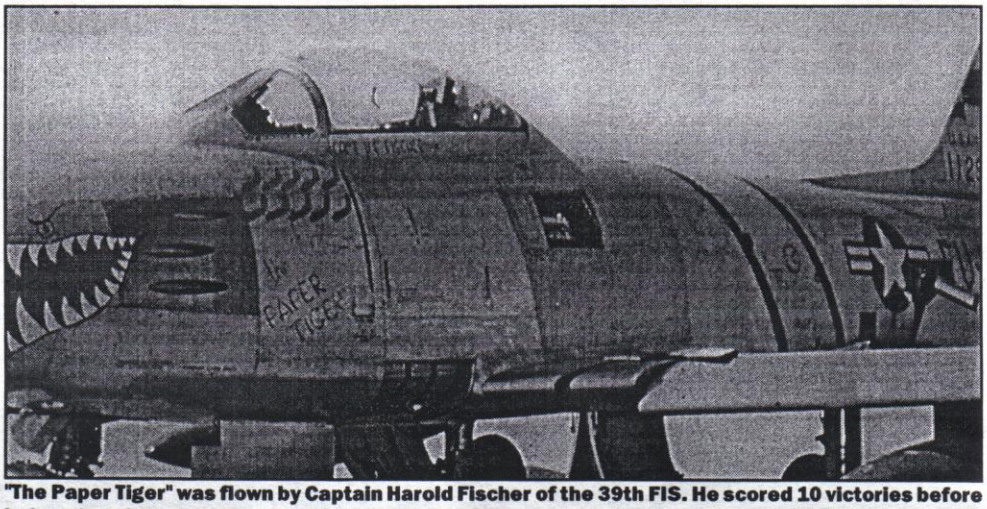
The cockpit tub includes rudder pedals and basic side instrument panel detail. Into this tub goes a three part seat, the main instrument panel and joystick, all delicate and all well done. Comparing this to references such as *F-86 in Color* by Larry Davis (Squadron/Signal, 1981), it seems *Heller* was right on. The cockpit colors in the USAF *Sabre* are mostly grey and black. Filling the open spaces above the intake trunk and just under the cockpit floor with steel BB shot provided enough nose weight, and this all superglued in place. Dry fitting the fuselage halves determined that the alignment of parts was still spot on, so on went the superlue and the fuselage was sealed. The prototypical *Sabre* characteristic of a slightly slanted nose is included in a single piece which proved to fit almost perfectly around the fuselage mating edge and little sanding was required. The horizontal tailplanes are single pieces. Since the real ones are also of a one-piece "flying tail" type, this leaves you with the decision of whether to whether to pose the stabilators deflected or in a neutral psition. The lower wing is in one piece and includes the main gear bays with basic detailing in the form of "potholes" for the wheels to retract into. The style of wing is appropriate for an early F-type, with slats molded closed, and the top wings are in halves, which I found easy to get a nearly perfect join to fuselage if I dryfitted the lower piece to the fuselage, then taped the upper wings on, making any adjustments needed, then carefully beginning to glue from the wing tips in. The end result was slight dihedral on the wings with very tight joints.

One thing here, before you glue, the kit comes with "holes open" for the wing tank mounts, so if you're of a mind to have the wings bare, I suggest you consider filling the holes from the inside now and make your work later easier. For this model they are staying open.

The speed brakes were a different story. Closing them was called for, so into spares box went the pistons for open brakes and here the very minor gripes I have with this kit come to light. When fitting the wing, the tendency is to get a low or high spot, but this is easily overcome with patience. A great deal of patience later, I could still not get the sit of air brakes in their wells without sanding.

Only a small amount of sanding was required, and so I moved quickly to the addition of the canopy, the last stage prior to readying model for overall painting.

While it is not the fashion to have raised line detail, I am not into rescribing, so any effort that can save losing the raised lines is a good investment in time. As I earlier noted, the canopy is in two parts. The windscreen fit to the fuselage took some minor nudging with sandpaper to blend it in and not lose detail. The canopy shell gets a separate insert (the little platform behind seat) which fit perfectly, and now the cockpit was closed tight.



"The Paper Tiger" was flown by Captain Harold Fischer of the 39th FIS. He scored 10 victories before being shot down and taken prisoner in July, 1953.

I chose to use the USAF Korean theater scheme for "The Paper Tiger," an option in the Testors edition, since all the *Heller* kits I have showed severe yellowing for "Mig Mad Marine." Using my favorite metal finish of *Testors* Non-Buffing Aluminum Metalizer, several coats were applied. By gently buffing (despite the name, you can buff it, it's just tougher than "buffing" variety for handling purposes, which I like) in some places a subtle natural metal in 1:72 appears.

The very delicate landing gear legs for all bays were painted, fitted, with the nose bay gear including a separate retraction linkage. The wheels/tires are all one piece with tread and great detail. These go on no problem too. The little lens on the underside of the nose was a bit painful to fit as they require some filling with clear adhesive and they went in before painting. All the gear doors except the very skinny main gear leg doors have inner wall detail, and all are thin! The only tedium in the closing the finiship I encountered was in applying the yellow/black fuselage ID stripe in that important and flashy marking.

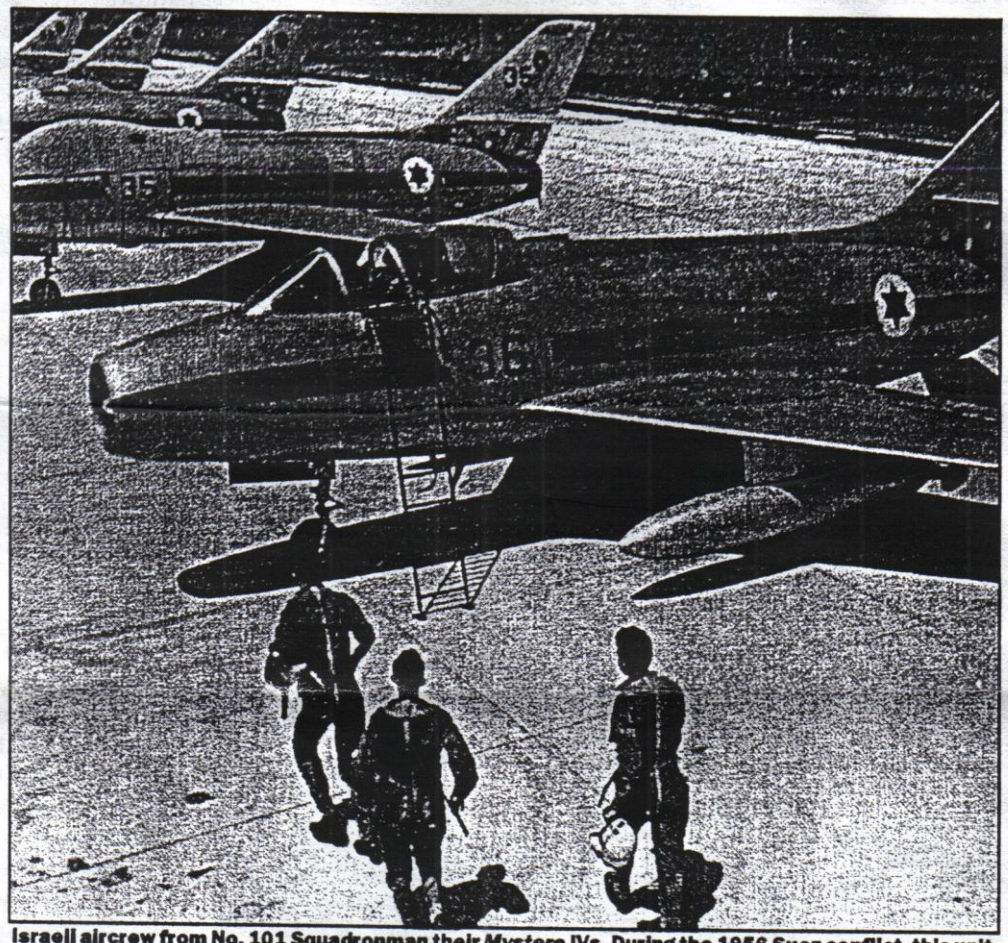
Finally after careful slicing off with a new sharp hobby knife, some small sections at the mating edges and the application of *Solva Set*, it snuggled down and all the rest of the markings went on deliciously. With "The Paper Tiger" mouthing off now in my burgeoning collection, I can safely say I heartily recommend any one who has the slightest interest in F-86F in 1:72 at least consider picking up, building one of these kits. I've got another on the way as I write this, for donation to the China Lake Museum of Air Warfare display when I can gather all the decals to complete it.

Mastering *Hi-Tech*'s 1:48 multimedia *Mystere*

By Frank Babbitt

Just two years after being liberated from Buchenwald concentration camp, Marcel Dassault (formerly Marcel Bloch) began work on his first successful jet fighter, the *Ouragan* (Hurricane). The *Ouragan*, built around the Rolls-Royce Nene engine, was a success, with 468 examples being produced for France, India and Israel.

Next came the *Mystere* (Mystery), a swept wing derivative of the original straight-wing *Ouragan*. Orders for production of the Dassault *Mystere* IV began in 1953. The *Super Mystere* was the ultimate design evolved from the original *Ouragan* concept, and it was the first western European production aircraft to achieve supersonic speed in level flight.



Israeli aircrew from No. 101 Squadronman their *Mystere* IVs. During the 1956 Suez conflict, this unit claimed four MIG-15 kills against no losses.

The American equivalents to the *Ouragan*, *Mystere* IV, and *Super Mystere* would be the F-80, F-86, and F-100. These aircraft had similar airframe layouts, operational roles, and chronological development in their respective countries. All three of the Dassault aircraft, plus the *Mirage* IIIC, were in Israeli inventory during the 1967 Six-day War. France eventually imposed an embargo on selling fighters to Israel in deference to their Arab oil suppliers.

The subject of this model project is the limited run *Mystere* IV kit made by the French company *Hi Tech*. The kit appears in the box as a challenging multi-media conglomeration that properly represents the lines of the *Mystere* IV in 1:48 scale. I bought the kit from an Israeli vendor at Scale Model World 2000. The sale price included a copy of the nicely illustrated IPMS/Israel magazine, which featured the *Mystere* IV. My lack of knowledge regarding the Hebrew language was not an impediment to viewing the photos and technical illustrations.

The Israeli Air Force had three basic color schemes for the *Mystere* IV. The delivery scheame was bare metal. The first top surface camouflage standardized by the IAF up to the late 1960s was dark blue-gray RAL5008 and yellow-tan FS30215. The IAF subsequently switched to the familiar green, tan, and brown camouflage. The later scheme was chosen for this model.

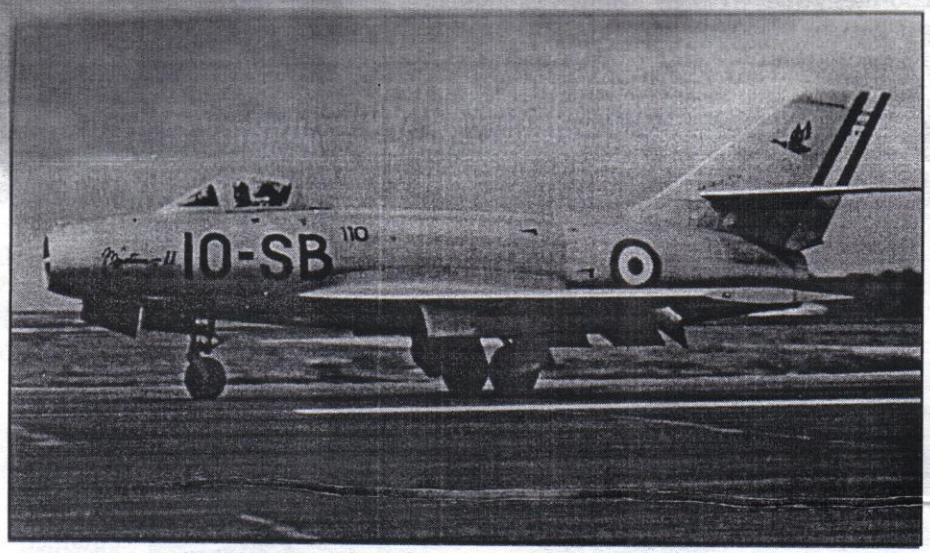
The *Hi Tech* kit depicts an early variant of the *Mystere*. The key differentiating external feature is that late variant used stabilators, which replaced the earlier conventional horizontal stabilizers.

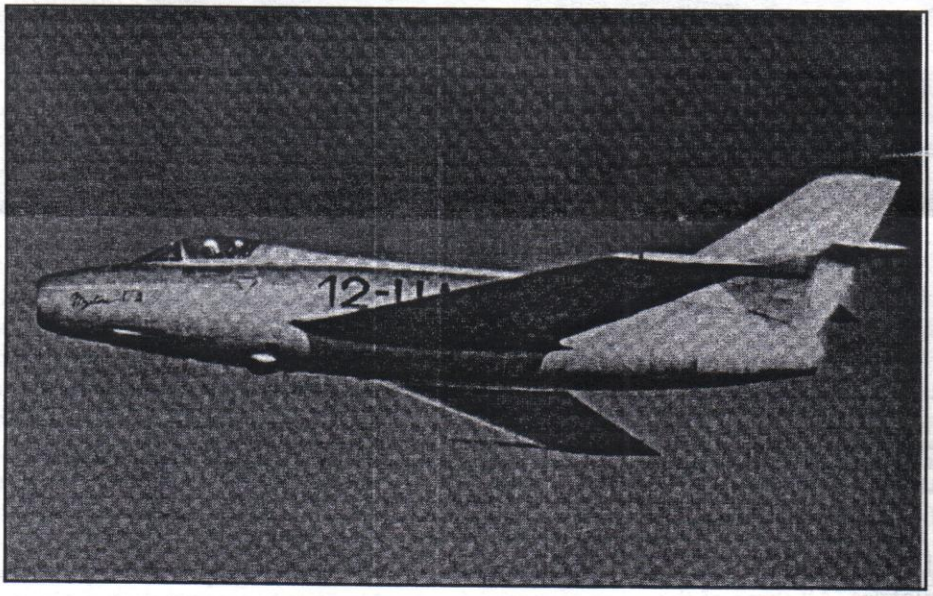
The kit supplies a resin casting comprising the cockpit tub combined with the intake faring and nose wheel well. This had to be aligned carefully to sandwich between the fuselage halves. The photoetched instrument panel had holes for the instruments but did not have the acetate film, as you might see in a set by *Eduard*. Instruments were added from my scrap heap.

It appears that soft polystyrene low-pressure injection molding was used for this kit. This is not an unusual practice for subjects with limited production runs. The quality of the molded surfaces in limited run kits is usually inferior to the mainstream kits, which use high-pressure hard production molds. This kit has the expected defects such as pebbly surface texture, pits, voids, etc. Superglue was dabbed into each pinhole pit and then the pebble texture was sanded smooth.

There were no locator pins for aligning the fuselage and resin interior, and there were only butt joints for the wing root and stabliators. The most difficult phase of the project was adding the wings. I chose to use a thin stock of sheet tin to act as the main wing spar. This tin was cut so that it could be embedded between the wing top and bottom on one side, and extend through the fuselage, and then be sandwiched between the wing top and bottom on the other side of the fuselage. This whole mess was held together with super glue.

The problem with using sheet tin to reinforce the butt joint was not evident until weeks after I finished the model. A



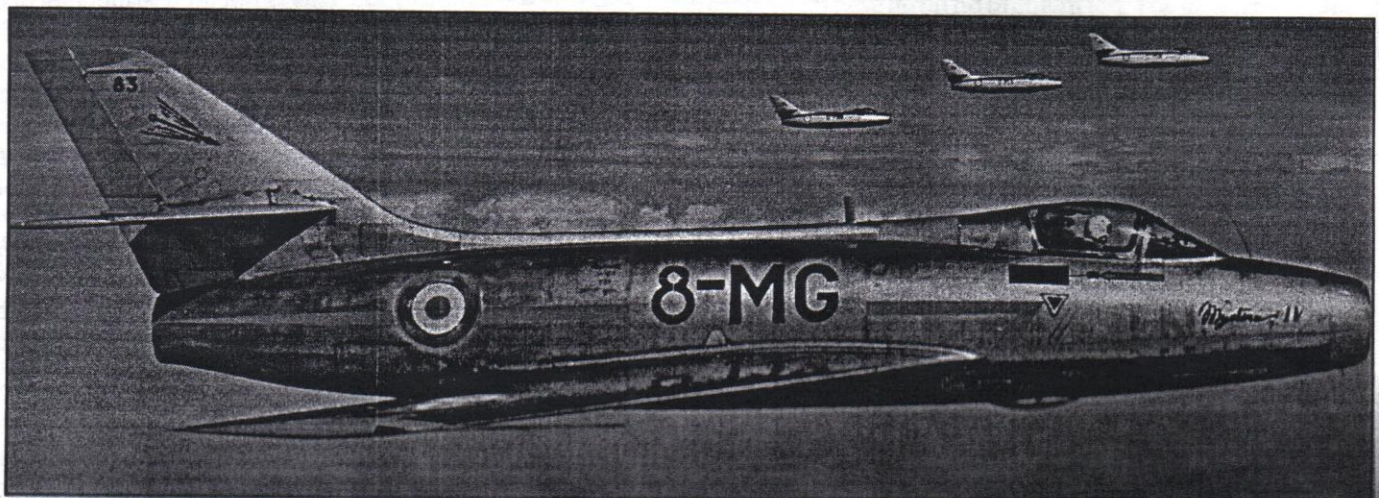


and the polystyrene parts. I wasn't happy with the model until I finally learned how to permanently resolve the crack issue by using thin acetate film at the wing root. Superglue was used to attach the film and the edges were blended in with light sanding. This spot on the model was then repainted. Joy ensued.

The stabilators were resin, but also had extensive surface defects. I had to fill in the panel lines at the back of the stabilators with super glue and re-scribe the panel lines. The reason is because I chose to model the later version of the *Mystere* IV, which had variable incidence moveable horizontal tailplanes (stabliators). The kit provided conventional fixed horizontal stabilizers, which were only used on the earliest production *Mystere* IV. Brass pins were inserted and used to brace and align the stabilators to the fin, with good results. I might have avoided a headache if I also used such pins in the wing root, instead of sheet tin.

The kit provides the landing gear and other fiddly bits cast in white metal. Some of the bits are not fiddly enough and I used some brass to replace a few actuators crudely represented in white metal. The nose gear is exceptionally soft and bends much too easily to support the weight of the finished model. I drilled a small diameter hole through the centerline of the gear starting at the oleo, then inserted a brass rod to provide some semblance of strength. The section of gear below the oleo was reinforced slightly with a thin coating of low viscosity superglue.

The torque links are provided in the kit as photoetched detail. A landing light was added to the nose wheel strut and wingtip navigation lights were



***Mystere* IVs in French colors. The French flew 225 *Mystere* IVs, and the aircraft equipped the aerobatic team Patrouille de France for a time.**

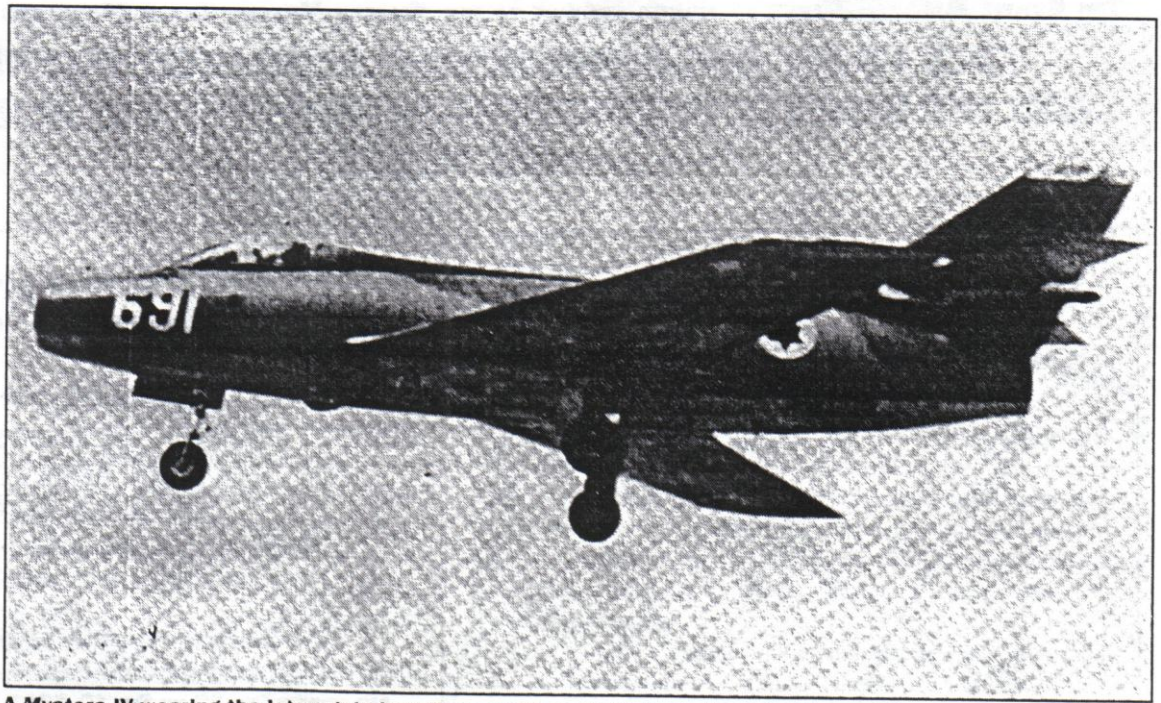
A *Mystere* IVA awaits takeoff clearance. Note the position of the landing light in the intake and the nose-high sit of the aircraft.

added using tinted clear plastic.

The resin wheels were nicely done in resin, and the resin ejection seat was suitably detailed with some photo etch belts, which are also provided in the kit. The main wheel wells were cast in resin, but lacked the extensive detail seen in typical after market resin castings. There was difficulty in fitting this to the fuselage.

I tried using *Floquil* clear flat as the final coat, but found it too susceptible to fingerprints. The *Floquil* is receptive to light sanding and polishing with toothpaste. This allows me to eliminate any remaining surface imperfections without spoiling the underlying decals and *Gunze* paint. *Model Master* flat clear lacquer was then sprayed on top of the *Floquil* as a hard-shell sealant with a flat sheen.

There are many aircraft such as the *Mystere* IV, which are not adequately represented by model companies. It is always welcome for any short run company to fill the void. I must say that there would be no better opportunity for me to build this subject in 1:48 scale if *Hi Tech* had not produced this kit. So, my hat is off to the *Hi Tech* company. Still, this kit is suitable only for experienced modelers and is compelling only for those who have slightly masochistic modeling tendencies. This experience is not much different from tackling some other limited run kit projects.



A *Mystere* IV wearing the later-style Israeli camouflage that Frank chose for his model.

Silicon Valley Scale Modelers Present their Tenth Annual

KICKOFF CLASSIC MODEL CONTEST

Sunday, February 16

Napredak Hall, 770 Montague Expwy.

Milpitas, Ca.

THIS YEAR'S THEME: THAT '70S CONTEST

46 Categories, plus Special Awards Including

Best 1970s Subject • Arlie Charter Memorial Award—Best USAAC Subject, Pacific Theater
Best Pioneer of Flight • Ayrton Senna Memorial Award—Best Competition Automobile
Mike Williams Memorial Award—Best Sci-Fi, Fantasy or Real Space Subject • Best Muscle Car
Best Vacuform • Ted Kauffman Memorial Award—Judges' Best of Show (Senior)
Best Air Racer • Bill Magnie Memorial Award—Judges' Best of Show (Junior/Youth)
Best Arab-Israeli Wars Subject • Best Tank Destroyer
Silk Purse Award-Best Model from the Worst Kit
Tim Curtis Award—Given to honor service to the Silicon Valley Scale Modelers IPMS chapter

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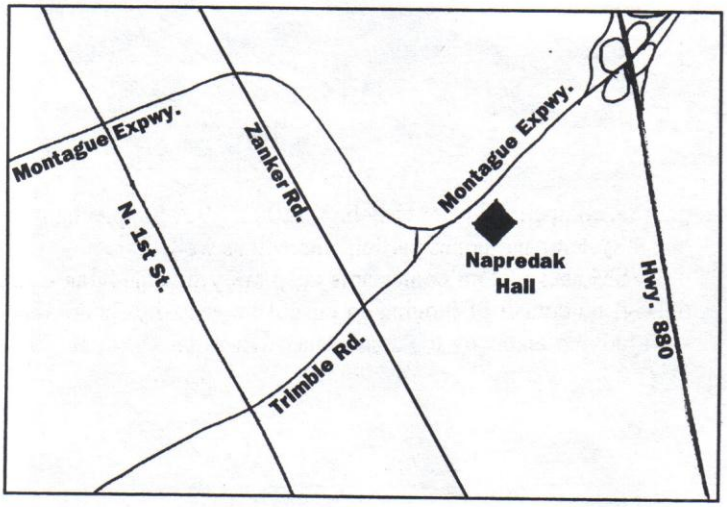

FOR MORE INFORMATION,
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VENDOR CONTACT:
CONTACT JIM PRIETE, WEEKDAYS BETWEEN 9 A.M. AND 3:30 P.M. AT
(925) 323-1845

VENDOR TABLES ARE LIMITED IN NUMBER AND AVAILABLE ON A FIRST PAID FIRST SERVED BASIS.

CALIFORNIA RESALE/TAX PERMIT REQUIRED BY FEB. 16.
TABLES ARE $50 EACH IF PAID BEFORE DECEMBER 20, 2002; $55 EACH IF PAID BETWEEN DEC. 20 AND FEB. 10, 2003; $60 DAY OF EVENT (IF AVAILABLE)

Senior (18+ Years)

S1. Single Engine Jet or Rocket Aircraft, 1:72
S2. Multi-Engine Jet Aircraft, 1:72
S3. Single-Engine Prop or Turbo-Prop Aircraft, 1:72
S4. Multi-Engine Prop or Turbo-Prop Aircraft, 1:72
S5. Single-Engine Jet or Rocket Aircraft, 1:48
S6. Multi-Engine Jet Aircraft, 1:48
S7. Single-Engine Prop or Turbo-Prop Aircraft, Allied, 1:48
S8. Single-Engine Prop or Turbo-Prop Aircraft, Axis and Neutrals, 1:48
S9. Multi-Engine Prop or Turbo-Prop Aircraft, 1:48
S10. Jet and Rocket Aircraft, 1:32 and larger
S11. Prop Aircraft, 1:32 and larger
S12. Biplanes/Fabric & Rigging, all scales
S13. Rotary Wing Aircraft, all scales
S14. Civil, Sport and Racing Aircraft, all scales
S15. Jet, Prop and Rocket Aircraft, 1:144 and smaller
S16. Military Vehicles, Softskin, 1:35 and larger
S17. Armored Fighting Vehicles, Closed-Top, to 1945, 1:35 and larger
S18. Armored Fighting Vehicles, Closed-Top, post 1945, 1:35 and larger
S19. Armored Fighting Vehicles, Open-Top, 1:35 and larger
S20. Towed Artillery and Ancillary Vehicles, 1:35 and larger
S21. Military Vehicles, all types, 1:48 and smaller
S22. Ships, 1:400 and larger
S23. Ships, 1:401 and smaller
S24. Automobiles, Stock, all scales
S25. Automobiles, Custom (Other than Low-Rider style) all scales
S26. Automobiles, Competition, Open-Wheel, all scales
S27. Automobiles, Competition, Closed-Wheel, all scales
S28. Automobiles, Specifically Styled as Low Rider , all scales
S29. Space Vehicles, Fictional (Science Fiction or Fantasy), all scales and types
S30. Space Vehicles, Real, and Missiles, all scales and types
S31. Figures, Historical, all scales
S32. Figures, Fantasy and Fiction, all scales
S33. Out of the Box, all types and scales
S34. Dioramas, all types and scales
S35. Hypothetical Vehicles, all types and scales
S36. Miscellaneous
S37. Collections, all types and scales

Junior (13-17 Years)

J1. Aircraft
J2. Military Vehicles
J3. Automobiles
J4. Dinosaurs and Figures
J5. Miscellaneous

Youth (12 and Under)

SJ1. Aircraft
SJ2. Military Vehicles and Ships
SJ3. Automobiles
SJ4. Miscellaneous

Special Awards

SA1. Ted Kauffman Memorial Award—Judges' Best of Show (Senior)
SA2. Bill Magnie Memorial Award—Judges' Best of Show (Junior/Youth)
SA3. Arlie Charter Memorial Award—Best U.S. Army Air Corps Subject, Pacific Theater
SA4. Ayrton Senna Memorial Award—Best Competition Automobile
SA5. Mike Williams Memorial Award—Best Science Fiction, Fantasy or Real Space Subject
SA6. Best 1970s Subject
SA7. Best Arab-Israeli Wars Subject
SA8. Best Pioneer of Flight
SA9. Best Muscle Car
SA10. Best Vacuform
SA11. Best Tank Destroyer
SA12. Silk Purse Award—Best model from the worst kit
SA13. Best Air Racer
SA 14. Tim Curtis Award—Given to honor service to the Silicon Valley Scale Modelers IPMS chapter

Schedule of Events

9 a.m.-noon—Registration; Contest Opens
11:45—Judges' Meeting
12:00-3 p.m.—Judging
4:15 p.m.—Awards Presentation

Fees

Seniors: $5 Registration, $1 per model entered
Juniors: $1 Registration, .50 per model entered
Spectators: Free

General Rules:

1. IPMS/USA rules and criteria will be used for this contest. However, no model may be handled by the judges. Model placement will be handled by the builder. SVSM invites members of other chapters to participate by joining our judging teams.
2. The contest director will make the final ruling on all disputes during the contest and may split or combine categories based on the number and nature of the entries.
3. No model that has won an award at an IPMS National contest is eligible, nor are any models that were first enetered in any Region IX competition prior to Feb. 27, 2002. SVSM appreciates the honor system, and hopes participants will as well.
4. SVSM asks that all contestants keep away from judging teams during the course of judging to ensure impartiality. Interference with judging teams by the contestants will be handled per IPMS/USA rules, and could render the offenders' models ineligible for award consideration.
5. All work done on model entries must be done by the entrant.
6. All contestants must have fun—otherwise, they aren't doing this right!

The lowdown on building *Trumpeter's* S-Tank

Continued from page 1

of decals. The instructions are well illustrated with limited Chinese/English text. The overall quality of the moldings is not quite up to the high standards of the latest *Tamiya* or *Academy* kits, but it is still very good and quite buildable. Some of the more complex parts show the use of sliding block molds—a nice touch. There are no figures or interior detail included in the kit, but for those who want to add both of those items all of the crew hatches are molded separately.

Following the instructions, the road wheels, return rollers, and drive sprockets were assembled. The lower hull assembly was done next, although the road wheels were left off until the hull was painted later. Make sure that the road wheel suspension arms (parts A13 and A14) are aligned and level with each other. Otherwise, the model may sit a bit crooked.

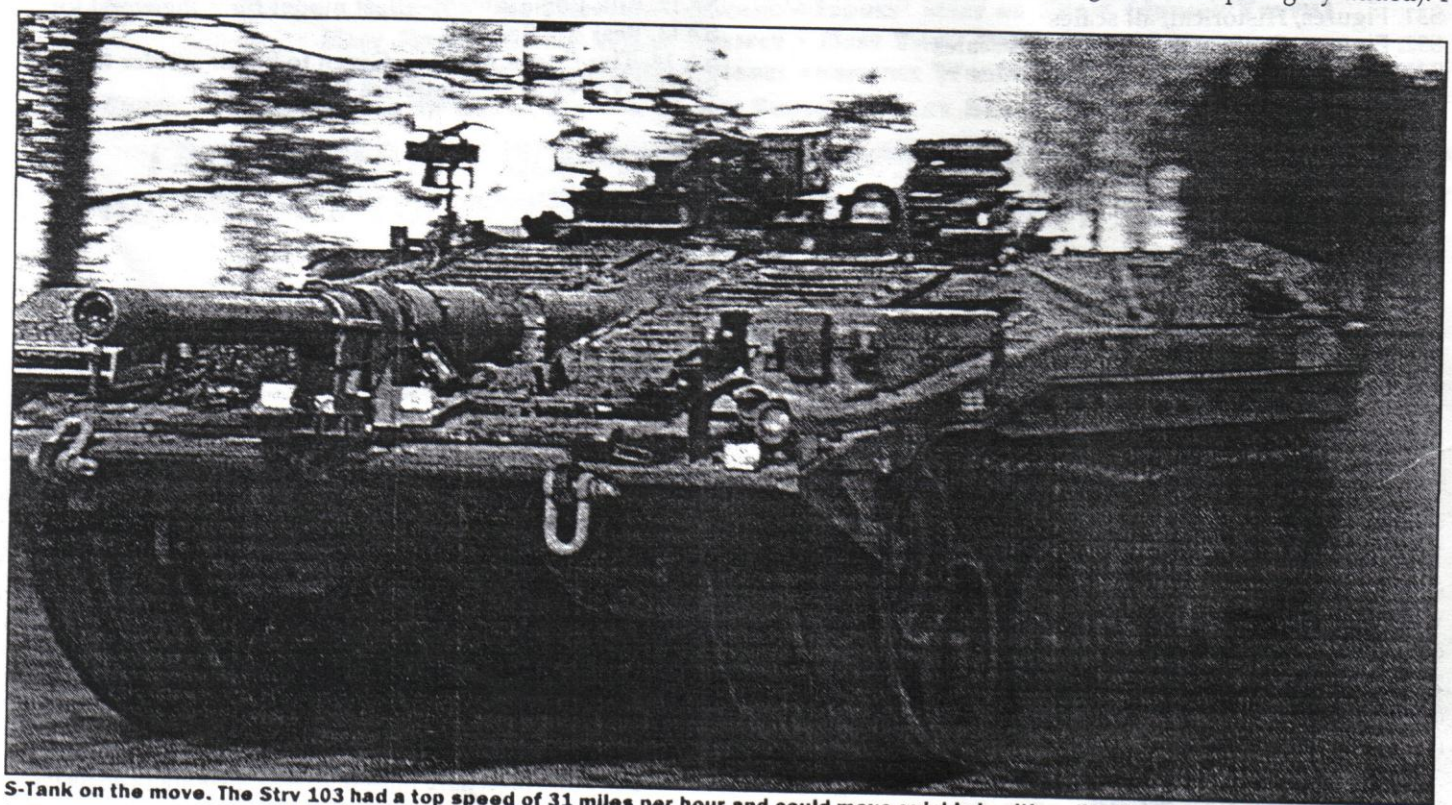
It would be fairly easy to cut the alignment tabs off of the suspension arm to hull joints and position them to make a model in the tilted position, but I didn't do this here.

The next step was the upper hull construction. If you want to have the front dozer blade in a down position, make sure you do not glue parts B33 to the upper hull—these are the dozer blade support struts. The blade was manually operated on the real item, by the way. I found that the holes for the various grab handles (parts C39, C40, C41, and C42) were too large. I glued the handles in place and filled the gaps around the mounting points with PVA glue. I also substituted many of the handles with bent wire as the kit parts had a bit of a seam on them that would be difficult to clean up.

The driver and commander's main sights were left off until after painting, as they had a large "glass" area that would have been oversprayed in painting. The smaller sight blocks were glued on, however, since their glass area could be painted on later. I found that on these parts and a few others, the mounting holes were either too big or too small. I cut off the mounting pegs and just eyeballed the alignment on those parts. Another tricky part was attaching the shovels (parts A1); a bit of fiddling is needed here to get them to fit in. There are supposed to be three shovels mounted, but that is nearly impossible to do, and two will do. I also managed to lose the tail lamp units when cutting them off of the sprue and had to scratchbuild new ones out of plastic rod—this is certainly not Trumpeter's fault. The only other problem is that the headlamps stick out a little too much from the headlamp guards. A bit of test fitting and modification of the mounts would prevent this, but I found this out too late. I should make the point that the upper hull construction was actually quick and easy; just don't expect the laser precise fit of a new Tamiya kit however. One more point: I drilled out the ends of what I assume are bilge pump hoses (parts A5 and A6) for realism.

The upper and lower hulls were joined together. There is a seam at the rear of the hull that must be filled with putty after this join, but otherwise the fit between the parts is good. I also used a bit of putty on the rear stowage bin seams and the dozer blade. The fit of these assemblies onto the hull is a bit touchy—dry test-fitting should be done here for sure.

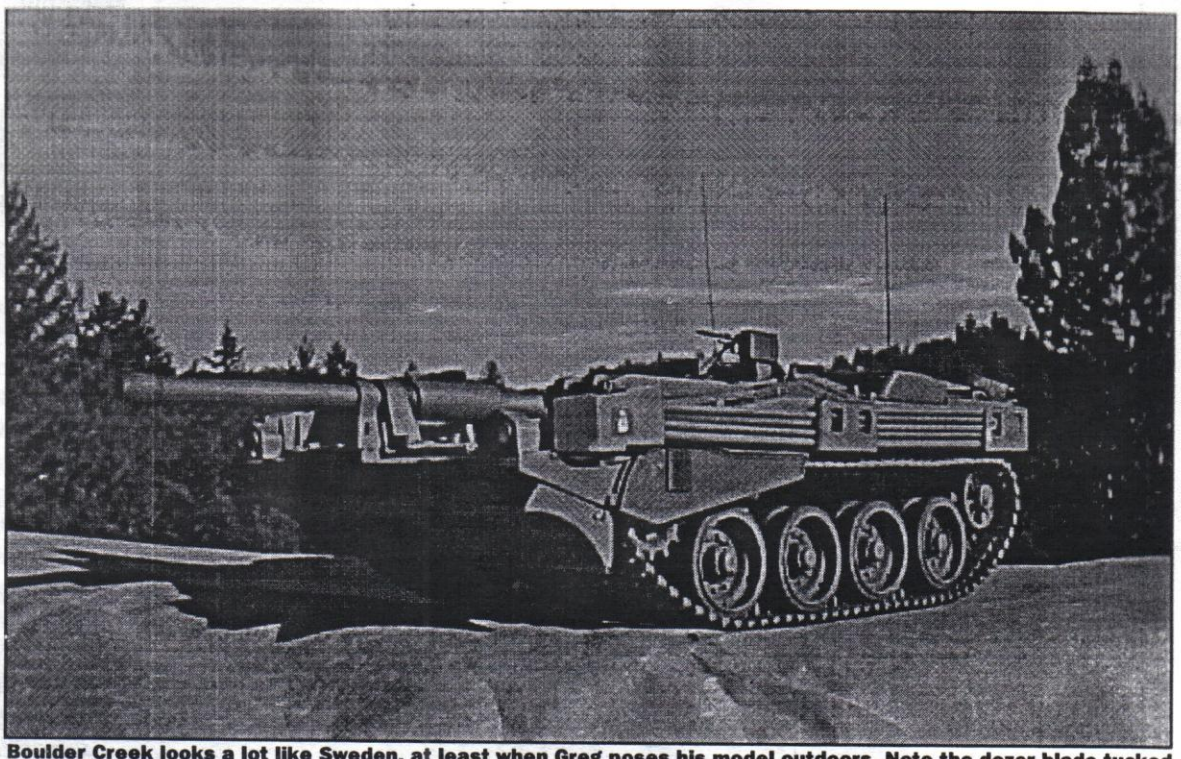
At this point, the model was ready for painting. The instructions call for RLM02 gray for the overall color. This is much too pale. I used *Testors* Marine Corps Green (FS 34052) as it seemed to be a good match for the grayish olive green seen in photos of the 103B. I painted the model overall with this green, and then sprayed the lower hull in a darker hue (Marine Corps Green with a bit of black) and the upper hull in a lighter shade (the same green with pale gray added). I



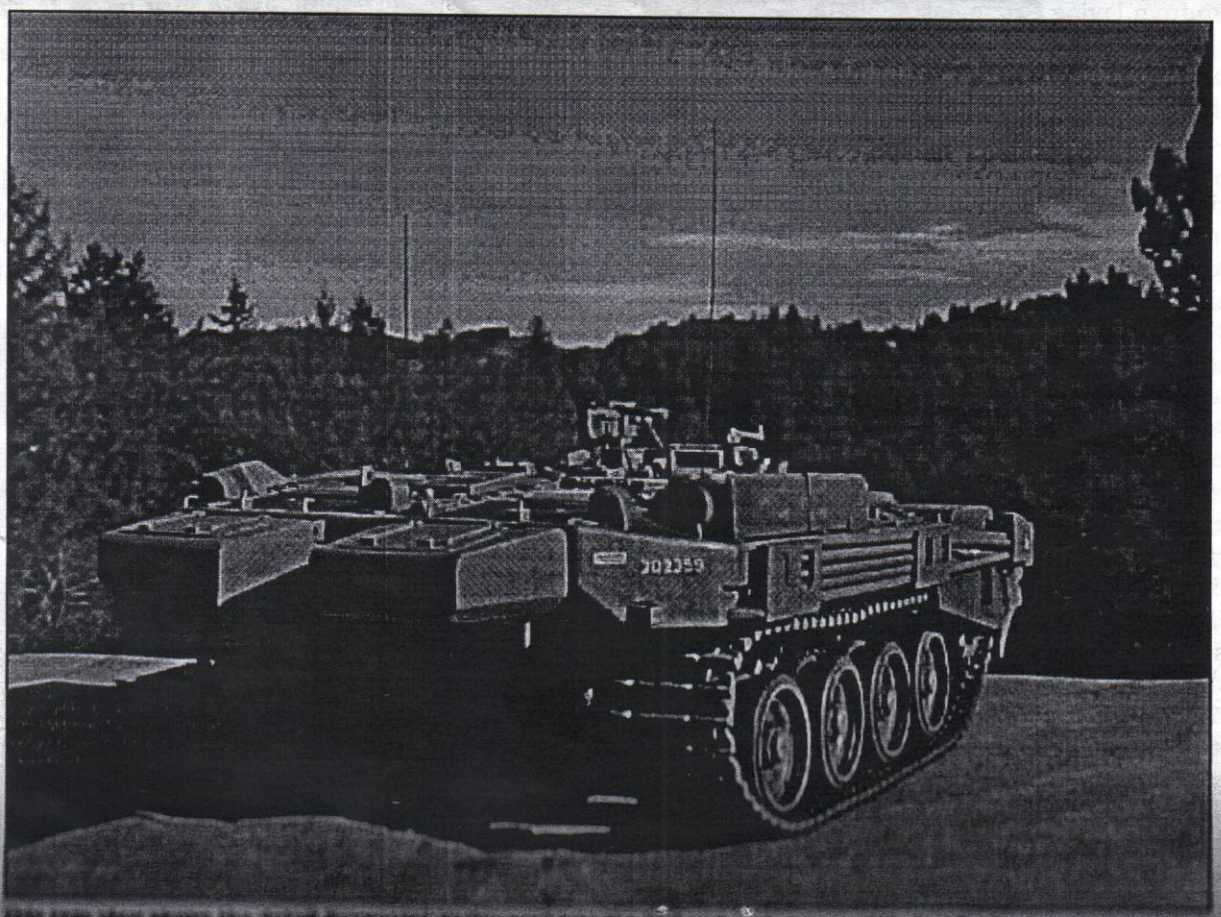
S-Tank on the move. The Strv 103 had a top speed of 31 miles per hour and could move quickly in either direction, thanks to a second driver in the rear.

simply airbrush downwards over the model with the lighter shade and upwards with the dark shade—it works fairly well to add an artificial shadow, which models need, especially indoors with less than bright lighting. The wheels were also painted separately at this time.

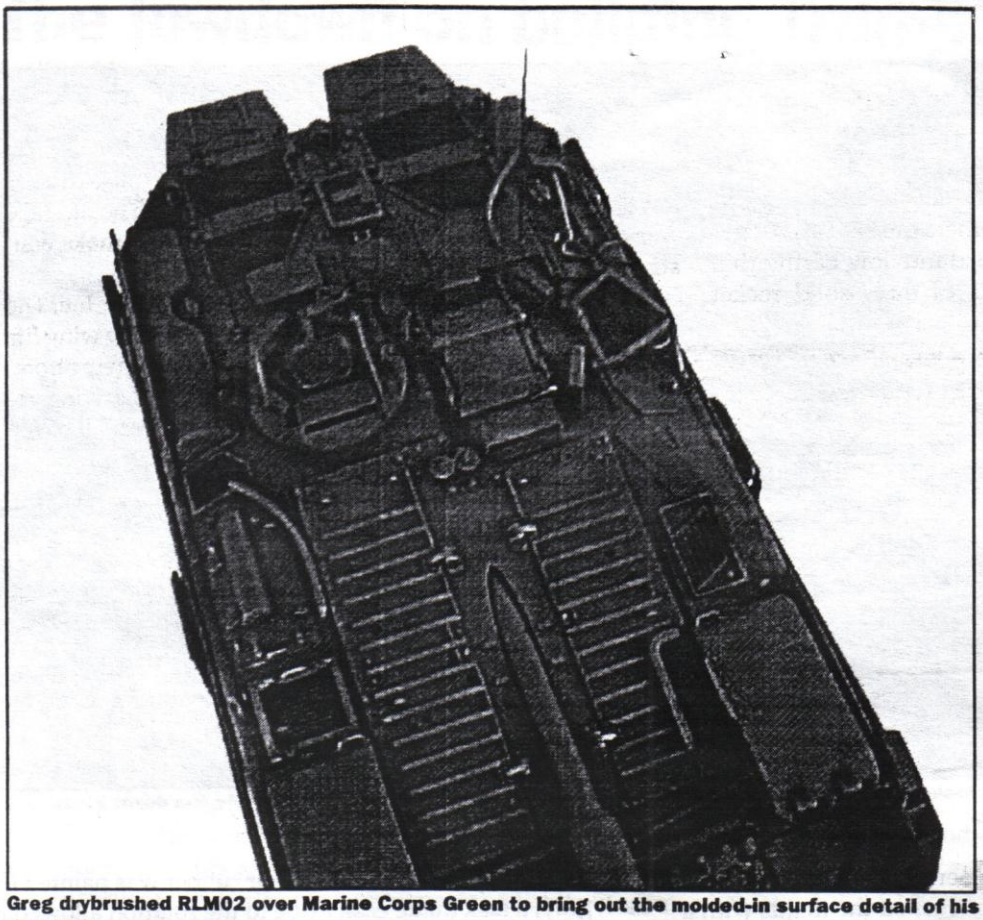
The multiple grills and a few other details were washed with a mix of *Tamiya* acrylic black and rubbing alcohol, and then I drybrushed the top and sides of the model with Testors RLM02, which turned out to be a perfect highlight color for the Marine Corps Green. I also airbrushed the treads with a mix of silver, black, and rust paint thinned with lacquer thinner so that it would dry on the vinyl parts. The road wheels were then attached and their rubber was painted in a dark gray, a task made easier due to the rotation allowed by their poly caps. I then attached the treads with the drive sprockets; the sprockets and idler wheels are fixed on the hull unlike the road wheels. This design actually worked very well, as the front and rear of the treads were held in good alignment. The tread tops were glued to the return wheels with a bit of clear epoxy—the tread top should sag just a bit according to the pictures I've seen, though I didn't manage to replicate this too well with the stiff kit tracks. Aftermarket individual track links, anyone?



Boulder Creek looks a lot like Sweden, at least when Greg poses his model outdoors. Note the dozer blade tucked under the bow.



I found that the front skirts, parts C49 and



Greg drybrushed RLM02 over Marine Corps Green to bring out the molded-in surface detail of his Strv 103.

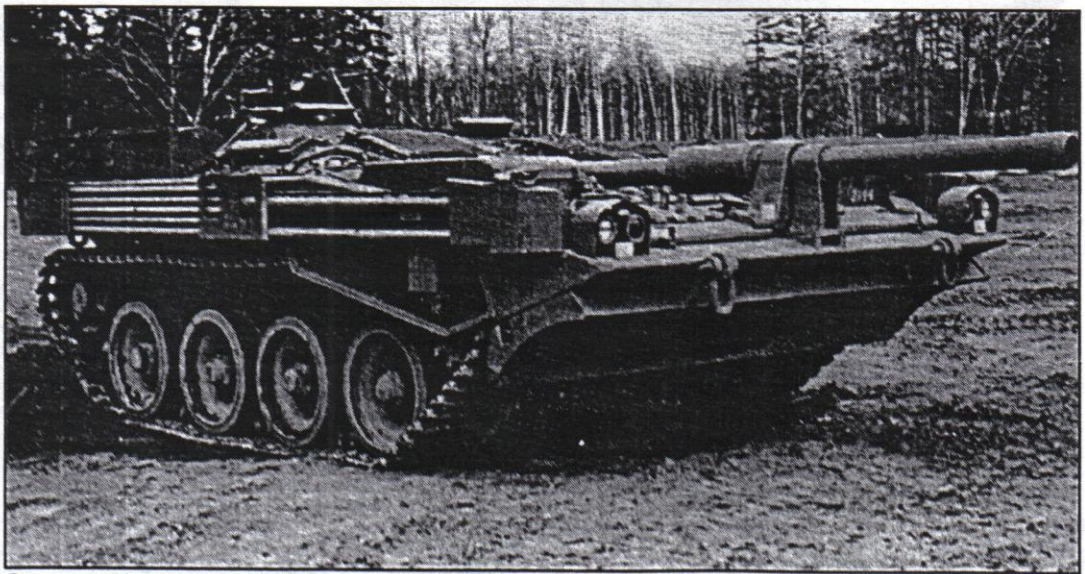
C50, would not fit properly because the tread stuck out and prevented them from laying flat against the hull mounting points. With a Dremel tool, I ground down the backs of these parts in the tread contact areas to allow them to fit. They're pretty thick so there's no worry about grinding through them. The photos I've seen also show that these skirts are darker in color than the rest of the tank, so I painted them in a mix of black and Marine Green. The lights were also painted at this time in their respective colors, including clear red over a steel color for the tail lamps.

The kit decals were thin and very brittle. Some of the markings on the model had to be made by putting back together two or three chunks of decal to re-form the whole piece. Not fun, but fortunately the 103s had very little in the way of markings. I found it was important not to bend the decals, as this seemed to cause them to break up. I also used a bit of Future to adhere the decals as they didn't seem to want to stick very well.

After the decals were dry, I added the fording screen poles, oddly refereed to in the instructions as the "discreteness assembly." The poles were cleaned up and each one was painted in a slightly different shade of green to add visual interest. This was a real chore but it adds a lot to the model. The poles were simply stacked into the holders already mounted on the hull. Now the model was given a spray of Dullcote and a very light "dusting" via a mix of Future, *Tamiya* flat clear, and a bit of acrylic tan paint. The Swedes appear to have maintained their vehicles very well, so I avoided excessive weathering. The vision block glass sections were painted in a gloss black, and the driver and commander's main sights were now added.

Final touches include a pair of stretched sprue antennas made as per the kit instructions, and airbrushed dark gray stains on the diesel and gas turbine exhaust ports. I also added the commander's machine gun, painted in Testors gun metal with drybrushed steel highlights. I plan to add a camo net over the front of the vehicle, as the Swedes seemed to be really into "organic" camo, especially on the C model S-tanks. In some of the photos I've seen, the tanks look like a rolling herb garden. If tree branches could stop 120mm rounds, these things would be unbeatable.

As it stands, the model looks good largely due to its unique shape. I'm pleased with the results, especially considering it's almost all out of the box and the build was quick and painless despite the minor fit problems. An open hatch and a figure or two would add a lot; I think the aftermarket makers will soon come out with accessories for this kit as it seems to be popular.



Compare this photo to the pictures of Greg's model for an idea of how faithfully the *Trumpeter* kit captures the Strv 103.

Little launch vehicle: *Pegasus* in 1:144

By Vince Kaufmann

Orbital Sciences Corporation (OSC) developed the *Pegasus* launch vehicle to provide their customers the lowest cost per pound to place a 1,000-pound payload into low Earth orbit. The *Pegasus* launch vehicle consists of three solid rocket motor stages, with a wing and fins for lift and attitude control of the first stage and gimbaled rocket nozzles on the second and third stages. The vehicle is carried aloft horizontally and dropped from a carrier aircraft at approximately 40,000 feet and .8 Mach. Upon motor ignition, the vehicle accelerates to a velocity of 8,300 feet per second (8.3 Mach) and performs a 2.5 g positive pull up to the correct trajectory angle. The second and third stages are then fired sequentially to place the payload into orbit.

The kit, produced by *Cutting Edge Modelworks*, consists of seven very nicely cast resin parts and a single page instruction sheet. No decals are provided. The kit cost $17.99 from Meteor Productions.

Accuracy of the kit is good, although some panel lines were omitted from the forward parts of the rocket, and there is no engine detail. The wing shape is good as is the wing boot. The only problem I found with the kit are the tail fins. They all appear to have been carved individually and none exactly match the others, and the surface texture of the fins is a bit rough. All of the parts were still attached to their pour lugs, which with the aid of a razor saw are easy to remove.

Vince's finished *Pegasus* belies the fact that it comes from such a simple kit. The *Cutting Edge* kit has only seven parts.

Assembly was fairly straightforward. The parts were removed from the pour lugs and sanded. The rough textures on the tail fins were sanded and some fine cuts with the X-Acto brought each fin closer in appearance to each other. I drilled out the engine with a countersink bit, then used a 1/8" bit to make the hole for the mounting wire. The fuselage was then temporarily glued to a wood dowel to make construction and painting easier.

The wing was attached to the fuselage with superglue. The lower surface of the wing fits very nicely to the wing boot, but the top of the wing requires putty to get all of the angles to conform properly. Bondo glazing putty was used for this to very good effect.

After the wing putty had dried, the tail fin locations were measured and marked with a pencil. The tail fins were then securely glued in place.

The model is painted in flat white *Gunze Sangyo* acrylic paint. An airbrush is used to apply the paint in three light coats, with the final coat being "wet" with 60 percent isopropyl alcohol. This final wet coat creates a very smooth surface finish as opposed to the grainy appearance flat paints tend to leave. The only surface detailing are finely scribed lines around the circumference at each stage or connector section. These were drawn with a .003 black pen, with two of the rings hand painted with chrome silver. *Bare Metal Foil* is used for the silver panel on top of the wing.

I spent a total of 12 hours building and painting this kit, with most of the time going into carefully puttying the wing root and painting the model. I am very satisfied with this kit overall, but it would be nice to have some decals. My local hobby shop did not have an L-1011 kit in stock, so a test fit of the pylon was not possible. The rocket fits quite nicely into the pylon and I don't imagine the modeler will have trouble attaching it to the aircraft.

I purchased a second kit for a future conversion to the *Pegasus*/X-43 combination. I'm looking foreword to that!

DECEMBER MINUTES

December's meeting was devoted to our annual gift exchange, which went a little something like this:

Monogram 1:48 Ta 154 *Moskito*: Opened by Postoria Aguirre, stolen by Cliff Kranz, stolen by Tom Harrison, stolen and taken home by Pete Wong.

Tamiya 1:48 F4U-1 *Corsair*: Opened by Frank Babbitt: stolen by Jim Priete, stolen by Cooper Sutherland, stolen and taken home by Ben Pada.

Tamiya 1:48 Fw 190D-9 and P-51D *Mustang*: Opened by Anita Travis, stolen by Braulio Escoto, stolen by Postoria Aguirre, stolen and taken home by Frank Beltran.

Siga 1:72 FJ-1 *Fury* and *Sword* 1:72 Fairchild 91: Opened by Gabriel Lee, stolen by Jim Lewis, stolen by Brian Sakai, stolen and taken home by Bill Ferrante.

Tamiya 1:48 P-51D *Mustang*: Opened by Barry Bauer, stolen and taken home by Brad Chun.

Academy 1:32 Nieuport 17: Opened by Gabriel Lee, stolen and taken home by Bill Bauer.

Monogram 1:48 F-86D *Sabre*: Opened by Braulio Escoto, stolen by Postoria Aguirre, stolen by Keiko Wright, stolen and taken home by Laramie Wright.

HiPM 1:48 MiG-19: Opened by Robin Powell, stolen by Bill Abbott, stolen back and taken home by Robin Powell.

Tamiya 1:35 88 Flak 36/37: Opened by Roy Sutherland, stolen and taken home by Jim Lewis.

Monogram 1:48 Bf 110: Opened by Jim Lewis, stolen and taken home by Tom Trankle.

Accurate Miniatures 1:48 P-51A *Mustang*: Opened by Gabriel Lee, stolen and taken home by Anita Travis.

Bandai Gundam and *Sweet* 1:144 Macchi 202: Opened by Anita Travis, stolen by Cooper Sutherland, stolen by Michael Hernandez, stolen and taken home by Jim Priete.

Tamiya 1:35 Panzer IV: Opened by Gabriel Lee, stolen and taken home by Hubert Chan.

Italeri 1:35 Panzerjager I: Opened by Anita Travis, stolen and taken home by Roy Sutherland.

Hasegawa 1:72 *Mosquito* IV: Opened by Mike Meek, stolen by Eric McClure, stolen and taken home by Keiko Wright.

Hasegawa 1:72 *Harrier* GR.5: Opened and taken home by Jim Lund.

Italeri 1:35 LAV-25 Piranha: Opened by Gabriel Lee, stolen and taken home by Mark Schynert.

Hasegawa 1:32 Bf 109G: Opened by Frank Beltran, stolen by Mark Hernandez, stolen by Mark Schynert, stolen and taken home by Braulio Escoto.

Monogram 1:48 He 111: Opened by Jim Lewis, stolen and taken home by Andrew Haas.

Hasegawa 1:48 Bf 109E-4 Trop: Opened and taken home by Tom Harrison.

Revell 1:48 F-84E *Thunderjet*: Opened and taken home by John Heck.

Trumpeter 1:35 S-Tank: Opened by Eric McClure, stolen by Ron Wergin, stolen by Jim Lewis, stolen ad taken home by Chris Hughes.

Hasegawa 1:48 Ki-61: Opened by Brad Chun, stolen and taken home by Kent McClure.

Skywave 1:700 *Sovremny*: Opened by Brian Sakai, stolen and taken home by Vladimir Yakubov.

Academy 1:72 SR-71: Opened and taken home by Postoria Aguirre.

DML 1:72 Ar 234B: Opened by Tom Harrison, stolen and taken home by Chris Bucholtz.

Mini Hobby 1:350 *Scharnhorst* with brass details: Opened by Vladimir Yakubov, stolen and taken home by Barry Bauer.

Frog 1:72 SR.52 and deHavilland *Hornet*: Opened and taken home by Gabriel Lee.

Italeri 1:72 RAH-66 *Commanche*: Opened by Jim Lund, stolen and taken home by Michael Hernandez.

Tamiya 1:48 *Sea Harrier*: Opened and taken home by Greg Lamb.

Tamiya 1:72 F4D-1 *Skyray*: Opened by Chris Bucholtz, stolen by Jim Lewis, stolen and taken home by Bill Abbott.

Italeri 1:72 YF-22 and *Italeri* 1:48 YF-22: Opened and taken home by Cliff Kranz.

Hobbycraft CF-100 *Canuck* Mk. IV with *Obscureco* interior: Opened by Keiko Wright, stolen by Jim Lund, stolen by John Knopf, stolen and taken home by Randy Ray.

Testors 1:35 Leopard II: Opened by Braulio Escoto, stolen by Jim Lewis, stolen by Chris Hughes, stolen and taken home by Ron Wergin.

Airfix 1:72 He 177 and *Airfix* 1:48 *Mosquito*: Opened by Jim Lewis, stolen and taken home by Ben Wergin.

Tamiya 1:35 Schimmewagen: Opened by Gabriel Lee, stolen and taken home by John Carr.

Tamiya 1:700 *King George V* with *Tom's Modelworks* brass details: Opened by Vladimir Yakubov, stolen by Brian Sakai, stolen by Robin Powell, stolen and taken home by Bert McDowell.

Revell 1:72 Arado E. 555: Opened by Braulio Escoto, stolen and taken home by Mark Hernandez.

Tamiya 1:72 F-84G *Thunderjet*: Opened by Greg Lamb, stolen by Eric McClure, stolen by John Knopf, stolen ad taken home by Eric McClure.

AMT Cutaway Starship *Enterprise*: Opened by Steve Travis, stolen and taken home by Ken Miller.

Monogram 1:48 Me 410B: Opened by Postoria Aguirre, stolen and taken home by Greg Plummer.

Testors Roswell UFO: Opened and taken home by Steve Travis.

Minicraft 1:144 *Constellation* and *Minicraft* 1:144 DC-6B: Opened by Bill Bauer, stolen by Ken Miller, stolen by Bill Abbott, stolen and taken home by John Knopf.

Hasegawa 1:48 F4U-5N *Corsair*: Opened by Tom Harrison, stolen by Ron Wergin, stolen by Cooper Sutherland, stolen and taken home by Mike Meek.

Revell 1:48 AH-64 *Apache*: Opened and taken home by Bradley Wong.

Eduard 1:144 Ju 52: Opened by Michael Hernandez, stolen by Ken Miller, stolen ad taken home by Brian Sakai.

Tamiya 1:48 Fw 190A-3: Opened and taken home by Frank Babbitt.

Two *Bandai* Gundams: Opened by Bill Bauer, stolen by Cooper Sutherland, stolen by Ben Wergin, stolen and taken home by Roy Sutherland.

Tamiya 1:48 Bf 109E: Opened by Robin Powell, stolen and taken home by Ron Wergin.

SVSM BOOKSHELF

The Hamilton Concise Guides:
British Aircraft of WWII
American Aircraft of WWII
Axis Aircraft of WWII
complied by David Mondey

These three guides have been around since the mid-1980s, but have been reprinted regularly. I picked up the 2002 printings recently and was very impressed.

If your interest is in WWII aircraft, it's always helpful to have books at hand that act as surveys of the most important aircraft. It's a great way to start your research, and will give some insight into types for which you probably aren't inclined to buy specific monographs. These books more than fill the bill for the listed subject areas, covering aircraft from the United States, Great Britain, Germany, Japan, Italy, Hungary and Czechoslovakia. Most of the types are illustrated by either a photo or a small 3-view drawing; the more important types may also rate a color 3-view or one or more color profiles. The text tends to be bland, and not always absolutely accurate, but it's certainly good enough in most cases, given that these are surveys.

What's truly amazing about these books, especially the American and British guides, is the very expansive definition applied to "major" aircraft. You certainly get *Spitfires* and *Blenheims* and *Lancasters* and *Sunderlands*, but also among the 113 types covered in the British volume are the Airspeed *Queen Wasp* (target drone, five built), Vickers *Windsor* (experimental heavy bomber, three flown), Gloster F.9/37 (experimental twin-engined fighter, two built), and Miles *Monitor* (twin-engined target tug, 20 built). Also included are a collection of interwar biplanes you won't find in most such works: *Vincent, Vildebeest, Gordon, Fox, Wapiti, Wallace, Nimrod, Osprey, Bulldog* and *Gauntlet*; a variety of light planes; and a number of types that did not see service at all beyond testing, such as the *Spiteful* and *Welkin*. In every such case, the detail is at least good, and sometimes superlative, given how difficult it can be to track down references on some of these types.

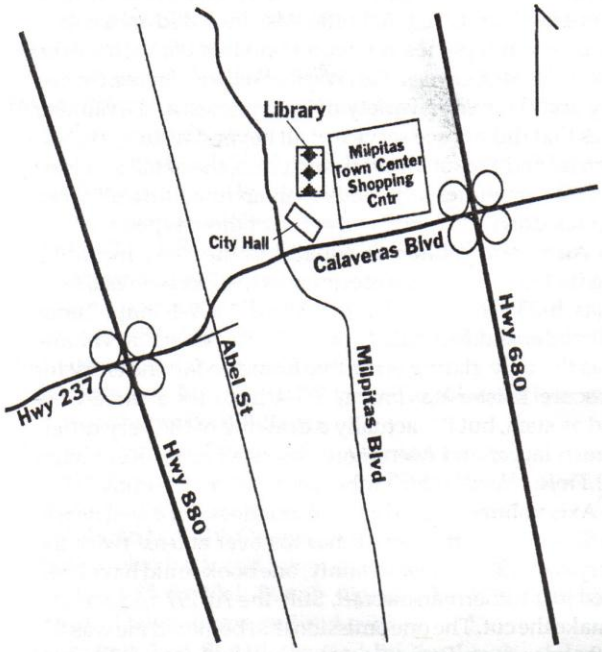
The American volume is equally impressive, including among its 133 entries such esoterica as the Fleetwings BT-12, Douglas B-23, St. Louis PT-15, Allied LRA-1 amphibious assault glider and Fairchild Model 45. The American volume also has the only glaring error I've found so far: the entry for the obscure Laister-Kaufmann TG-4 includes a three-view labeled as such, but it's actually a drawing of the very different, much larger and even more obscure Laister-Kaufmann CG-10 *Trojan Horse*, which otherwise isn't in the book.

The Axis volume is good as well, but does not dwell nearly as much on the exotic, since it has to cover at least twice the territory with 137 entries; certainly, one book could have been devoted just to German aircraft. Still, the Ar 197 and Kayaba Ka-1 make the cut. The one omission that bothered me was the IAR 80 series from Romania, which really belonged in this volume instead of either or both of the above choices, but that's a relatively small bone to pick.

The books cost me $10 each; they're well worth it.

—Mark Schynert

Back to Milpitas to start the new year...



Next meeting:

7:00 p.m., Friday, January 17

at the Milpitas Public Library

40 N. Milpitas Blvd.

For more information, call the editor at (408) 723-3995

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PM JAN 2003

DAN BUNTON
910 NIDO DRIVE
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It's January, thus it's time to pay your dues!