

FAMOUS ROBOT STALKS LOCAL MODEL BUILDERS WORK BENCH

BY CREEPY CHRIS BUCHOLTZ

Although you'd never know it from my steady stream of 1:72 airplanes, I was raised on a steady diet of science fiction by my father. The first model I ever built was the Aurora Godzilla. As much fun as the Japanese rubber-suit movies were, however, the film my dad always held up as the gold standard—the Shakespeare of film science fiction, as it were—was 1956's *Forbidden Planet*. The Shakespeare allusion is apt, since the movie was loosely adapted from "The Tempest."

In this film, which was remarkably literate for its time and genre, the United Planets ship C-74-D is sent to Altair 4, where 20 years before a prospecting team aboard the ship *Bellerophon* landed and then was lost from contact. Here's the first clue this movie was more than your usual matinee monster movie: in Greek mythology, *Bellerophon* was the hero who defeated the Chimera only to later plunge to his death trying to reach Mount Olympus, proving that humans cannot be gods.

The crew of C-74-D are initially warned away by Dr. Edward Morbius, but the crew, led by Cdr. Adams (Leslie Nielsen, before he discovered comedy) lands anyway. They are greeted by Robby the Robot, who speeds up and take Adams and two crewmen to see Morbius and his beautiful daughter Altaira. At Morbius' homestead, the crew is treated to a demonstration of Robby's abilities: he whips up a synthetic lunch,

and then is ordered to shoot Adams. Robby can't, because he seems to have read Isaac Asimov's *Laws of Robotics* and taken them to heart. Later, he makes 60 gallons of bourbon for the grateful crew.

Unfortunately, while Robby is the good machine on Altair, there's also a bad machine, one left over by the previous civilization, the Krell. Morbius first tells his visitors that a "planetary force" killed

the rest of the prospecting crew. In reality he is hiding the massive subterranean world of the Krells, including a machine that can vastly increase the mental power of those who use it. Before long, crewmembers of the C-74-D are being menaced by a mysterious monster. Although Adams would like to blame Morbius, he was with him during the attacks. The culprit eventually turns out to be a Krell-enhanced physical manifestation of Morbius' own

id, functioning against his conscious will and acting independently against the men who threaten to change his world and, perhaps more significantly, take his nubile young daughter away from him.

It is no surprise that *Forbidden Planet* still holds up today. Not only is the script and story very sophisticated, but the production design is far above the average for the 1950s. Granted, the C-74-D looks like your typical flying saucer, but Morbius' home looks like something Frank Lloyd Wright might have had a hand in designing, and Robby the Robot is a timeless character, certainly better known today than any character in

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Welcome to Altair 4. Chris' vinyl Robby the Robot stands a menacing two feet tall, large enough to make use of a car's seat belt. No more tickets in the diamond lane.

EDITOR'S BRIEF

There is something abhorrent about this month's Styrene Sheet. I do not speak of its odd appearance of which I have not been able to have any effect. There is, dear reader, something deeper and more unsettling than this newsletters' mere aesthetic. I sense your bewilderment. Perhaps I should explain my meaning.

You may not be aware, but the newsletter you now hold is brought to life from two distinct yet concerted systems of computing. One machine is employed for creation and the other for reproduction. Both are converged through a system of cables and blinking lights. To the initiated, this will no doubt sound familiar. To the novice, I do not intend to bore you. Know only this; the plastic box of tiny lights that blinkingly notify me of the computers' cooperation were not their usual green this night. Instead, they flickered the reddest of reds. Mildly perplexed, I queried the manual for said appliance. You see, while I can easily engage my machines, I do not always understand their meaning. Alas, the documentation made no explanation of the current condition. I resolved to leave well enough alone as my progress, and that of the computers, was not impaired.

With my work complete regarding my intended issue of this Styrene Sheet, I took leave for my regular midweek assemblage. The evening progressed with expected amelioration until our adjournment well after two in the morning.

As I returned to my neighborhood, the night was darker as the lights that normally illuminate my way did not shine. Although the hour was late, the few house lights that I would normally see were not shown. I left my motor carriage in the drive as the door to the garage was afflicted by the same condition that cursed the streetlights.

As I entered my foyer, I could not resist the instinct to operate the closest light switch with expected results. As I felt my way around the corner toward my bedroom, I heard a noise that froze me where I stood. This was a noise that I had come to know intimately in the few preceding months and would recognize easily. The ghostly vibration was the unmistakable whine of a laser printer coming to life. This would not normally cause me any consternation, yet before I could consciously discern the current circumstances, the subconscious that rules my instincts recognized that which should not be.

With my heart pounding, I slowly and quietly (and I must include bravely) inched toward my center of business. The disorienting darkness of a house, which most always shone with at least some ambient light from the street or indoor appliances, seemed to both stretch distance and compress time. As I neared the doorway I realized the room glowed with an eerie, dim blue light.

Rigid with fright, I forced my body, which felt made of concrete, to round the threshold of the room that now emitted the chilling glow. I am curious by nature. One might assume that mankind's instinct to investigate and to discover that which is unknown is what drove me past the doorway. I, however, knew already of what awaited. I surged forward not to learn, but to confirm the unspeakable.

There, anticipating, partially eclipsed by the desk, lay the HP 4v. It's electronic interfaces aglow with that horrible blue green light. The high-pitched squeal that greeted me upon my arrival had wound down to a knowing silence. The printer and I faced each other, quite and motionless. The shadows the thing beget scraped up the walls as my eyes absorbed the light emitted by its light emitting diodes. As I dared gaze upon the infernal machine's readout, the text flickered, changing from "warming up" to "ready to print."

My unnatural paralysis evaporated as I called upon all that my reflexes could summon. I charged from the small room, slamming the door behind me. Now, in near total darkness, I collapsed against the wall of the pitch black hallway. My body shook with a coldness that clutched my soul in an icy grip.

After a fleeting handful of seconds that seemed to last for days, the empty darkness was shattered as the stabbing and gleeful whine of the apparitional printer oozing its way through and around the closed office door. The accursed printer had begun burning it's insane prophesy to paper. Sheet after sheet, the HP 4v drew the over sized pages from where there were none, etching it's diabolical sayings.

At that moment I realized a quieting metamorphoses. I felt a calm like I had not felt since I was too young to know the workings of the world: a time when time and reason had no meaning. I feel sorrow for you, dear reader, for you roam the earth wondering of your place, what meaning you might have in this world. I had found mine. Rather it had found me.

I slowly slid back up the wall until I was upright. As I walked forward, I had no need to feel about for my position. I easily found the handle to the office door in the darkness without so much as a misplaced step. The cool metal handle felt soothing in the palm of my hand. I turned the handle. As the door opened with almost no effort on my part, the sound of the printing process grew louder. I paused to take in the calm, my new understanding and sense of place. I walked forward and slowly dropped to my knees. I began folding and stapling the pages. In the darkness.

- The Editor



BEWARE THE
STYRENE SHEET
TO LOOK UPON IT IS
TO KNOW MADNESS
Go to www.svsm.org to download the September color newsletter.

BEST OF THE GUNFIGHTERS: ACADEMY'S STELLAR NEW F-8

BY EVEN CREEPIER CHRIS BUCHOLTZ

For such a revolutionary aircraft, the F-8 Crusader has been woefully underserved in 1:72. The Crusader, the first Navy aircraft capable of sustained supersonic flight and the first carrier plane capable of over 1000 mph, has been molded in a slightly misshapen form by Hasegawa (the gear bay is of an inch too far aft), in crude kits by Fujimi and Revell, and in an accurate in shape but clunky-in-detail Heller kit. Italeri threw one on the market late last year, but it was less than stellar.

Enter the new Academy F-8E. This is the 1:72 kit Crusader fans have been waiting for: accurate, with scribed panel lines, a complete load of ordnance and some very clever engineering that may make this not only the most detailed kit of the Crusader but the easiest to assemble as well.

The cockpit includes a four-part ejection seat, a cockpit tub with a very detailed rear bulkhead and sidewalls, a correct control column, and a control panel and separate clear gunsight. All of this is quite good, and while some might use the inevitable aftermarket parts that are sure to come, the kit cockpit would work just fine. The intake, always an iffy area, is handled by a two-part trunk that's split into upper and lower halves. There are some small ejector pin marks on the top half, but these can be easily reached if one feels the need to address them. The nose gear bay is included in the bottom half of the trunk, and it is splendidly detailed.

This kit, unlike any other Crusader in the scale, is designed to depict the variable-incidence wing in the raised position. Because of that, you get a part to depict the area under the wing, which is very nicely detailed. The main gear bay is a six part assembly and is magnificently detailed. Inserting into the fuselage just ahead of the main gear bay is a plug for the positionable speedbrake, which has a couple of ejection pin marks in readily-reachable locations. Another neatly-detailed box houses the arrestor hook. You'll end up sticking five assemblies into the fuselage before you seal the halves.

The wing is molded in halves, with the upper wing containing the entire outboard folding portion. A separate "Bullpup hump" goes on top of the wing, evidence that the kit is set up to provide an earlier F-8 sometime in the future. Also separate are the leading edge flaps, which can be positioned in the correct lowered position for a raised wing. Unfortunately, the trailing edge flaps also ought to be lowered; you'll have to cut and reposition them yourself, or you could wait for an aftermarket set that is going to hit the market shortly from a local source. A plate goes on the front of the "hump." Of

course, you could build your F-8 with the wing lowered, but you'd miss out on the chance to show a lot of red-painted structure, and anything that adds color to a gull gray-over-white airplane is welcome in my book!

The scribing on the model is fantastic. All the small fasteners are there, but they're in scale. The gear is also terrific; the nose gear includes a separate wheel, main strut and a second part to trap the wheel while the mains each have two separate strut parts. The decal sheet includes placards for the struts! The gear doors are very nice, and the main gear doors are actually molded into the belly plate. Landing and signal lights are provided as clear parts.

The burner can is a two-part assembly, saving the annoyance of sanding the seams inside of a two-part can. The tube-like rear of the engine has compressor detail on its bottom, and the external can goes on top of this to form a complete and seam-free assembly. The two cooling scoops added to the later Crusaders could stand to have their fronts hollowed out with a pin vise.

With the addition of the horizontal stabilizers, the wing and the pitot tube, you get to choose what your F-8 will be taking to visit Charlie. Your choices include AIM-9 Sidewinders carried singly or on Y-rails (correctly depicted for the first time ever) or 5-inch Zuni rockets in twin pods (again, a first), plus up to eight Mk. 82 Snakeye retarded bombs on multi-ejector racks on the wing pylons. All of these are done very well, and that makes this the first Crusader with truly representative ordnance.

Decals in the first issue are for two Marine Corps Crusaders: BuNo. 150852 of VMF (AW)-333, the Fighting Shamrocks, with a band of green leaves on each side of the fin, and BuNo. 150329 of VMF (AW)-232, the Red Devils, with its devil-in-a-diamond logo on the tail. These are somewhat plain-jane colors, but the real beauty of the decals lies in the details. They start with exceptionally detailed data stencils, including markings for inside the gear doors, a legion of "no step" markings for the movable wing and tail surfaces, and ejection and rescue warnings, and they're crowned by two sets of decals for the windscreen: one set in black which gives the entire frame and the thin yellow seal around each panel, and a second set that has just the yellow seal. The yellow seal is also given for the canopy. The printing is tremendous, with all the small stencils legible if you get close enough to read them.

My only concern about this model is that, once finished, it will make all of my other Navy jets appear amateurish. This model will build into something truly special, and I am eagerly awaiting my chance to build this fantastic new kit.



CONSIDERING THE CAUDRON BROTHERS G.3 AND G.4

BY RECALCITRANT ROBERT MILLER

Once upon a time, in the days before Marcel Dassault created his Ouragans and Mysteries, you could count on the French. Ah yes, without exception, and year after year, they produced the homeliest, most inelegant flying machines in the world. Well, now and then they slipped up and produced a good performer like the SPAD 13 that was also a classic beauty, but always you could count on them to follow up with something strange like the SPAD S.A-4. In the last year before World War I, it was the brothers Caudron who stepped up and, with unmatched élan, seized the title of creators of the homeliest production machine of 1913. Consider their G.3 and its sister ship, the G.4.

Actually, the G.4 is quite easy to consider, if you tour the Smithsonian's UdvarHazy facility, because it holds possibly the best location for viewing in the entire museum. And it's about time. For years, the G.4 could be seen at the Silver Hill facility, hanging overhead. It was tantalizingly close, but not even the most sympathetic docent could have granted enough access to really comprehend this strange critter. Now, thanks to its placement in a corner of the World War I collection at Udvar-Hazy, where both catwalk and ground-level walkway get you some choice three-dimensional views, it is possible to really enjoy one of the more creative aeronautical oddities of its time.

This is an interesting machine to write about, but I could hardly send off an article to the Styrene Sheet unless there were a modeling connection, could I? Ah-hah! There is one! Some time ago Formaplane produced a vac-u-form kit of the G.4. One can still be found on e-bay now and then, but the selling price typically reaches \$40 or more, and that is a bit beyond what I can bring myself to offer for 65 grams of polystyrene, no matter how well done (and the Formaplane kits of this vintage are typically exceptionally nice) so I have never actually laid hands on one. Just to keep the pot boiling and make this short story longer, the twin-engined G.4 has a sister design, the single-engine G.3, a design so similar that the two can be discussed together. Best of all, there is a currently available vacform in 1/72 by Roseplane, and I

have one! It is, as of now, uncut and reserved for fondling and contemplating because this is one challenging-looking model! Let's begin with this kit and bring in the G.4 later.

Roseplane's G.3 is an absolutely beautiful kit, with about 35 vac-u-form parts (16 of which may actually be intended for use as cutting and assembly jigs for the boom structures and struts, but which may be used as molded), metal wheels (four), metal rotary engine and prop, and about five feet of extruded rod and strut. Five feet of struts? In 1/72, that is a scale 360 feet! See why I haven't started it? Surface detail is very nice: there is just the right touch of fabric sag between wing ribs, and the engraved panel lines are fine and consistent. The interior, consisting of five pieces plus two seats, offers a satisfying beginning, though I can't attest to its accuracy. Very complete drawings in *Windsock International* magazine for May-June 2003 show a conventional plain joystick for the aft position, extending high enough to place the grip above the cockpit sides. Possible details not provided included a small set of engine control levers high on the left and a cylindrical air pump on the right to pressurize the fuel tank. Overall, Joe Chubbock, the kit designer, has made an exceptionally nice job of it. Decals are furnished for a French aircraft



The twin engined Caudron G.4 at the Smithsonian's UdvarHazy museum. At the Silver Hill facility the aircraft was suspended from the ceiling. Now it sits at ground level, in plain view.

and two Finnish ones, plus serials for an Italian ship.

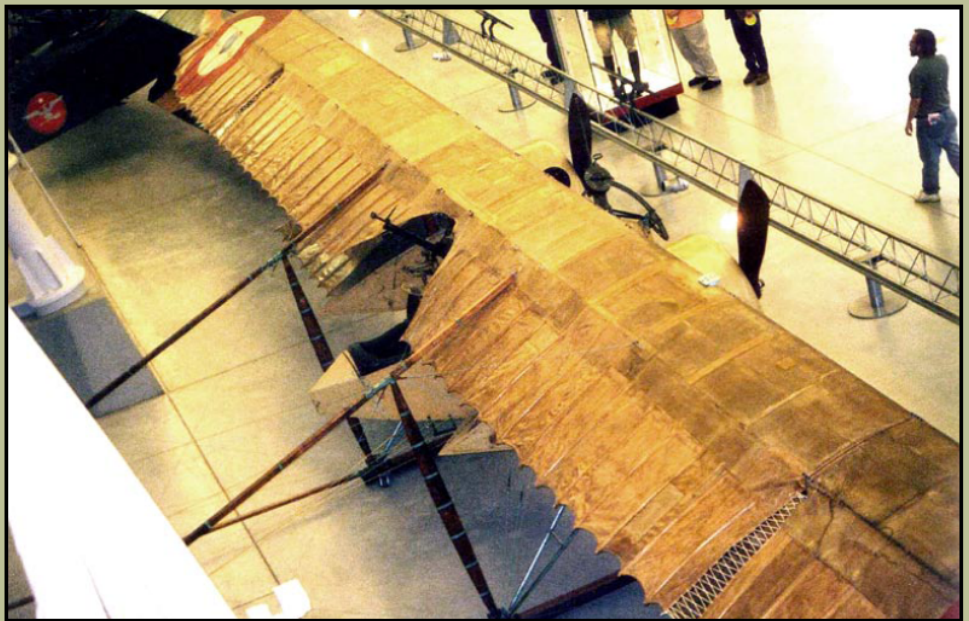
The wings are what initially put me off. Uppers and lowers are each molded in two spanwise sections. For the upper wing, both forward and aft sections are about three scale feet in chord. For the lowers, the sizes are three feet and one foot. The drawing shows them being pieced together, but with no clue as to exactly what they should represent when done. Do I apply enough filler to make a smooth upper contour? Does the whole aft portion of each hinge for roll control? What? Thanks to the UdvarHazy display, I now understand what I'm seeing, though I don't understand the logic behind it all.

The airfoil of NASM's G.4, is quite unusual. The forward three feet is a typical thin WWI-era section, built around two spars, the front one forming the leading edge. Aft the rear spar, however, the upper surface tapers sharply downward, and joins the lower surface, leaving exposed ribs on top to hold the shape. This results in a smooth and

continuous lower surface with a rather badly disrupted upper. In the various collections of wing-section data I have seen, I don't recall ever encountering this curious shape. And with some good reason: wing performance is much more sensitive to upper surface quality than lower surface. So WWII designers felt free to clutter their lower surfaces with exposed hinges, coolant radiators, bomb and rocket mountings, and uncovered wheel wells, so long as they kept the upper surfaces clean. Nonetheless, here's the Caudrons' solution, and it presumably worked reasonably well: I have seen references that claim the Caudrons' aircraft were good climbers, and since climb is a direct function of amount of power left over from the task of dragging the airframe through the air, the wings must have been acceptably efficient

(I would very much like to see a comparison of the drag contributions of the various parts, though). The kit wings are modeled with only top surface being correct, the forward portions being too concave on the underside. In my opinion, the under-surface should be filled or covered to replicate the smooth contour of the actual thing. Also, notice, before we leave this part of the discussion, that the ribs at the forward section don't match the exposed ones aft. Yup. For whatever reason, different ribs form the top and bottom contours.

The rigging is a bit perplexing, also. Wing-warping is used for roll control but the logic of the warping rigging is not really shown on the plan. Adding to that problem is a subtle question of the strut arrangement outboard. These are actually sesquiplanes, with the area of the lower wing only half of the upper. French designers seemed to favor this style up through the Nieuports of the 1920s. The Caudrons consequently used a large overhang on the top wing, which they braced with struts that combine with the outboard

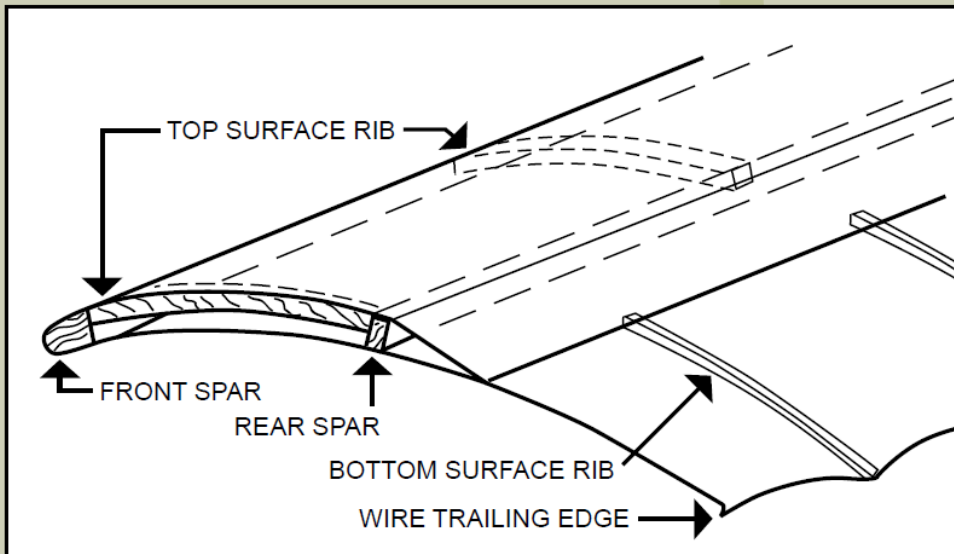


The Smithsonian Caudron G.4's odd layout and bat like wings can be viewed from the ground and from the museum's catwalk.

vertical struts to form triangles. Nice solid strut braced triangles, at that. Triangles are famously rigid, so why did they combine rigid triangles with a flexible warping wing? This forces the rear upper spars into shallow S-curves when a roll command is applied, not the unreflected single curves we might expect. Given the rather modest maneuverability needed for the observation and bombing roles, it evidently worked all right, but it makes the roll-rigging a little different, if you are accustomed to thinking of that of the pylon-braced Eindekkers or the Deperdussin racer. In the Caudron's case, the roll control consists of an extension forward of the joystick gimbals to a pair of bellcranks in line with the lower rear spar, and a pair of redundant cables running just above the top surfaces of the lower wings to the mid-wing interplane struts, where they turn upward to the tops of the outboard vertical interplanes. So the entirety of the lift loads of the outboard 2/3 of the wings passes through the pod, attaching to the stick in the middle, without being anchored otherwise.

The ground (or anti-lift) rigging wires for the outer bay are similarly replaced by a cable that runs from the bottom of the outboard strut, turns at the top of the middle interplane, and passes across under the top wing to the opposite outer bay. In keeping with the needs for wing-warping, there's no criss-cross diagonal bracing between the outboard struts, as is common among biplanes. None of this is obvious from the kit plans. I might note here that, in contrast with many later biplanes, none of the rigging other than the roll-control lift wires is doubled, not even the front spar lift wires.

The wing is not the end of the oddities of the Caudron G.4. How about that configuration? This is the only example I can think of with a



Bob's sketch shows the unusual layout of the G.4 wing. While the forward portion of the wing is conventional for WWI, the aft portion exhibits features not common to other aircraft.

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THREE LIVES OF A SINGULAR SUB: USS HALIBUT, SSGN 657

BY BODY SNATCHING BILL ABBOTT

The US Navy's first atomic-powered, atomic-missile-carrying submarine was NOT the USS George Washington, SSBN-598.

The USS Halibut, SS(G)N 657, was the US Navy's first atomic-powered, atomic-missile-carrying submarine. Laid down in 1957 at Mare Island and commissioned in January 1960, she made seven patrols as part of the Pacific Fleet, carrying five Regulus I, nuclear-armed cruise missiles, until relieved of deterrent duty by Polaris boats in July 1964. Her final years were shrouded in mystery until the release of "Blind Man's Bluff", by Sherry Sontag, and Christopher Drew†. In the book, Sontag and Drew revealed Halibut's even more secretive life as a spy sub, starting with a two-year overhaul and rebuild that began in 1965. Halibut's enormous missile hanger, its equally enormous door (22 feet wide) and her nuclear power plant ideally suited her for second and third lives as a cold war spy.

Halibut's hanger was an order of magnitude larger than any other space available on any other submarine. The hatch was a unique asset in a fleet where almost every other hatch was 26 inches in diameter. And nuclear power, even with the ship's un-hydrodynamic shape, meant she could run submerged for months. Classed as a "Research" vessel, Halibut served as a mother ship for deep-diving robots and then less-deep-water divers. After many years of obscurity even deeper than that shrouding her nuclear deterrent years, Halibut was decommissioned in 1976, and stricken in 1986.

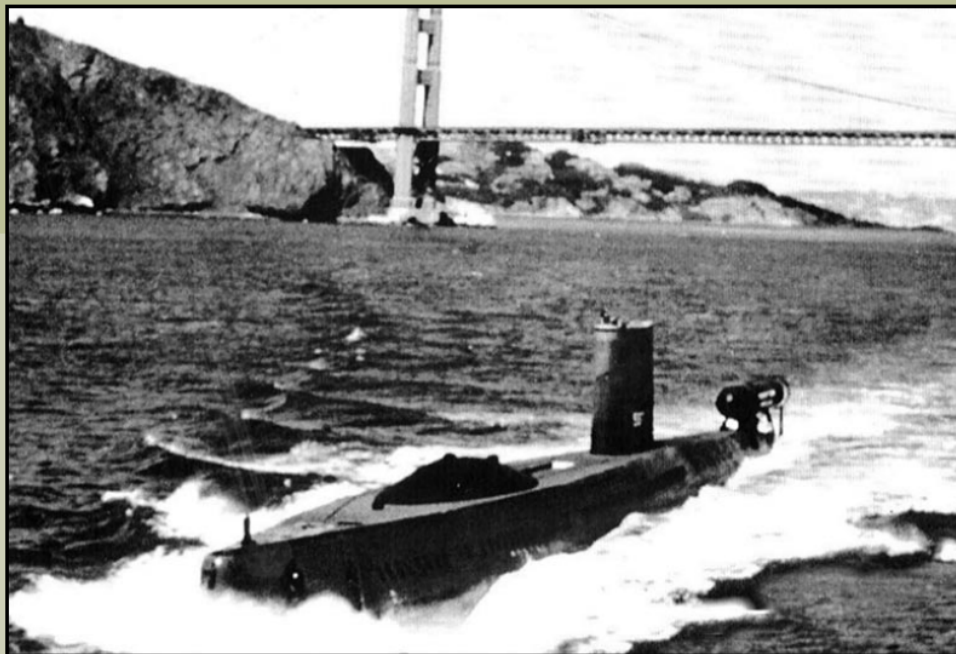
The ex-Halibut entered the Navy's nuclear powered ship and submarine recycling program on July 12, 1993. Her nuclear fuel was removed and sent to the Naval Reactor Facility in Idaho for storage. The reactor compartment itself was removed, sealed and buried at Hanford, Washington. The remaining sections of the hull were recycled after all reusable, hazardous and toxic materials had been dealt with appropriately. She completed the recycling program on September 9, 1994, and ceased to exist as a complete ship.

USS HALIBUT, SSGN-587, was the second ship in the US Navy to carry the name. The first USS HALIBUT was SS-232, a Fleet submarine that operated in the Pacific during WWII.

She sank 12 Japanese ships before being stricken, because of hull damage from depth charges, in 1944. Her second and last commanding officer, LCDR I. J. Galantin was one of the planners for SSGN-587 and put forward the name of his old ship from the list of WWII subs that had received battle honors. Admiral Galantin, USN (Ret.) has remained in contact with the crew members of both SS-232 and SSGN-587.

The Regulus was the Navy's follow-on to the Loon program, which was a copy of the German Fi-103 (V-1) pulsejet cruise missile from WWII. Loons had a range of 135 miles, using a second submarine to relay or originate guidance commands, when the missile left the 50-mile range of the launching vessel's control.

Vought's SSM-N-8A Regulus program began in 1947 and the first fleet deployment was on the cruiser USS LOS AN-



Halibut was equipped with a "deep submergence rescue vehicle" that was actually a deep diving chamber on the submarine's stern. Once submerged, deep-sea divers exited the submarine and wrapped tapping coils around communication cables.

ANGLES (CA-135), in 1955. Regulus (later Regulus I) was a jet-powered, subsonic cruise missile with a 500 mile range and a 3000 lb, 40-50 kiloton, W5 atomic, or 2800 lb, 1-2 megaton W27 thermonuclear, warhead.†† Guidance was by radio command from the launching vessel or another vessel, for example, a submarine at periscope depth between the launcher and the target. Maximum radio range for guidance was 125 miles,

which required the missile to fly at 30,000 feet. Carrier aircraft could guide the Regulus but this was understandably unpopular with pilots.

A number of cruisers, aircraft carriers and the submarines USS TUNNY (SSG-282), USS BARBERO (SSG-317), USS GRAYBACK (SSG-574), USS GROWLER (SSG-577) and Halibut carried Regulus I. Tunny and Barbero were Guppy conversions, WWII Fleet-type subs rebuilt with streamlined conning towers, Grayback and Growler were purpose-built diesel-electrics with two, large, forward, hangers, each accommodating 2 missiles, for a total of 4. Halibut was intended to carry the supersonic Regulus II, a streamlined and refined development of Regulus I, with 1200-mile range, twice the weight and a different power plant. By the time Regulus II development was completed, the Polaris ballistic missile program was nearing deployment. Regulus II never went to sea.

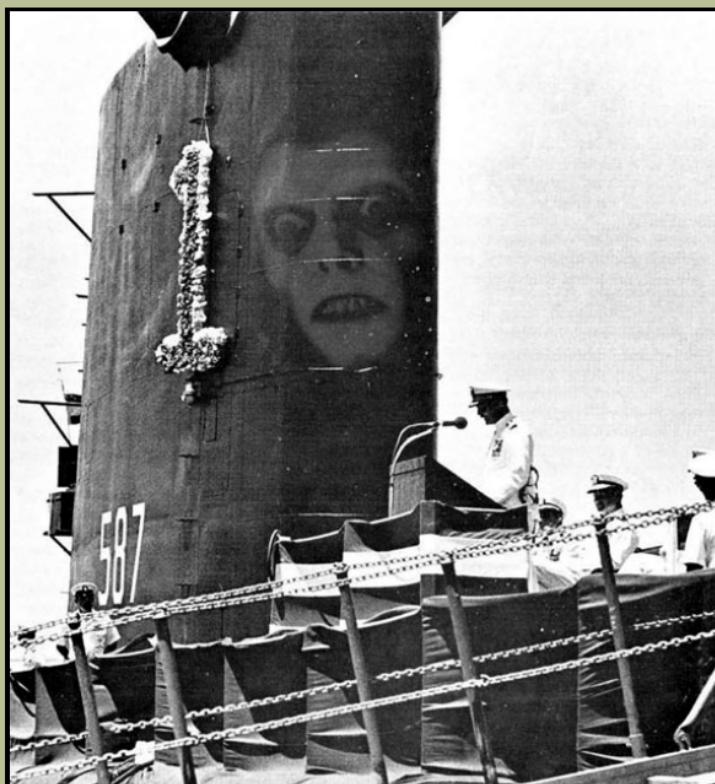
Regulus was considered so important as a nuclear deterrent after 1957 that four submarine-carried missiles were kept on

station in the Western Pacific at all times. This required Submarine Squadron ONE, stationed in Hawaii, to deploy both of the Guppy conversions or one of the Grayback class, or Halibut, continually.

Late 1959 was the time of the USS GEORGE Washington's initial Polaris patrol, but for their first half-decade, the 1200 mile range Polaris missiles were stationed only in the Atlantic. The Polaris boats got the glamour of high-tech equipment and "Blue" and "Gold" crews alternating cruises in a single vessel. The SSG/SSGN community in the Pacific has less exotic equipment, and referred to themselves, ironically, as the "Black and Blue" crews, since they did NOT have alternates to take every other cruise.

After the extensive refit, Halibut's next role was that of highly classified mother ship for deep-diving Remote Operated Vehicles (ROVs). The ROVs were the brainchildren of Navy scientist John P. Craven, built to gather intelligence material from the sea floor. Halibut figured in this picture because she could deploy and search while submerged. No "unfriendlies" need know she was there. Debris from ballistic missile tests and other weapons or sensors hardware hidden in deep water (20,000 feet and deeper) was the target. Some, but not all, of the SubSafe and Deep Submergence Rescue Vehicle (DSRV) programs launched in the wake of the Thresher disaster were used as cover. Technology notionally developed for DSRV would actually be built and operated as ROV "Fish" controlled from Halibut. The "black" program's entire budget came from DSRV "overruns".

This explains a minor mystery of my childhood- much was made of DSRV designs by Lockheed in the 1960s, and some were built and have been mounted on the backs of SSN Attack submarines. But DSRV produced no scientific results, no photos, and there never has been an opportunity to use it to save lives. Modern, deep-water, submarine sinkings are more like airplane crashes than traditional ship sinkings. The investigator gets to start with a debris-field rather than a hulk resting neatly on the bottom. There are no survivors. At the time,



Capt. Charles R. Larson, Commanding Officer of Halibut addresses a crowd of over 500 persons at the decommissioning of the ship at Mare Island in June of 1976.

unhappy Congressional committees tried to understand what the Navy was spending the taxpayer's money on, without success in open hearings. So that's what happened.

Halibut had just returned from its first spy cruise, an unsuccessful search for Soviet missile debris, in 1968, when a Soviet GOLF II class submarine, possibly named "Red Star", exploded, flooded and sank in the Pacific ocean. While the Soviet Navy searched fruitlessly in other parts of the ocean. U.S. Navy sonar triangulation sent Halibut to where her "fish"

were able to find the sunken Soviet boat, and photograph the pieces, inside and out. The skeleton of one sailor, dressed in foul weather gear, lay on the seabed next to the hull of the sub. Whatever had picked the poor boy's flesh from his bones was a surprise to the experts. They hadn't expected any scavengers in 16,000 feet of water. President Richard Nixon awarded Halibut's crew the Presidential Unit Citation for finding the GOLF II. This is the highest collective decoration for members of the US armed forces.

By Sontag and Drew's account, the intelligence recovered by the cameras in Halibut's "fish" fully repaid the investment made to make them. Five years later, the CIA's Glomar Explorer, in an episode that remains murky, raised the Soviet GOLF II missile sub to near the surface. Many of us older Bay Area residents remember seeing the Glomar Ex-

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Halibut firing a Regulus missile on March 25, 1960. In the background is CV-16 Lexington. Halibut was the first nuclear powered submarine to successfully launch a guided missile.

CONSTRUCTING MASUDAYA'S 1:3 SCALE VINYL ROBBY THE ROBOT

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the film. Created by art director Robert Kinoshita, Robby's career, like those of many other Hollywood figures, only went downhill from his debut; in 1957 he appeared in the movie *The Invisible Boy*, then was seen on television on the series "The Thin Man," "Lost in Space," "The Twilight Zone," "The Addams Family," "The Love Boat," "Columbo," "Mork and Mindy," and "Clueless," to name a few. Robby's odyssey from expensive prop to cast-aside relic to lovingly-restored artifact can be found at www.the-robotman.com, which is the site of 1:1 scale robot modeler Fred Barton. No matter what your area of interest, the obsessive research and enthusiasm Barton shows for his chosen subject will be familiar to you.

Early in 2004, I received a call from out of the blue from Kent Sezen, an engineer in San Jose whose office is entirely decorated in 1940s and 1950s robots, lunchpails, Disney theme-land posters and other items that reflect the "future of yesterday," or what the world was supposed to look like in the future as envisioned by people 50 years ago. Kent asked me to assemble and paint a model of Robby the Robot. How tough could that be? I thought. I took the commission.

My question was answered by the sight of the almost three-foot high box the model was packed in. This was a Masudaya 1:3 scale vinyl Robby the Robot, which my research revealed costs in the neighborhood of \$370! The finished Robby is two feet tall and "talks," sort of, when you push a button in his chest. In reality, the "talking" sounds like a tape recording of a small television playing a worn out print of *Forbidden Planet*, but hey, this is a two-foot-tall robot! What more could you ask for?

The model breaks down into a few major sections: a legs-and-hips section that is heavily weighted, insuring that Robby doesn't topple over; the torso, which also includes the arms in a clever ball-in-socket arrangement; the head; and an assortment of other parts that adorn the head. This is really more like a toy than a model; Kent and I agreed that I would leave the model in its natural black vinyl color and paint only the head and other areas that were different colors.

The head, torso and hips/legs went together with just some gentle physical coercion. There's a clear plastic faceplate which

fits rather miserably, but it can be set in place and stays put on its own. I chose not to glue it in place. The first real bit of actual modeling work I did was to mask off the area that would go inside this faceplate with thin strips of Tamiya tape, then mask off much of the robot's head. Then, I airbrushed a mixture of silver and gray over this area. Remember that if you're painting a vinyl model, you'll need to use acrylic paints. Enamels react with vinyl and, as a result, never dry! I used Testors Model Master acrylics for most of this model.

When I peeled off the masking tape, I found that there had been no bleeding under the masking, and the paint dried very quickly, allowing me to go to the next step of the process that night. I carefully painted the "mouth" parts of Robby's head black, followed by a coat of gull gray on the small rectangles on the front of these parts (teeth?). The kit provided very spotty instructions, so I had to check the internet for extra assistance in locating areas that needed painting. Next up came the large orange hemispheres at either end of the bank of relays (I guess) on Robby's head, and then I alternated yellow and orange across the small round bumps above this area, which are said to be the rocker-arm computer relays that clack when Robby speaks. These details required careful use of a small brush, because the

molded-in detail has lots of round surfaces recessed inside raised detail. It's a little like playing the game "Operation" with a paintbrush.

Next came the addition of the clear high-voltage coil where Krell energy is harnessed and distributed. There were coils that were the proper length for the outside coils, but the inside coils were the same length and had to be modified in a fairly brutal fashion to approximate any sort of a fit. The problem was that the area these plug into curves upward; the Masudaya failed to take this into account and simply replicated the same part four times. The outer horizontal coil was also impossible to fit without some considerable mangling of the original part, but some coercion with pliers and flush-cutters resulted with this part being stuck to Robby's face, sort of.

There is a small plug-like fixture on the very top of Robby's head; this was painted with Tamiya acrylic brass. Into this plugged the three clear gyroscopic stabilizers. The two



For \$15.42 per inch, the Masudaya 1/3 scale model comes with *Forbidden Planet* and *Lost in Space* hands. Robby the Robot appeared in a couple movies and many television series.

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reciprocating arms at the top of Robby's face were painted white and pushed into place. At this point, I used Tamiya's silver spray paint on the styrene vertical and horizontal access rotating scanners and his four "vision coils." The coils had their points painted with acrylic blue; I bet you didn't realize that Robby had blue eyes! These parts were pushed into place, as were the two clear "energy neutralizers," which resemble ears. These latter parts took considerable convincing to fit into place. I opted not to glue any of these parts in place; should the model fall over, glued parts would break off, but snapped-into-place parts could be replaced by the new owner.

The most frustrating areas of Robby to paint were the fins along the head. These are silver, but trying to reach inside the narrow openings of the fins with a brush and painting a reasonably straight line was an effort. Also, brush painting silver is no fun on its own, so adding a second coat was doubly frustrating.

Next came the two dials in the center of Robby's chest.



Most of the assembly and painting of this kit took place under the face plate. Some "brutal" modifications were needed to get proper fit of some parts.

Applications of bronze, orange and silver replicated the dials that monitor Robby's molecular analyzer and RNA duplicator.

Finally, I selected the Forbidden Planet-style hands (in place of the hands Robby had in the "Lost in Space" episode he appeared in) and pushed them into place.

The finished model was so large it was easy to transport. Robby was tall enough that he could be secured in the passenger seat of my car using the seat belt, which fit quite comfortably across his barrel-like body! Kent was overjoyed—and a little overwhelmed—when his huge Robby arrived. It dwarfed his other robots and displaced a few from their original locations! It was my first vinyl kit and my first science fiction or figure kit in at least 20 years. Thanks go to Kent for giving me a chance to build this reminder of my childhood.



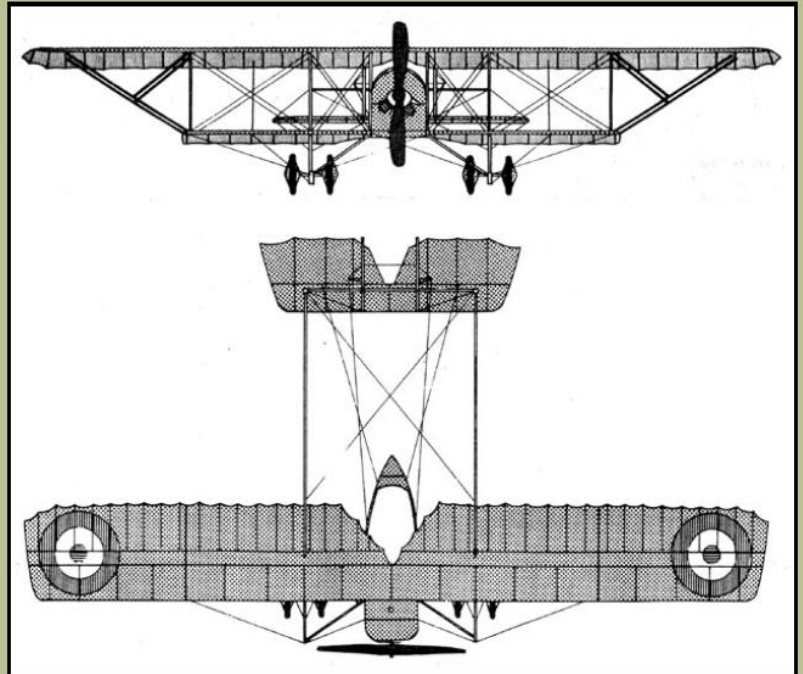
Chris used acrylic paints because enamels will not dry properly on vinyl models. Pushing the button on Robby's chest causes him to speak even if it sounds a little like talking through two soup cans and a piece of kite string.

Chris Bucholtz has been building models since 1973 and has been a member of SVSM since 1986. His interests include 1/72 scale aircraft of all types, but specifically World War II and subjects whose pilots or crew he has met. Occasionally he builds robots.

THE HOMELIEST PRODUCTION MACHINE OF 1913: CAUDRON'S G.3 AND G.4

Continued from page 13

twin-tractor-engine, twin boom and pod configuration to reach production until the Dutch air force's WWI Fokker G.23 "Reaper" of 1939, and then, of course, the P-38. The usual configuration for the smaller WWI aircraft that needed the nose clear for bomb-aimer or observer was a single pusher engine. If the plane needed more than the 100 or so horsepower available from one rotary, or the 160 from an inline, designers commonly went directly to a larger design with single fuselage and inline engines in nacelles. But not rotaries. How did the G.4 arise? It appeared to have been the natural development of the Model A, 1912 sport/trainer design. It appears to have had a single tractor 6-cylinder Anzani radial. So the brothers Caudron seemingly began with one of the common early configurations and made it more comfortable by seating the occupants in an enclosed nacelle. A couple of easy steps of evolution produced the mildly militarized G.3, with which France entered WWI. Still a pod and twin-tailboom tractor, this one had either the 80 hp rotary or an Anzani radial of 100 hp. This was hardly an airplane that would survive in the air when pilots started shooting at each other, and since the French seemed to view the pilot as little more than a chauffeur operating in three dimensions, the commander rode up front, where he was surrounded by engine, wings, struts and wires. This was fine for observing in a permissive



Both the twin engine G.4 and the single engine G.3 (above) had a complex rigging which was used to warp the wings for roll control.



The center nacelle of the twin engine Caudron G.4 with its gun track. The pilot sat in the rear while the observer rode up front.

environment, but where to from here? Needing more power than one engine could deliver, they essentially took the same aircraft, extended the upper wing span from 43 ft 11 inches to 56 ft 4 inches, mounted a pair of the same engines on nacelles, still in tractor configuration, moved the observer forward, then gave him a bomb-aimer's window and a choice of formidable-looking gun mounts. NASM's aircraft has a track on which a gun can be traversed forward and down. It looks intended to attack ground forces from above. Though the notion of attacking trenches from above in an unarmored aircraft seems appalling in retrospect, remember, this was the war of Paaschendale and the Somme, where 50,000 men died in a day. What's one aircrew, in comparison?

Still, despite all this weaponry up front, you have to have sympathy for the chauffeur. He sat at the absolute rear of the pod, and by simply looking over his shoulder, he would find that the "blind spot" that worried most pilots was totally nonexistent. He could readily scan the entire hemisphere behind him. Should he (Sacre bleu!) look back and discover the agile three-gun Eindekker of Max Jmmelmann overtaking from below... well, Merde! He still had a pistol to brandish.

The Roseplane kit offered no clues about armament, though the only thing that could possibly be attached to a G.3 airframe might be a small bomb or two. The French withdrew them from combat by 1916 and used their G.3s for trainers, as hinted by the alternative "E.2" subtype, for, perhaps, Ecole, so unarmed is appropriate for this one. I have no information on the armament Formaplane may suggest for the G.4.

There is a G.3 at the RAF museum at Hendon with much the same sort of comments applying, but with another interesting twist. The Roseplane kit included the LeRhône rotary but the example at Hendon has a ten-cylinder Anzani radial, entirely uncowed, and with a pair of half-ring exhaust

collectors at the front, each exiting downward. The engine is as curious as all the other aspects of this bird. It appears to be a single-row radial with an even number of cylinders. Impossible! At closer inspection, it turns out that it is a twin-row, even though the offset in the second row of cylinders is so small as to be easily overlooked. Anzani dispensed with the center crankshaft bearing and used an offset crank throw that allowed the second bank to be displaced perhaps three inches from the front bank. This is a 100 hp engine, and the solution probably wouldn't work for anything with much more power, but it is just one more item in the list of curiosities in these strange aeroplanes. The British version differs in another respect from the French design in Roseplane's kit. Instead of the wide-open "bathtub" cockpit of French aircraft, Hendon's has a short top deck separating the two positions. This did little for its looks and couldn't have done much good except to slightly decrease the wind blast hitting the back-seat guy, but considering they trundled about the sky at 60 mph or so, this hardly seems worth the trouble.

In regarding colors, Roseplane calls for the French G.3 to be painted aluminum on top, with clear-doped linen on the bottom surfaces. This surprised me, but the NASM on the Mall has a Voisin painted overall aluminum so (assuming the Garber Facility folks got the Voisin right) this scheme was apparently at least occasionally used. In a guidebook Jim Lund

brought back from the French Museum of Air & Space, their G.3 appears to be painted in a color that approximates clear-doped linen but looks too opaque to actually be that. The kit plan similarly shows Finnish machines in aluminum overall, while the Italian were in clear-doped linen, with outer wing panels painted red and green, approximating the Italian flag. The British example at Hendon is in clear doped linen. I once came upon a Royal Aero. Soc. paper discussing the damaging effects of solar UV on clear-doped fabric (and, for that matter, on the lozenge-dyed fabric the Germans used), which could reduce the strength of a fabric cover by half over the progress of a summer of sun exposure. They knew this in 1916. So why no sunblocking pigment on this aircraft? Did the British anticipate the lifetime of their Caudrons to be so short that they would never last long enough to make loss of fabric strength significant? In the slaughter of World War I, was this trivial, not worth the price of another coat of dope?

The G.4 is hard to interpret. It is apparently painted overall in a khaki color (I had no color standards with me when I was there) as the surfaces are too opaque to look like clear-doped

fabric. The color has a sort of grimy look that one might expect from something that had hung for years at Silver Hill, but earlier photos of the G.4 hanging overhead show some tattered wing fabric that has been repaired or restored for the aircraft as it now appears. Is it possible that the crisp, attractive khaki we apply for WWI SPAD camouflage jobs should actually be shaded toward a dull grey? If anyone goes back to D.C. take along some color standards and write us some answers, OK?

Although they are strange, the Caudrons have to be described as successful. Over 3800 G.3s and G.4s were built. First flying in 1913, there were G.3s in service at the beginning of WWI, and they were still working at the end, though, as combat types, only with the British RFC. They went to Finland (for which decals are included), the USA, Belgium, Russia, and were widely used for private flying after the war. The Caudron brothers went on to build a G.6, a design similar to the G.4 but with the span increased from 13.4 meters to 17.21 and the LeRhones raised from 80 to 110 hp. Their final WWI design was the conventional but very attractive R.11, a design that would have looked good in a 1929 flying review. (Sierra Scale produces a 1/72 scale kit of the R.11, and most Sierra Scale kits are very good.)

So what did I think of the Caudrons? An aircraft is a sort of living creation. At their best, they entice you to come closer, like a pretty girl that you can't

help looking at and soon find yourself drifting toward (if you'll pardon the sexist language.) Who wouldn't love to be invited to climb into a Spitfire or Macchi 202, and just sit there and dream, or, in the ultimate fantasy, hear someone say "Go ahead, take 'er around?" The Caudrons are intriguing, but, sorry, they don't entice nor seduce me. Down the WWI line from the G.3 at Hendon is a BE-2b, universally reviled as "Fokker Fodder", as "flimsy" or "rickety". But it's kind of cute, and absolutely right for 1913. I can't remotely imagine being over the trench lines in it in 1915, with people shooting at me, but offered a ride today in my choice of the two, it's the plain-vanilla-looking BE-2 that somehow wins. Wouldn't I jump at the chance to take that one up for a couple of turns around the pattern?

Bob Miller started building wooden aircraft models when he was seven years old and has been a member of SVSM since the early '80s. His interests include ships, trains and most importantly aircraft, especially those from transition periods such as 1914 and the late '30s.



Please put your seat back and tray in the upright position. Two vintage photos of the Caudron G.3.

USS HALIBUT—FIRST ATOMIC-POWERED, ATOMIC-MISSILE-CARRYING SUB

Continued from page 13

plorer parked down by the salt pile near Redwood City.

Braced by this success, freshly overhauled again, and equipped with a fake DSRV to serve as a decompression chamber, Halibut then penetrated into the Sea of Okhotsk for her crowning achievement. In a piece of inspired reasoning, U. S. Navy civilian analyst James Bradley had imagined that Soviet practice wouldn't be too different from American, and that the telephone cable that linked Kamchatka Island to the Soviet mainland would have "Don't Anchor Here" signs posted on the beach, near where it entered the water, to prevent local sailors from damaging it. Further, he suspected that the Soviet's Petropavlosk naval base, home to significant submarine and surface forces, would be a significant user of such a telephone line. Bradley was right, and Halibut, under Commander John E. McNish, found the signs and traced the cable to international waters (outside the 3 mile limit).

Breathing a helium/oxygen mixture from umbilicals supplying both this mixture and hot water to warm their wet suits, Halibut's divers emplaced the first of a series of voice activated telephone taps and recorders. The crew waited for the tapes to fill, then brought home the hardware and a month's worth of candid conversations between Soviet Far-East commanders and Moscow.

On the strength of the first mission's results, Halibut began a regular shuttle to the Sea of Okhotsk. There she would drop off a fresh pod with a six-month supply of recording tape, at the submerged telephone line, and bring home the previous pod. A form of nuclear energy, probably similar to the Radioactive Thermal Generators that powered NASA's Apollo Lunar science packages, powered the pods and deep space probes. Sophisticated electronics could detect and record multiple conversations coming through the cable.

Prepared for the worst, as any ship's captain does, Commander McNish informed the crew of the nature of their sec-



Halibut at Pearl Harbor in 1960, shortly before joining active service with the Pacific Fleet.

ond mission, and that he had decided that, should the Soviets discover them, Halibut would under no conditions be boarded or captured. Demolition charges were placed in the ship. One 19-year+ chief petty officer 'un-volunteered' himself at the next port of call, ultimately receiving an honorable discharge. He maintains that his departure from the ship was not prompted by the illegal spying they were doing, or the demolition charges, but declined to give more specifics to Sontag and Drew. Some sailors contacted their Senators or Representatives with guarded tales of the telephone tapping, but Congressional investigations never revealed what was actually happening. Even if the tap seemed awkward in the era of détente, it was awfully appealing, like all high-tech spy stories.

Eventually the Soviets found out, from Ronald W. Pelton, a former NSA cryptologist who sold the crown jewels of U.S. Naval Intelligence for \$35,000. One day, a flotilla of Soviet ships appeared in the Sea of Okhotsk and dredged-up the tap and recording pod then on station. Part of it, proudly stating that it belongs to the United States government, is on display in Moscow today.

Halibut had retired well before the tapping project, code-named IVY BELLS, ended. Her crew nicknamed her "The Bat Boat", after the hanger area with its need-to-know security and spooky Intelligence types had become "The Bat Cave". Her hull-shape was noisy above moderate speed; her design was a dead end. But she'd had a life of adventure and risk as dramatic as any of the more glamorous-looking subs in the Fleet.

My kit of the USS HALIBUT is a very early effort by Tamiya. I bought it in Tokyo in 1981, on a business trip. It appears to have been designed in the



Halibut was nicknamed "The Bat Boat" and her super secret hanger "The Bat Cave." Her hull shape was too noisy above moderate speed making the design a dead end.

early 1960s, well before Tamiya's heart-breakingly non-scale 1:18 racing cars. No scale is stated and the proportions of the hull (too short) and sail (too tall) are sufficiently wrong that one could work out several quite different 'scales' from various dimensions. The hull is about 1:403 scale in length, about 1:320 scale in depth and about 1:348 scale in width.

The kit was designed for rubber band power, with an oversize propeller mounted underneath the hull proper, and both a keel weight and removable soft plastic caps for the positive buoyancy tanks are provided. Wing-like diving planes at the center of the hull connect to an out-of-proportion 'radar antenna' that emerges through a slot in the sail. In theory, under way, the planes cause the completed sub to dive, until the drag of water pressing against the radar forces them to the 'rise' position. A Regulus II missile is provided to sit on the launching ramp on the fore deck.

For a mere 180 Yen, I should have bought two of the kits so I could splice the hulls together and at least get the length/depth/beam within approximate proportion. (Getting the flooding holes in correct number in the correct location would be a challenge.) Then I could round off the bow, replace the fore and aft diving planes, install twin screws and rudder(s) and so on. Re-shaping the sail and adding a surface bridge station and retracted periscopes and antennae would complete a basic rebuild. Details like the real shape of the missile hanger fairings and deck details would still be needed, and a Regulus I missile.

An easier, if not cheaper, solution is the 1:350 resin kit made by Combat Subs. Photos and descriptions of two built-up models by Tom Dougherty are on the Internet at ModelWarships.com. Both models were built for the Halibut's 2002 crew re-union, showing Halibut in her original missile patrol form and in her final telephone tapping form, with fake DSRV and extended sail.

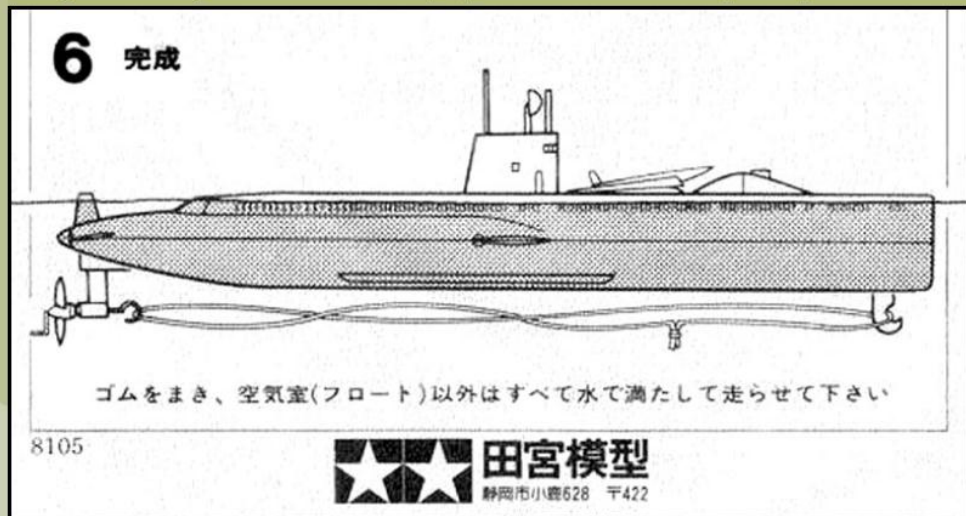
Having served honorably as a bathtub toy (straight out of the box) for my son, my Halibut is now being gently refitted. Perhaps we'll paint it too.

The USS Halibut would never win a beauty contest but, "purty is as purty does" and Halibut was certainly a doer. Tracing her story through books and web sites has been interesting and informative.

†† These bare figures, 40-50Kt from a 3000lb warhead, 1-2Mt from a 2800lb warhead, illustrate not only the unprecedented power of atomic weapons but also the exponentially more unprecedented power of thermonuclear weapons. 40-50Kt is approximately three times the energy released by the bombs that destroyed Hiroshima and Nagasaki, while 1-2Mt is approximately 75 to 150 times the energy of those first, primitive, bombs.



Tamiya's early Halibut kit is of questionable scale and dimensions. The kit was really designed as a toy with its over sized propeller and rubber band power plant.



Step six of the Tamiya instruction sheet shows how the Halibut really got its power. Shhhh... tippy top secret.

References:

†Blind Man's Bluff, by Sherry Sontag, and Christopher Drew, with Annette Lawrence Drew, published by PublicAffairs, New York, 1998.
 The Regulus Cruise Missile: A Forgotten Weapon System, by David K. Stumpf, PhD, is available from Turner Publishing, Paducah, KY, (502) 443-0121
<http://users.erols.com/marelk>
<http://users.erols.com/marelk/three%20ships.htm>
http://www.navy.mil/navpalib/cno/n87/usw/isue_11/regulus.html
<http://www.wa3key.com/regulus.html>
<http://www.GlobalSecurity.org> - Regulus I and II articles
 Google searches for SSGN 587, Halibut and Regulus were quite informative.
 Marelk's Web site contains photos including a book titled "Spy Sub" and another titled "The Silent War", both in a display case with a model of Halibut. Both are likely to be about her later missions or similar missions by other boats.

Bill Abbott has been a member of SVSM since 1992 and been building plastic models since his dad bought him a McDonnell Banshee in a plastic bag in 1961. He builds airliners, road racing cars, US Navy and RAF planes, as well as balsa and paper flying models. His son Benjamin often helps him with part cutting and assembly.

SEPTEMBER MALEDICTION

The people who attended the Reno contest on Sept. 11 said the turnout was excellent and the awards were very nice. Our brief update at the meeting indicates that this is one of the shows to watch in the future!

In model talk... Villainous Vladimir Yakubov's latest Czarist navy vessel is the Aurora, built as she looked at the time of her launch. Vladimir is using the Kombrig kit to build the ship, which still exists today. Vlad's 1:72 La-7 is being built from the Eduard Profipack kit, which he says has everything except the radio shelf in the rear of the cockpit. Vlad made that himself. Also in the works from Vlad is a 2S1 self-propelled gun from Ace; Vlad paid the model the cryptic compliment "it's nice, but it sucks."

Rancorous Renzi Pesigan is preparing Horizon's resin Batman for painting; one of his major improvements was to replace the bat "ears" with larger substitutes after the originals broke off! Toxic Thom Ivancso is building Special Hobby's A-9, the manned V-2, and says the kit has no locating pins but still fits well. Thom had to do a little clean-up of the rear end of the rocket. Baneful Buddy Joyce picked up an AMT 1959 Chevrolet at, appropriately, a garage sale. It will become a long-term rehabilitation project. Juntas Jim Priete had a few minor wing root issues but says that, otherwise, Hasegawa's 1:72 Bristol Beaufighter fits very well. Jim plans on finishing his model as an Australian-built Mk. 21. Jim is also hard at work on Alliance Models' X-2, trying to finish it in time for IPMS/ Antelope Valley's X-planes contest.

Haunting Hubert Chan returned with an in-progress Sherman, based in part on the Italeri M4A1. Hubert uses Mr. Surfacer 500, applied with a brush and stippled, to replicate the cast surface of the Sherman's turret. Hubert's also well along on Trumpeter's AS90 self-propelled gun; he built the 155mm version and had to make modifications from the kit's Braveheart gun arrangement. Revolting Roy Sutherland loves Hasegawa's 1:32 Bf 109G-6 kits; he had his two latest paint masters for 21st Century Toys at the meeting, bedecked in EagleCal decals. Lecherous Lou Orselli said it took a few days to re-engrave the skin texture of his Skilcraft velociraptor, but once that was done he applied his interpretation of an ambush scheme. Lou's also finished his Aurora mummy; the model was bought in a very poor state missing a hand, but Lou found a skeletal hand on a toy that was the right scale and it fit the bill beautifully! Bloodthirsty Ben Pada's two late-war Japanese fighters—his NIK2-J and his Ki-84—both came from Hasegawa kits. Ben's also in the early stages of building Tamiya's Bf 109E-4, and he has a Tamiya Me 262 in paint and ready for final construction. Baleful Brad Chun is building Dragon's 1:72 Leopard A26 for a friend; he says it's a nice kit. Brad's also got his Hasegawa 1:48 F-104C in its pre-production state (aka taped together). Repro-

bate Ron Wergin's F6F-3N Hellcat from the 1:72 Italeri kit survived a close encounter with a book and was fixed up into a very neat little nightfighter. Rotting Richard Linder has eschewed that cumbersome 1:72 scale in his new military vehicle models, instead going for 1:87! His HO-scale Autocar tractor is coming along very well, and he's eyeing a P-32 tractor with a Tatra T8000-111 as a next project. Murderous Mike Woolson built Academy's neat OA-37 straight from the box, outfitting it as a USAF Dragonfly based in Osan, Korea during the 1980s. Eerie Eric McClure has been busy adding brass fittings and scratchbuilt sandbags to his still-turretless Sherman. Appalling Andy Kellock's first plane in 25 years is the Aii Fw 190A; Andy's never had the opportunity to build a plane using an airbrush or any of the other tools and skills he's built up through his car modeling.

Ghostly Greg Plummer had two engines on display: 1:25 V-12 destined to be nestled inside Tamiya's Ferrari Enzo kit, and a big 1:6 Ford 427 SOHC engine that's a kit in itself. The Revell kit has a metal block and comes pre-finished; Greg said it was a very enjoyable project. Demonic Don Savage has his "family vehicle" just about finished; he's taken a Fujimi Toyota Sienna and given it a rather sleek look for a minivan. Don overcame a tweaked frame to finish his model. Kafkaesque Ken Miller is progressing on a pre-painted Pokemon 747; the kit is by Tomy in the always-popular 1:300 scale. Ken's Ghidora from last month now serves a more festive purpose; the sliced straws that



Kafkaesque Ken Miller's city crushing and yet festive King Ghidora model. The party hats can be switched out for seasonal events.

Ken used to replicate the monster's rays looked like party streamers, so he added party hats to the monster's heads and says that he'll change the hats with the season! We can't wait to see Ghidora dressed up as a pilgrim for Thanksgiving! Kevorkian Kent McClure has four resin dwarves he's working on; he's "mutated" two of them with putty. Kent's also mutated the Academy P-40B into a reasonably P-40B-looking model with a goal of building an RAF machine with the 1940 white/night underside scheme, and he's fighting his way through a rather unpleasant FDS kit of the Porsche 917 PA in 1:43. Misanthropic Mark McDonald has made considerable progress on the Sherman Firefly IC he had in its basic form at the last meeting. All the fiddly bits have been attached and the big-gun Sherman is ready for paint. Mark's also working on a Maquette PzKfz 38T Ausf G, which has surprisingly nice interior detail. Malignant Mark Schynert has a trio of late-war Focke Wulf products in progress: a Dragon Ta 152C, an Aoshima Ta 152H that has a saggy wing and brittle plastic, and an Esoteric Body Job/Italeri Fw 190C. Creepy Chris Bucholtz has his 1:72 Academy P-38 almost ready for paint, and he would have painted it had Bloodthirsty Ben Pada not spotted a small flaw that needs to be sanded out. He also has an Academy P-51B in almost the same stage of assembly. Troublesome

Terry Newbern's small scale trucking empire has one HO scale tractor cab in it now; Terry built it using an Athern kit, and painted the cab a pleasing shade of Testors green. Carcinogenic Cliff Kranz used the CMK conversion to turn Tamiya's Tiger I into a factory-fresh Bergetiger wearing a smooth coat of panzer gray. Apparitional Aiden McMackin used some yard trimmings to create high grass for his two Korean War-era infantrymen to sneak through. Aiden used a photo in a book to guide him in building his small but effective diorama. Morbid Matt McMackin's Vickers E-6, built from the ICM kit, represents an export-only tank that was used in considerable numbers by the Polish Army against the Germans in 1939. John Living in Heck's well-weathered N1K1 "Rex" benefited from some judicious chipping applied with a silver pencil in strategic areas. John said this kit is very nicely engineered but shows how far Tamiya has come in the 10 years since it was released. Leering Laramie Wright's next Sherman features a Chesapeake Models turret, an upper hull from Tank Workshop, an Italeri hull and running gear from Academy. Blasphemous Barry Bauer is doing considerable work to make Matchbox's Dornier 228 airliner into a reasonable replica, adding such important things as intakes and exhausts for the turboprop engines! Barry plans to make this model into an Indian Coast Guard aircraft. Sal-low Steve Robinson's audacious 1:32 scratchbuilt de Havilland Comet is largely together, but he has yet to vacuform the canopy and make the landing gear struts. The model is largely made of resin. Steve also added an improved cowling and windscreen to Williams Brothers' Laird Super Solution in 1:32. Subterranean Shervin Shambayati built Academy's Hellcat just to practice his airbrush technique. He was disappointed by the model's cowling, among other things. Grisly Greg Lamb used kits from Revell and Eduard to build a pair of Fokker Dr.Is, and he used wire to add control cables to their inner wing areas. Menacing Mike Burton says



Felonious Frank Babbitt's carnivorous Heller MD.450 Ouragon won model of the month.

the Wings 72 F-90 is not the best kit ever, but it does rank high on the list of 1:72 F-90s. Mike also is building Revell kit of the Oreo Monte Carlo and the Virginia is for Lovers NASCAR racer. He also has three P-63 in progress: an RP-63A Pinball, with a scratch-built air scoop, a P-63C and a P-63D with the sliding-style canopy, all from the Toko kit. Mike brought in his Execuform XFG-1 glider again, and he's also got an assortment of P-38s in the works: an olive drab-and-green version of Jay T. Robbins' "Jandina," a P-38E, a P-38G and a P-38J, all of which are from the Monogram kit and which have bits added from the Koster conversion kit. Beastly Bill Bauer's entry in the SSR sweepstakes is a sleek Lowenbrau promotional rod/racing wagon. Bill used MS Hobby Porsche wheels to trick out the otherwise boxy car. Malodorous Mike Meek couldn't stop talking about Welsh Models' 1:144 C-133; the model is a vacuform kit with resin engines and some white metal parts. Mike plans on building an early C-133 without the external reinforcing ribs to avoid difficulties in sanding the seam in that area. Mike's also radically reworked a 1:48 Sea Fury into an air racer; it'll probably end up as "Miss Merced." Mike's Esoteric 1:72 Guardian firebomber has a nice coat of natural metal paint on it and looks far better than its origins as a crude vacuform kit would have presaged, and his Griffon-engined Fw 190D-9 fantasy air racer is almost ready to accept a sponsorship of some type.

And the model of the month goes to...Felonious Frank Babbitt, who may not be an expert on pronouncing the word "Ouragon," but he certainly seems to be an expert at building it! His Heller MD.450 was outfitted with some brass parts, an Aeroclub ejection seat, and very nice FOD covers, and he finished it in a weathered three-tone Israeli camouflage, with decals that were radically reworked by Frank to be accurate. One of his revisions: painting and giving decal "dentures" to the sharkmouth on the nose.

CONTEST GHOULENDAR

October 11 - 17, 2004: **IPMS Philippines BAC** is proud to announce the **IPMS Philippines Bert Anido National Scale Model Competition** at the UP College of Architecture, Quezon City, Phillipines. For more information email: nationals@ipmsphilippines.com, or call at Noel Carpio at (632) 431-2836 (yes, this is a Region 9 event).

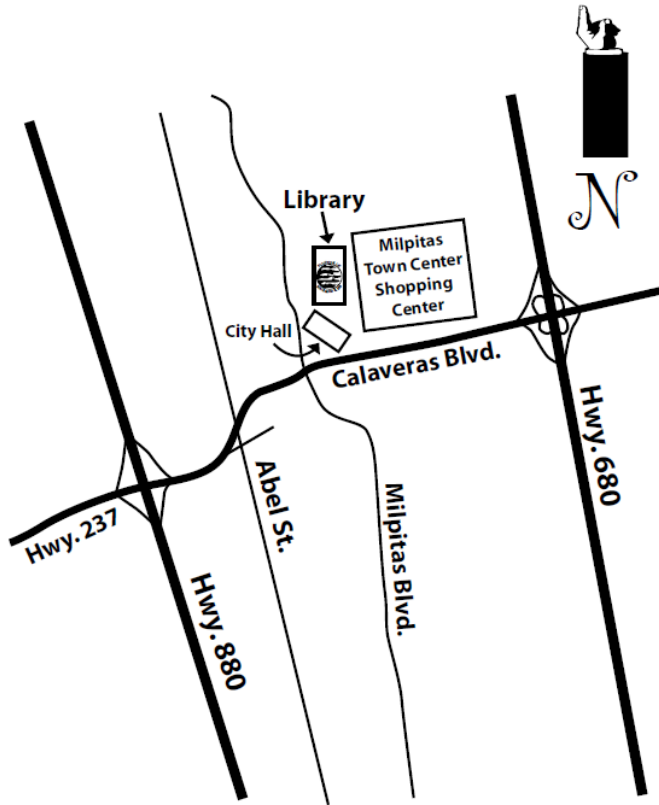
October 16, 2004: The **IPMS/Redding North Valley Dambusters** host their **model contest**. At the Win River Casino, 2100 Redding Rancheria Rd., Redding CA 96001. For more information contact Richard Carlson (530) 357-4488.

October 17, 2004: **IPMS Orange County** present

OrangeCon 2004 Anaheim Park Hotel, 222 West Houston Ave., Fullerton, CA 92832. For more information, email them at oc_ipms@aol.com.

February 13, 2005: **Silicon Valley Scale Models** host the **Kickoff Classic** at Napredak Hall, 770 Montague Expwy., San Jose, CA 95131. For more information, contact Chris Bucholtz at BucholtzC@aol.com.

April 28 - May 1st, 2005: The 20th annual **GSL International Scale Vehicle Championship and Convention** at the Wyndham Hotel, 215 W. South Temple, Salt Lake City, UT 84094. For more information contact Mark S. Gustavson at msg@GSLChampionship.org or visit their web site at www.gslchampionship.org.



NEXT MEETING:
**7:00 P.M.,
FRIDAY,
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IF YOUR RENEWAL DATE IS IN BLOOD, IT'S TIME TO PAY YOUR DUES!