Third-place Dennis Crooks' Learjet 35A on takeoff. The model flew impressively at well over 120mph and was a big crowd pleaser. Dennis had to increase the tire pressure so the big jet could get up enough speed on the grass runway. It was well worth the effort.

Mark Frankel's colorful F-4D Skyray was entered in Team Scale with Dean DiGiorgio as pilot and placed fifth. Mark's construction article on this ducted-fan-jet design appeared in the April '93 issue of "Model Airplane News." The 18-pound O.S. .91-powered jet uses a Ramtech fan unit and rides on Glennis wheels.

This 1/5 4-scale F8F Bearcat Whitley of Lynn Haven plans, and it includes a built. The mighty Navy O.S. 300 twin-cylinder wingspan, weighs 25 pounds. Mel placed fifth.

by GERRY YARRISH
Getting caught up in the fearsome crosswind, this Japanese A6M3 model 32 Zero built by Jeff Foley just avoids scratching its wing tip. Jeff built his model from a Dave Platt kit and placed seventh. An O.S. 1.06 engine powers the 18-pound, 7/8-s-scale, 80-inch-wingspan model with authority.

The main Top Gun for 1993. First-place Corvin Miller of Sarasota, FL, and his 1/4-scale Globe Swift. Corvin earned a static score of 96.491 and a flight score of 91.958 for a winning total of 188.449. The model has a wingspan of 80 inches, weighs 21.25 pounds and is powered by an O.S. 160 twin-cylinder engine.

THOROUGHBRED was built by Mel Platt, using Jerry Bates landing gear that Mel added to a kit. It is powered by an engine, has a 78-inch wingspan and has “droppable” gear.

THE WEEKEND OF May 1 and 2 was perfect for the 5th Top Gun Scale Invitational held in sunny West Palm Beach, FL. With temperatures in the mid 80s, a carpet of lush grass on the huge flying site and 57 of the best scale model aircraft ever built competing for thousands of dollars in prize money and trophies, this year’s Top Gun extravaganza was almost beyond description.

A crowd of thousands and a host of sponsoring manufacturers witnessed the events that made up this two-day competition. As before, Model Airplane News and Pacer technology co-sponsored the meet, which must now truly be the greatest display of R/C scale aircraft showmanship.

Expert modelers from around the world came for the chance to be this year’s Top Gun winner. From the first practice on Thursday morning to the final round on Sunday afternoon, the caliber of the models and the ever-increasing proficiency of their pilots made it impossible to single out any model as a sure winner. Each year, the quality, engineering and execution of these flying masterpieces continue to improve, and that they’re actually flown is a tribute to the hard work and dedication of the modelers behind the transmitters.

We congratulate all the winners—especially the new man on top, Corvin Miller, who flew his scratch-built, 1/4-scale Globe Swift, and the Team Scale winners, Bob Violet and Jerry Caudle with their Lockheed T-33 jet.
JUDGING

The contest is a combination of static judging (this came first, for obvious reasons!) and flight judging. Practice flights are usually flown after the models have been “static-judged.” The rules specify that neither the model’s outline nor its markings may be altered in

Paint or the Real Thing?
by JOHN E. JUNDT

This year’s Top Gun offered several examples of aluminum-skin simulation that was much more true-to-scale and realistic than the traditional aluminum or silver paints. For example, not content to rest on his laurels after winning the ‘82 Scale Masters with an aluminum-painted F-86, Terry Nitsh campained this season with the “real thing.” His spectacular, new, ¼-scale F-86 Sabre jet won the Best Jet and the Best Craftsmanship award at Top Gun ‘93. The jet is modeled after the Colorado Air National Guard’s demo team, and the contrast between its polished-aluminum skin and bright red paint is stunning.

According to Terry, the model was primed and prepared as though for paint and then covered primarily with Coverite’s Presto aluminum and a heavier aluminum detailing foil sold by Jeff Foley of Foley Mfg. The non-aluminum areas were painted first, and then the Presto was applied and trimmed to the paint masking lines. Each panel was applied individually and in correct scale position. The inspection hatch were made with the Foley foil, which is slightly thicker and, when applied, gives the model’s surface a 3D effect.

Presto is an adhesive material, and much care must be taken to avoid trapping air or dirt underneath it. Application consists of sticking one panel edge to the model and slowly burnishing the rest of the panel down with your fingers while forcing out air as you go. The use of a tack-rag to remove any dust or dirt immediately before applying each panel is a must.

To cover compound curves, Presto can be heated with an iron or a heat gun and then stretched to fit. Terry says that only about 70 percent of the panels went on correctly the first time; others had problems with air bubbles, wrinkles or trapped dirt.

When the trim paint and aluminum skin had been applied, it was time to make the simulated rivets—no dry-transfer rivets. With a combination of heat and pressure, the rivets were burnished into the model’s surface. Terry used two tools for this: a reasonably sharp tool on painted areas, and a tool with a slight flat on the Presto.

When all the graphics had been applied, the model was sealed with Ditzler DAU 82 clear coat. (For proper adhesion, a suitable bonding clear coat such as S.E.M.’s automotive Flexible Bonding Clear, no. 39663, must be used over the Presto before the final clear coat is applied.) To dull the surface as necessary for a particular scale model effect, the finish must be scuffed with steel wool before or after the application of the clear coat. Masking and scuffing different panels in opposing directions will help to ensure a maximum “scale effect.”

Eduardo Esteves of Belo Horizonte, Brazil, placed 19th with this ¼-scale, scratch-built Rearwin Skyranger. Covered with Sig Coverall cloth, the finish is automotive enamel. An O.S. 300 twin-cylinder 4-stroke engine powers the 112-inch-wingspan model. Eduardo scratch-built all the hardware on this seldom-modeled subject.
1. Eighth-place Kim Foster of Mansfield, OH, built this wonderful 1/4-scale model of a Nieuport 28 from the Proctor kit. Powered by a YS 1.20 4-stroke engine, the model has an 80-inch wingspan, weighs 16 pounds and has an automotive lacquer finish that duplicates a modern reproduction of the famous WW I fighter.

2. The father-and-son team of Tony and David Malachi of Kennett Square, PA, prepare their T-33B T-Bird for the second round. Powered by a BVM .91 engine and a Violett fan, the model placed sixth in Team Scale.

3. This close-up shows the excellent detail on Dick Hansen's 1/4-scale Albatros.

4. A gathering of jetsters and their jets. From left to right: Paul Schuessler, Patty Generali, Kent Nogy, Garth Hamilton, Bob Violett, Jerry Caulle, Bill Harris and Terry Nilsch.

5. Rich Uravitch (left) and Nick Ziroli Jr. carry Nick's Hellcat back to the pits after a wheels-up landing. The impressive Grumman fighter with its unique British paint scheme won the Best Military award. Scratch-built from Ziroli plans, the model has a wingspan of 96 inches, weighs 40 pounds and is powered by a Sachs 5.2 gas engine.

6. Bob Boswell placed 21st with his Mark Frankel-designed F-4D1 Skyray. Here, Bob brings it in for a landing. Power comes from an O.S. .91 engine and Dynamax fan.

7. This 1/2-scale, 101-inch-wing-span F/A-18 Corsair was built by Bill Stalfer of Schenectady, NY, and flown by Nick Ziroli Jr. in the Team Scale event. It weighs 35 pounds and is powered by a Zenith G-62 gas engine. Scratch-built from enlarged Ziroli plans, the model is equipped with Robert retractors and Gene Barton wheels.

8. Kent Nogy of Paso Robles, CA, returned again to Top Gun with his North American F-86 Sabre jet and placed 25th. Flared for landing, the model is just about to touch down. The model is built from a BVM kit, weighs 13.5 pounds, is powered by a BVM .81 engine and has a wingspan of 58 inches.

9. Tom Polapink of Centereach, NY, built this great-flying Sopwith Snipe, which is powered by a O.S. .35 gas engine. Just under 1/4 scale, the model has an 84-inch wingspan and weighs 16 pounds. Tom earned the highest static score (89.480) at this year's Top Gun.

10. Jeff Foley’s Japanese Zero is a study in surface detailing. Rivets, panel lines and just the right amount of weathering make the model look as if someone sprinkled "shrink dust" on the full-size fighter. Jeff's static score was 97.151.

Flown in Team Scale, this Douglas C-47 (Critics Choice Award) is the work of Gerry Garing (Schenectady, NY). Built from Ziroli plans, it has a 140-inch wingspan. It is powered by two O.S. .35 gas engines and has Robert retractors. Pilot Ron Chizuk did a good job of flying, and the team earned third place.
International Affair

It's the history that makes a scale extravaganza such as Top Gun so exciting, even to non-modelers. It's the one ingredient that sets scale meets apart from other events. Few would argue that English, German, and American aviation history have been closely tied throughout most of this century. How appropriate it is that fine scale modelers and admirers of aviation history from these very countries should meet at Top Gun in friendly competition.

The German team showed up with three excellent flying models designed by Andreas Gietz, and they're available as highly prefabricated fiberglass kits: a 92-inch span Yak 11; a 102-inch-span Spitfire (not shown); and a beautiful 126-inch-span DC-3 called "Sentimental Journeys." The last of these was flown by Stephan Dürststein to win Best Civilian Model, which was awarded by Lanier RC.

For more information on these excellent flying kits, contact Model Aviation Technology (407) 626-6955.

The Germans were very pragmatic during the days and nights of Top Gun. I like the Germans; you know where you stand with them. Their philosophy is simple and easy to understand. Daytime was for serious flying; nighttime was for serious fun, both "to the fullest." The English, on the other hand, were serious about very little, showing up with some very unique scratch-built models. The wildest of these was a Gerry Rathband-built Vicker Vimy—a twin Laser 100-powered WW I biplane that was designed and flown by Radio Control Scale Aircraft editor, Dave "laughing-man" Boddington.

As you can see from the photo, the Vimy wasn't the only offbeat undertaking created by the Brits. Equally unique were Richard Crapp's Antonov AN-2 Russian biplane and David Toyer's Gloster Meteor (also from a David Boddington plan). I can easily relate to the English; they admirably plunge headlong into the absurd at every possible moment—day or night.

 Seriously, it was quite an experience to be in the presence of countrymen whose aviation history is a story of both civilization and—how shall we say it—military competition? But all is forgotten and the fun of scale competition at Top Gun puts smiles on everyone's faces, no matter what one's native language might be.

If, however, a spark of aggressive competition is occasionally noted, it is, no doubt, the fault of us Yanks. After all, we allowed the Brits to put their slightly overrated, albeit supercharged, Rolls Royce Merlin V-12 into our supertwin airframe, the North American P-51 Mustang—a combination that proved to be a giant thorn in the Luftwaffe's side. I know I'll pay for that one!

Oh well, come plunge headlong with us next year into days of flying and nights of fun (be it serious or absurd) at Top Gun—the international event.

—Chris Chianelli

The German Team with the Fiber Classics Yak 11 and DC-3 (left to right): Michael Becker, Andreas Gietz (owner of Fiber Classics), Helmut Dürststein, Stefan Bloss and Stephan Dürststein. The Yak and the Spitfire (not shown) featured incredibly quiet, in-fuselage muffling—a possible feature for Model Airplane News. The DC-3 was powered by O.S. Surpass .70 4-stroke engines. Airplanes were shipped courtesy of American Airlines.

Mr. Top Gun himself, Frank Tiano, mugs it up for the camera during a brief break from keeping everything running smoothly. Frank has done a lot for the sport of scale.

The static judges evaluate:
- Accuracy of a model's outline—judged by documentation and three-views;
- Color and markings—judged by referring to color chips, photographs and drawings;
- Craftsmanship—judged by its overall finish, details and degree of scale perfection. Three judges score the model while standing 15 feet away from it, and a fourth judge scores craftsmanship while standing next to the modeller as he holds his model: side view, front, top and bottom.

Flight judging is based on:
- Five rounds; the lowest score is thrown out.
- Five mandatory maneuvers: takeoff, slow-speed flyby, high-speed flyby, traffic pattern and landing.
- Five optional maneuvers: slip-S, loop, roll, etc.

Before the first flight, contestants are allowed to demonstrate up to two mechanical options, such as retractable landing gear, flaps, etc. The flight judges look for scale realism in the execution of various flight maneuvers—a real test of pilot proficiency.

I think the only thing harder than designing, building, finishing and flying a model at Top Gun is judging the models. Chief judges George Lee (Flying) and Tim Farrell (Static), along with their teams of hard-working judges did super jobs, as did the contestants themselves and the models they flew. With mere fractions of points separating the winners, this has to be the most demanding and precise national competition.

HALF-TIME HIGH JINKS

Each day, to the delight of spectators—and to give competitors a well-deserved rest—we were treated

Half-time high jinks included Bubba Sipsip flying his Lanier Singer sport plane. Powered by a G-62 gas engine, there was smoke to spare during his heart-stopping routine.

Caught in a speedy knife-edge, Bubba’s Week’s Special biplane spits out its smoky signature.
1. Linda Crooks and Mark Frankel carry Dennis Crooks' 1/6-scale Learjet 35A back to the pits after a successful flight. The jet is powered by two O.S. .77 engines turning Dynamax fans, and it has a wingspan of 80 inches. Dennis placed third with the impressive corporate jet built from the Frankel kit.

2. Bud Roane of Melbourne, Fl., flew this scratch-built, 1/4-scale Sopwith Pup and placed 22nd. The WW I scout plane is powered by an O.S. 120 15 4-stroke engine, weighs 15 pounds and has a 79.5-inch wingspan.

Charlie Chambers of Coral Springs, Fl., scratch-built this beautiful all-aluminum-covered Grumman F9F-1 Bearcat from Jerry Bates plans. It has a wingspan of 77.25 inches and weighs 28 pounds. Powered by a Super Tigre 4500 glow engine, the model is equipped with modified FTE retractals and scratch-built wheels. The scale panel sections are made of 2mm-thick aluminum.

Nick Tusia of East Moriches, NY, pushes back his 1/8-scale Fokker D-VII WW I German fighter after another successful flight. The giant model has a 10-foot wingspan and is 7.5 feet long. It weighs 38 pounds and is powered by a Quadra 100 gas engine. The finish is a hand-painted "lozenge" pattern done in watercolors over doped cloth with a clear coat of polyurethane. Every part of this model was scratch-built by Nick.

Sixth-place Diego Lopez did very well with his 1/8-scale Skyradair. The 90-inch-wingspan model weighs 37 pounds and is powered by a Webra Bully engine. The model has operational folding wings and is equipped with navigation lights that show when the wing's fold-down locks are properly engaged.

It's the Effort that Counts

All too often it's heard: "You can build a warbird or a modern twin-engine ducted-fan ship of your own design to win at Top Gun." Well, to disprove this tired complaint, here are two antiques from vastly different eras that took top honors at Top Gun.

Twenty-eight-year-old Tom Polapink, from Centereach, Long Island, NY, took the top static score of the weekend with his incredibly accurate, painstakingly detailed Sopwith Snipe. Obviously, not a Phantom or a Bearcat, Tom's Sopwith nonetheless was awarded a glorious 93.490 static points—the closest Top Gun score to that perfect 100.

Not only did Tom take the highest static score with the Snipe (his own design), but he also managed to log three flights in the 90s, in spite of strong, gusty crosswinds all weekend (conditions often dangerous for scale subjects from WW I). Tom's overall score of 181.74 gave him 11th place out of 49 contestants. It's scary to think what Tom's final score might have been had the winds cooperated just a bit more.

On the other hand, Terry Nitsch from Columbus, OH, showed just how far you can go with an entry built from a commercially available kit. With his Bob Violett F-86F, Terry was not only among the top six static scores with 96.507 points, but he also won the Special Award of Best Craftsmanship (presented by Ace R/C). Just look at the detail in that cockpit: Terry used many off the shelf scale niceties like Glenni wheels, a favorite on Top Gun jets.

Finally, by logging beautiful scale flights consistently in the 90s, Terry took second overall with a score of 188.299—not bad for a project that started as an off-the-shelf kit. This undertaking makes all of us feel as if we might have a shot at scale events if we're willing to put in the effort to make it stand out.

So, thank you Terry and Tom, not only for being part of the Top Gun Invitational spectacle, but for also disproving some long-standing misconceptions about warbirds and exotic jets being the only planes that can win at Top Gun and you can't win with a kit—wrong!

—Chris Chianelli
and exits each maneuver; and the sheer power of the model as its big gas engine thunders overhead. It takes a lot of sky to complete TOC maneuvers, but his landings were so "on-the-spot" that they looked effortless. Experts always make the impossible look easy.

While performing some of the hottest hot-dogging ever seen with his Flying Machine, Cloud Dancer team member Don Muddiman rightfully grabbed his fair share of "ohhs" and "ahhs." This small unremarkable-looking model's performance was in marked contrast to its appearance. A vertical hand-launch was followed by a series of mind-boggling snaps, loops and Lomcevaks that took the plane almost out of sight. The finale—a 90-degree, vertical, dead-stick dive from the clouds to a split-second-timing pull-out—would have caused wing failure on lesser models.

With a bright green Viper sport jet, Terry Nitsch showed what the cutting edge of speed and performance is all about (how about 200mph!). His ducted-fan jet did the fastest, lowest, high-speed passes and went much too fast for my camera to record clearly.

With a flight commentary by Frankie T. himself, the entire flight was reminiscent of the displays put on by the Blue Angels and the Thunderbirds. Bob Violett and Bill Harris flew a pair of Violett Maverick jets in slow, fast flybys. Bob Fiorence flew his black, swing-wing F-14 Navy Tomcat built from the Yellow Aircraft kit. Seeing it pull its wings back in flight was like seeing a bird of prey making ready for the kill!

In themselves, all these half-time showmen put on a true-to-form, Top Gun show within a show.

**THANK YOU!...**

...to "Mr. T.G." Frank Tiano for promoting the event; Herschel Worthy of Pacer Technology for being co-sponsor; announcers Sam Wright and Dave Platt for their informative, entertaining narratives; the Palm Beach Aero Club members who planned and hosted the event; Britannia Airways for arranging transport of the British models; American Airlines for transporting the German models; the judges, who did their jobs flawlessly; and to the host of other sponsors and manufacturers who donated products and cash awards. They all helped to make this thing called "Top Gun" a wonderfull success.

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**TOP GUN TOP BRASS**

**Chief static judge**—Tim Farell

**Static judges**—Bob Curry, Bill Deverna, Lee Henderson

**Chief flight judge**—George Leu

**Flight judges**—Wayne Fredrick, Darlene Fredrick, Bob Campbell, Jim Semornian, Jim Parker, Stan Alexander, John Smith, Tom Kozel

**Head scorekeeper**—Rosella Curry

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