

Howard's Damn Good Airplanes, Mike and Ike

By Mike Burton

Although the Thompson Trophy races produced a number of stubby, stumpy-looking racers, the same could not be said of the DGAs. As beautiful in form as they were in function, they were the work of American aircraft designer Benny Howard, whose first competition racing plane, the DGA-3, took to the air in 1930. DGA stood for Damn Good Airplane, summarizing Howard's goals succinctly.

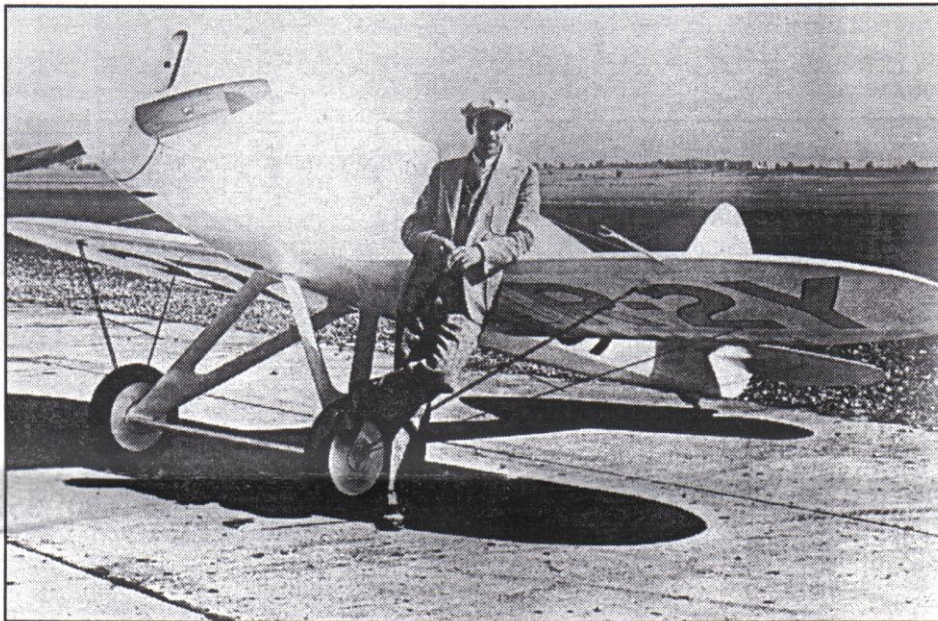
Benjamin Odell Howard was born in Palestine, Texas, in 1904. At the age of 19, he went to Dallas and got a job in the Curtiss airplane factory. Lured by the glamour of flight, the enthusiastic Howard bought a used Curtiss biplane and a book on how to fly. His enthusiasm nearly cost him his life, however; during one of his first flights, he crashed, killing his passenger and injuring himself. He said later that he'd read the book, and didn't think he needed to know anything else! After recovering, he took flying lessons and became a commercial pilot.

Howard became interested in airplane design when a Houston "businessman" asked him to modify an airplane to carry large amounts of bootleg liquor. Howard modified the plane to carry fifteen cases of booze on each flight. When he saw the plane with its new cargo compartment, Howard's bootlegging customer said, "damn good airplane!" and DGA became a Howard aircraft trademark.

Not having an extensive reference library, I cannot describe anything about DGA-1 and DGA-2 but DGAs 3, 4, 5, and 6 are well-known to any Golden Age or air racing aficionado. Sharply competitive between 1930 to 1935, DGA-6 "Mr. Mulligan" took first place in the Thompson Trophy

Race of 1935. This was quite a resume for Howard, who was by this time already engaged in a very leading-edge career as an airline pilot.

Howard also had a knack for choosing other young men to help in his design goals. Not only did Howard want to design



Benny Howard built racers like 'Pete' with the idea that they should be capable of receiving a commercial airworthiness certificate. Howard's DGA-6 won the 1935 Thompson Trophy.

fast racing aircraft, but he wanted them to be capable of meeting strict U.S. Department of Commerce requirements for commercial license registration. Most racers not of military origin were constructed and inspected as "experimental" vehicles which weren't going to carry paying passengers or be offered to the public at large. While Howard never actually had any of

his racing DGAs so certified, as a design goal it is notable. But creating a purpose-designed speed racer which could pass cursory examination by DOC inspector and gain an NX or NR license to fly was still a far cry from making something commercially useful out of the effort.

In 1929, The National Air Races in Cleveland were a rousing success, ten days of all-out show-flying by over 300 military and civil aircraft, with a feature race which was to underscore the idea of advancing aviation technology. The first Thompson Products Company-sponsored trophy race, a fifty mile free-for-all on a five-mile pylon course, was open to military and civil entrants with no holds barred on modifications to increase speed. Remembered today by the banner headlines "Mystery Ship beats Army's Best," the significance of a commercial design (Travelair's Model R) at 235 mph outpacing by 50 mph the fastest US military biplanes was not lost on Ben Howard. The next year, the 26-year-old Howard piloted the

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FROM THE PRESIDENT

Let the Carnage begin!

November 17, 2000. Put it on you calendar, make a note for yourself, write it backward across your forehead. This is not an auction, folks. The library forbids the use of the facilities as an auction site. This is the our annual "Paper for Plastic Exchange." We do not auction stuff, we just exchange designated amounts of paper for plastic. If you have been fortunate enough to remember our last exchanges, you will recall that they have been fun and interesting, especially to those of you who bid on a model that you would never build in the first place just to increase the price for someone you hate. I am not against it, because it's more money for the club, but I find it funny as heck when it backfires on you. Remember, November is also the month we begin to go full swing for the Veterans' Drive. If your little acts of revenge backfire and explode in your face, you can always donate that 1/12 scale drum set model kit to the vets.

The usual rules apply:

-Please bring at least one model to donate to the exchange

LETTERS TO SVSM

Just a quick message regarding the status of repairs on the "box o'parts" I created last Friday in the parking lot following the meeting. First, EVERY part that popped off was recovered by the gang and put in back the box! I find that pretty amazing under the circumstances. Second, I have already re-attached nearly everything and repaired the broken fender on the Sherman Jumbo. Third, it looks like the only actual unrepairable damage was to a photoetched periscope guard that will require replacement. Talk about falling into a bucket of crap and coming out smelling like a rose...

Thanks again for the assist.

Laramie Wright

Dear Editor,

To all our new and returning veterans, thank you for a very successful Kids' Faire. Everyone I talked to said they had a wonderful time and we know that wouldn't have happened without you and your support. We hope you had a fun time, too. The Faire gets better and better. This year, 197 people from the community turned out. Since this is a feel good, do good day, all those people got a good feeling about all that they saw.

Events such as this are sometimes difficult for local agencies, businesses, clubs or private individuals to attend or help to support. We at Foothill Presbyterian Church would like to acknowledge this and express our gratitude to you for your participation. We could not have had the success we did without your support.

We are already talking about the fifth annual Kids' Faire! If you have any suggestions for ways to improve this community event, please contact me. With each year, more people will discover the Faire and what it is all about. This is good for all of us. Thanks again and hope to see you next year!

In His Service,
Sara Lienau
Coordinator, Kids' Faire
Foothill Presbyterian Church

pile. If you would like to donate more you may, as it all goes towards the club.

- Please make the models you bring something you would like to build yourself.

- Although unopened models are preferred, please make sure that any already-opened kits have all the parts in the box. After checking, please tape or rubber band the box shut. In the past there have been such mistakes made. Please help us avoid such problems this year.

- Bids are to be made in dollar increments only. Sorry folks - no minor increment bids.

- Please arrive early. This way you can register, donate your kit and checkout what's on the table. Also, if we end up with a large amount of donations, we can get cracking as soon as possible.

See ya at the exchange.

—Dave Balderram

CONTEST CALENDAR

September 23, 2000: **IPMS/Humboldt Bay** hosts its **annual contest** in Eureka, California. For more information, call Mitch Bartel at (707) 826-1380 or e-mail him at mitchy2@juno.com.

October 21, 2000 **IPMS/North Valley Dambusters** holds its **annual contest** in Redding, California. For more information, call Richard Carlson at (530) 357-4488 or e-mail BlackWatch25@aol.com

October 22, 2000: IPMS/Orange county hosts **The Region 8 Convention-OrangeCon 2000** in Buena Park, California. For more information, call (949) 631-7142 or e-mail ocipms@aol.com.

October 28, 2000: The American Scale Modeling Organizaton presents the **Central Valley Modeling Expo** at the Legion of Valor Museum in Fresno, California. For more information, Call Ernie Gee at (559) 438-1628 or e-mail him at elitemodels@aol.com.

November 11, 2000: The **Antelope Valley Group** hosts its **Fourth Annual Contest** at Antelope Valley College in Lancaster, California. For more information, call David Newman at (661) 256-6359 or e-mail him at dnewman@as.net.

November 18, 2000: **IPMS/Mt. Diablo** hosts its **annual contest** in Vallejo, California. For more information, call Chuck Speir at (707) 645-0231 or e-mail him at sjshark2@ix.netcom.com.

Overworked, unappreciated: WWII utility twins

By Mark Schynert

What has two engines, eight to 14 seats, carries passengers, drops bombs, evacuates wounded, trains crews and appears in the markings of at least two dozen nations? The utility twin of World War II. Almost every combatant nation (and most neutrals) used one or more types of twin-engined airplane for training, light transport, cargo, reconnaissance, patrol and in some cases even ground attack duties. Americans built Beech 18s, Lockheed *Electras* (Model 10) and *Electra Juniors* (Model 12). The British produced *Ansons* and *Oxfords*. The Japanese had the Ki-54, the French the *Goeland*, the Soviets the Yak-6, and the Germans came up with several types: Si 204, Fh 104 and Fw 58. The Italians had only one basic type, with many versions: Ca 309, 310, 311, 313, 314, 316. Even the Czechs got into the act with the Aero A-304.

For the most part, these are unsexy second- or third-line drudges, with less horsepower in both engines than the average WWII fighter had in one. But precisely because of this, and their multiple uses, these types can show up in a variety of military and civil guises, some of which are quite surprising. And if one is so inclined, there are kits for most of them. Herein is a brief survey of available kits (1:72 unless otherwise specified).

The most ubiquitous of the bunch was the Avro *Anson*, based on the Avro XIX feeder airliner of 1935. Entering service in 1936, the *Anson* was the first RAF monoplane to see squadron service since 1918, and 11,020 were built. Most were trainers or transports, but it was also important in the early war as a coastal patrol plane, and got the better of more than one Bf 109, despite its slow speed and minimal armament. A few Canadian-built examples even served with the USAAF as the Federal AT-20.

Four kits are currently available: *Airfix's* rendition of the coastal patrol *Anson I*, which dates back to the sixties, and a C. 20 transport version by *Aeroclub*. The *Aeroclub* is probably a better kit, but the *Airfix* kit should turn out a nice model if

you go to the expense of getting the *Falcon* transparency set that includes bits for the *Anson*. *Sanger* also offers two 1:48 vacuform kits.

The other major British type was the *Airspeed Oxford*, with 8558 built. It usually had the same engines as the *Anson*, and pretty much the same top speed, just below 190 mph. However, although the Mk. I came equipped with a bomb bay and a turret, it was used almost exclusively by the RAF for multi-engined pilot training, with a few for communications and other roles. There are three suppliers of *Oxford* kits. The old *Frog* kit is a bit crude, and apparently has some outline problems. *Tasman* also offers three different kits (Mk. 1, 2 or 5), and is probably the better choice. And in 1:48, there is another *Sanger* vacuform.

Lockheed's two entries in the category have a historical significance that is disproportionate to their production totals. The Lockheed Model 10 *Electra* is of course the type in which Amelia Earhart and Fred Noonan vanished in 1937. 144 were built, including one of the first aircraft with a pressure cabin, the XC-35, the C-36, R2O and R30. The smaller Model 12 *Electra Junior's* production only ran to 114 examples, plus 16 Model 212 light patrol bombers built for the Netherlands. Sidney Cotton, the father of British aerial



Oxfords like these provided valuable training for future Bomber Command crews. *Tasman* makes the best 1:72 kit of this airplane.

photo-reconnaissance, used a trio of Model 12s for spy flights over Germany up to 1939, his cover being that of a promoter of color film! He even invited German officials to ride in one of the *Electra Juniors*, equipped with no less than five cameras! The *Electra Junior* also saw service with U.S. forces as the C-40 and JO.

There are lots of kits for the Model 10, but most of them are right out. *Execuform* issued a vacuform twenty years ago which is accurate in outline, and the drawings are nice, but it's only one step up from scratch-building. *Merlin* boxed a Model 10, but *Merlin's* products are usually one step down from scratch-building. *Dekno's* resin effort is expensive, and not the

best available in the scale; that would be the *Special Hobby* kit, a limited-run injection kit with some resin parts. Mike Burton has one under construction now; it goes together well, though not without some hassles, especially around the tail fins and windscreen. And if constant scale is not an issue, consider the *Williams Brothers* 1:53 kit, which came out last year. The only complaint I've heard is that it isn't 1:48.

There are only two available kits for the Model 12, *Merlin* and *Dekno*. Apart from the price (over \$30), the *Dekno* resin is a pretty decent kit.

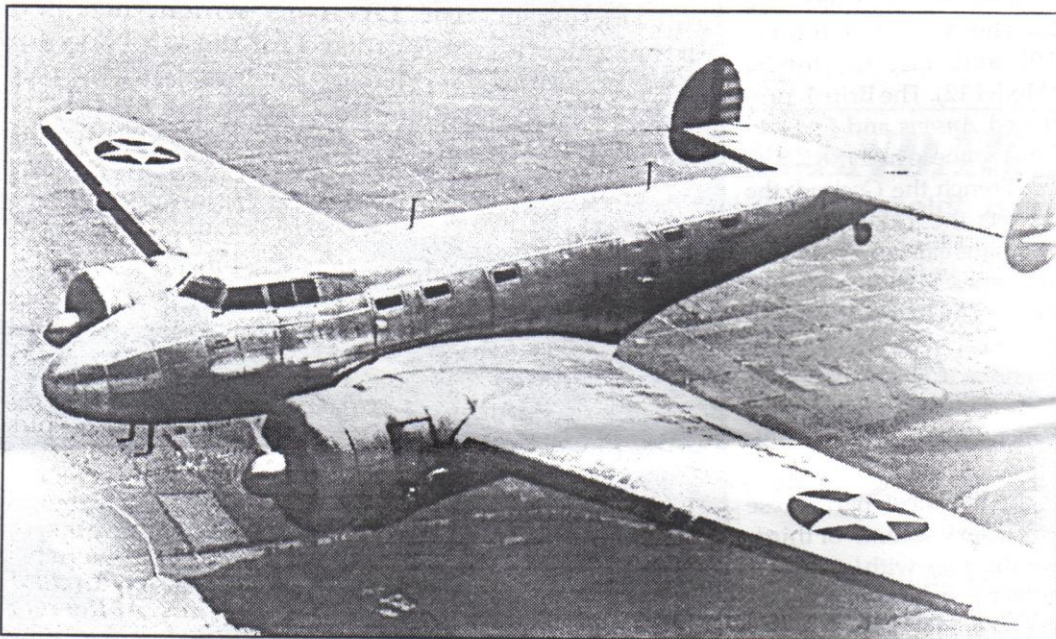
The most important American type in the category is the Beech Model 18. It served as a navigation trainer (AT-7, SNB), bomber trainer (AT-11), photo-recon plane (F-2), utility transport (UC-45, JRB) and even as a bomber (a small batch was exported to the Kuomintang). It was also in continuous production for over thirty years. 5680 were built during the war years, and with postwar commercial production, the total rises to about 7800.

Four kits are available. Oldest is the *RarePlanes* vacuform, which builds a UC-45. Three

newer injection kits are preferable. *Hobbycraft's* UC-45 issue has better engines and nacelles, but the *Pioneer* kit is otherwise better. *Pioneer* also produced an AT-11 with essentially the same mold, although there is no interior detail behind the glass nose. In 1/48, *Sanger* offers a vacuform.

The Italians employed light twin-engined aircraft in combat more than anyone else. Their Caproni Bergamaschi Ca 310, 311, 313 and 314 (with a confusing collection of subvariations, totaling 1115 examples) served the Regia Aeronautica from the start of WWII to its end, and some continued in service after the war. Further, the Caproni saw service as a recon bomber and transport with the Swedish Air Force, and some were lost on patrol duties over the Baltic, both to marauding German aircraft and to frequent mechanical/structural failures. The Swedish crews hated the plane. Unsound though the type itself may have been, *Italeri* has produced a series of nice kits, covering the Ca 311M, Ca 313 and Ca 314. If you want to build the very different Ca 310, there is a *Dekno* resin kit.

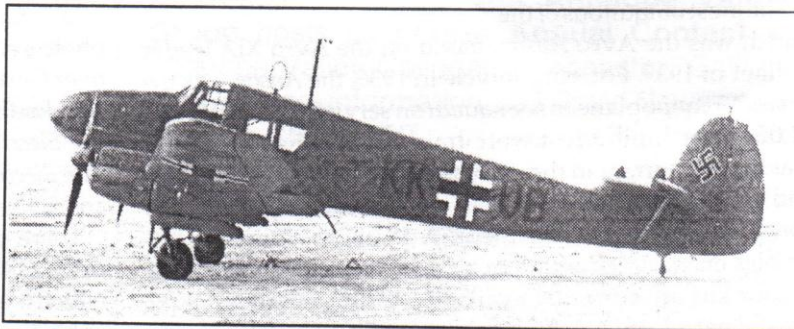
Germany's crew trainer at the start of the war was



Lockheed's *Electra Junior* (top) and *Electra* are best known as airliners, but they served as utility aircraft for the USAAF during WWII.

the Fw 58 *Weihe*, and it had an active and varied career as a courier, staff transport, crew trainer and anti-partisan bomber. Many were exported, and it was produced under license in Hungary and Brazil. 2050 were built altogether, but unfortunately, no kit is easily available today, although *Karo* has issued a vacuform some time back.

Next for the Germans was the Seibel Si 204, which was a logical follow-on to the smaller Fh 104 *Hallere*. Only 48 of the



The Fw 58 was used for a variety of missions, including training, staff transport and anti-partisan bombing.



The versatile Siebel Si 204 was used as a transport, bomber, trainer and even night fighter. After the war, production continued in Czechoslovakia and France, as the Aero C-3 and the NC 701 Martinet.

latter were built, but Si 204 production exceeded 1000 examples during the war, and over 300 more were built in France postwar. Over time, the Si 204 supplanted the Fw 58, as it was a more capable crew trainer, though it too was used for anti-partisan sorties and as a anti-night-harrassment night-fighter. Amazingly, it was also used by the RCAF as a carrier-borne coastal patrol aircraft... actually no, although the Schiffer *Luftwaffe Profile #11 Fh 104/Si 204 and Its Variants* (Manfred Greihl, 1996) does include a color profile of this spurious bird. Tsk, tsk, modeling humor...

Pavla has done a limited-run injection kit of the Fh 104, which looks pretty nice. For the Si 204, you have a choice of two flash-ridden KP kits: the Si 204A, or the C3 (Czech designation for the Si 204D). The moldings are almost identical except for the nose of the plane, and there is a lot of flash.

Japan built a variety of small twin-engined transports, but the only one that was truly multi-roled was the Tachikawa Ki-54, Allied code-name Hickory. Production ran to 1368 airframes, including a -d variant used as an ASW patrol plane. *A & V Resin* has issued a kit of the Ki-54, and it will be challenging to build, mostly because the builder will get no help whatsoever from an instruction sheet that was apparently composed and included without the faintest intention of instructing anyone about anything. The shape of the thing looks good, and there are lots of little parts, but where they all go...?

The French entry is the Caudron *Goeland*, variously designated C.440/441/444/445/447/448/449. 1702 were built. The Germans captured a bunch and had a

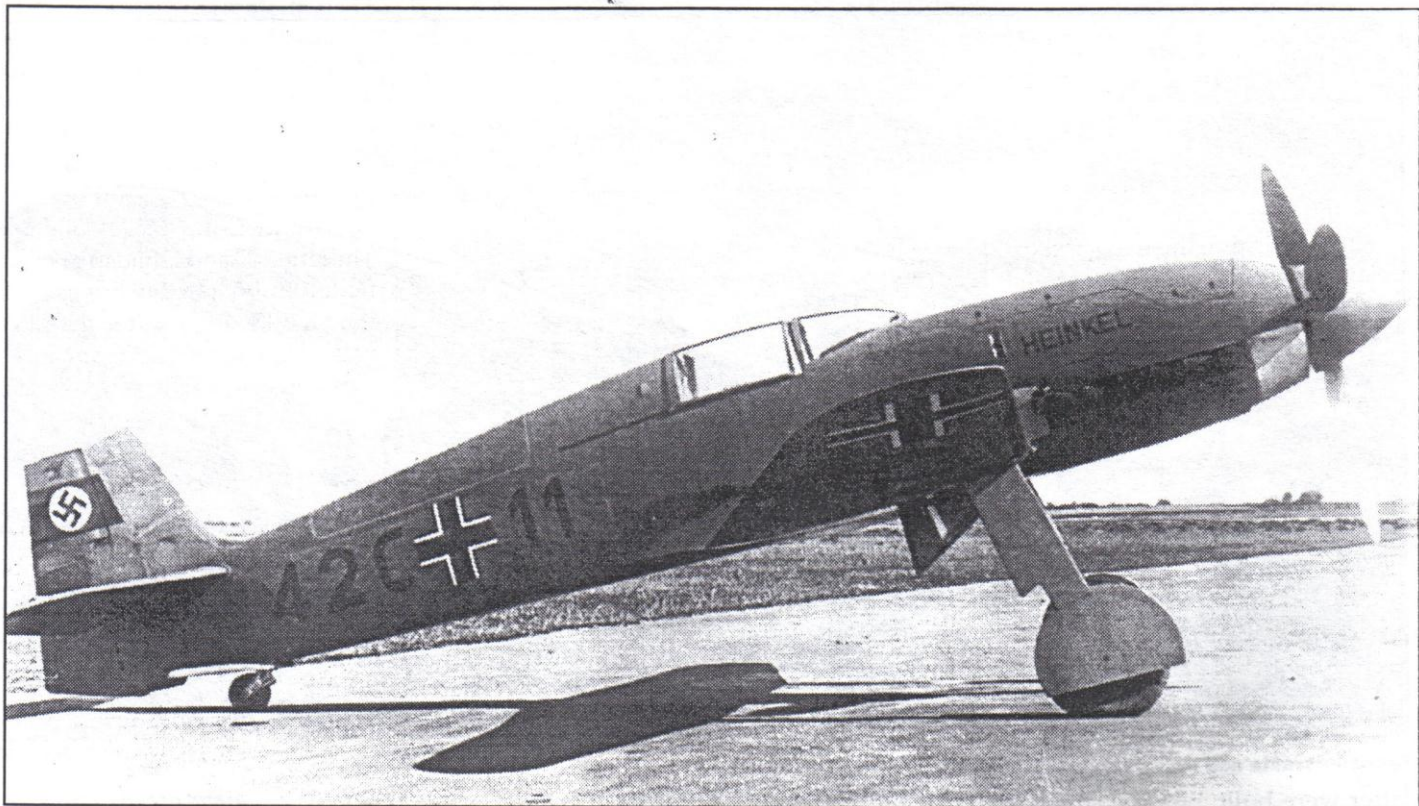
lot more built; they probably got more use out of them than the French. There is an *Airmodel* vacuform with resin parts available. There may also be a resin kit by *Dujin*.

Finally there is the Yakovlev Yak-6, the Soviet solution. With less than half the horsepower of the other types discussed here, and in most cases fixed landing gear, the Yak-6 was cheaper, slower and uglier than anything else in its class and despite the lack of performance, the VVS frequently loaded them up with half a ton of bombs and a dorsal gunner and sent them to the front, albeit at night. About a thousand were built. There are a number of kits: *Encore*, *Wings*, *7* vacuform, *Zvezda*, *Alpha* and at least one box I saw covered with Cyrillic. Probably some of these are the same molding in different boxes. The *Zvezda* kit looks good, except for the propellers, which are unusable.

So get with it—at the next contest, let's flood the multi-engined category with some of these real planes. Wouldn't it be great if the judges had to split the category into Ki-54s and "all others"?



Allied personnel examine a Tachikawa Ki-54 in surrender markings. The Ki-54 served as a trainer, transport and anti-submarine aircraft.



The He 100 Harold modeled was this one, coded D-IDGH when it broke the speed record, but covered over hurriedly with a piece of fabric printed with a small national insignia and fighter-style codes. If one looks closely, one can see the ripples in the fabric.

He 100: world's fastest propaganda fighter

By Harold Offield

In 1939, the German propaganda machine was in high gear, and so were Heinkel's efforts to build a front-line fighter. The two came together in the He 100.

After the Bf 109 was chosen over the very capable He 112, the Heinkel team designed a new fighter with as few curves and the minimum number of parts. In 1938, they rolled out the new plane, a small low-wing fighter with a DB601 engine with a special pressurized evaporative cooling system.

Although the plane demonstrated outstanding performance, once again Heinkel was snubbed. Three planes were sold to Japan and a further three went to Russia; the Ki-61 and LaGG-3 have features that may well have been inspired by the He 100.

While the Germans did not make use of the He 100 as a fighter, except for nine examples assigned to factory defense of Heinkel's Rostock plant, the plane did make an impact. The nine He 100s were photographed in a variety of paint schemes in several locations to give the impression that the "He 113" was in widespread use. They made the French think that there were several squadrons already equipped with it. They also claimed the plane was the fastest aircraft in the world. This was not propaganda—the second prototype set a record, and the third prototype, built specially to set the record, topped it.

By removing all armament and radiators, clipping the wing tips, removing the paint, and polishing and waxing the skin, they were able, to indeed, hold the record for three weeks at 463.92 mph before it was broken by another German design, the Me 209V-1, with a speed of 469.22 mph. That record stood for 30 years.

Medallion Models' kit of the Heinkel He 100D includes 28 resin parts, seven white metal parts, two vacuform canopies and decals for one of the Luftwaffe's fictitious propaganda squadrons.

The resin is well done, with very few mold marks. Mold seams are easily sanded smooth. The white metal pieces are well cast, as are the other small pieces in resin. The canopy was vacuformed without scratches, bubbles or blemishes. The decals looked good on the paper backing, but since I didn't use them, I can't comment on how well they worked.

I started with the modifications first. Using line drawing from *The Air Racer* by Charles A. Mendenhall, I clipped about an eighth of an inch from the wing tips (regular sewing scissors snipped them cleanly). I then sanded them to shape and scribed new panel lines on the tips. The same was done for the stabilizers.

The area behind the cockpit had to be filled. There is a vertical bulkhead here instead of the diagonal one the kit provides. I glued a piece of .010 card to the back of the cockpit, then, with A&B epoxy, filled in the area. After it cured, I sanded it to match the fuselage. A panel line had to be scribed into this area to complete the improvement.

The radiator on the bottom of the wing was filled using the resin piece that was designed to hang below the wing. I glued it flush. The gun ports were filled with Zap-a-Gap, and the ejection ports were taped over with small rectangles of Scotch Clear Tape (this tape can actually be sanded and painted). That's it for modifications on the fuselage.

The cockpit was used almost stock from the box. Although a bit overscale, especially the rudder pedals, it looks good

after painting, washing, and dry brushing. I used the Tamiya's German Gray for the floor boards and sidewalls, Alclad "O" on the seat (paint is heavy, you know!), and installed *True Details* German rudder pedals and seat belts. The usual flat black instrument panel and glass dials and a throttle made from stretched sprue and white glue finished it all up.

After polishing the wing and fuselage just to make sure the model was almost ready for a natural finish, I used 5-minute epoxy to glue them together. This was the only problem area I ran into. Repeated applications of superglue were used until the area on the wing to fuselage seam was filled to the surface. I had to be very careful sanding this area. The superglue is harder than the resin. I used superglue because there was going to be a panel line between the wing and fuselage. This was the hardest part of the assembly. The panel line curved from the front of the wing to the rear, and it was a little hard to reach with a guide to scribe against. I used Dymo Tape as a template.

The cockpit was masked off before another round of sanding with dry 1500 grit sand paper. A toothpick was run through all the panel lines to remove the sanding dust. Fleco Varathane water based clear gloss was shot over it. The next day I made sure everything was ready. Alclad "O" was used overall, then medium was used to shadow shade all the panel lines. Post-it-Notes were used on all panels. Alclad darkest

shade was used for the exhaust area. After a short wait I then rubbed the model down with a piece of flannel cloth. Another coat of Varathane was sprayed over this. I let it dry under a lamp for an hour.

Decals from *SuperScale* (German letters) were used. A couple had to be made by cutting some apart and using pieces of them. The letters D and G had to be modified. Rub-on letters were used for the Heinkel logo. After the plane was cleaned with a clean damp cloth, it was again sprayed with Varathane, and again rubbed with a dry cloth.

The undercarriage was used straight from the box, cleaned up, painted Alclad Medium and glued

into place with 5-minute epoxy. The instructions are a little vague on the locations of the retraction struts, so I put them in the most logical position.

The canopy wind screen can't be used. The actual plane had a small round windscreen. Fortunately, I had a mold already made for another project that worked perfectly. It was vacuformed and dipped into Future, painted, then glued into position with Elmer's glue. The sliding portion was used from the kit. No radio antenna was used on the real plane.

This project was really a joy to do, it was simple and fast. I wish they were all this easy! I friend suggested that I enter it in the Virginia Beach Nationals. I did, and it placed third in the civilian category. Not bad for about a week's spare time!



He 100 in phony operational markings around 1940.



Although its combat career was a fraud, the He 100 was an attractive airplane. This photo shows both the planform, which used few curves, and the small size of the fighter. Only nine were ever used by the Luftwaffe, although the French supposed there were several squadrons.

OUR FAVORITE MUSEUMS

Mohave • Fox Field • Palmdale

California's Antelope Valley

Photos by Ken Miller

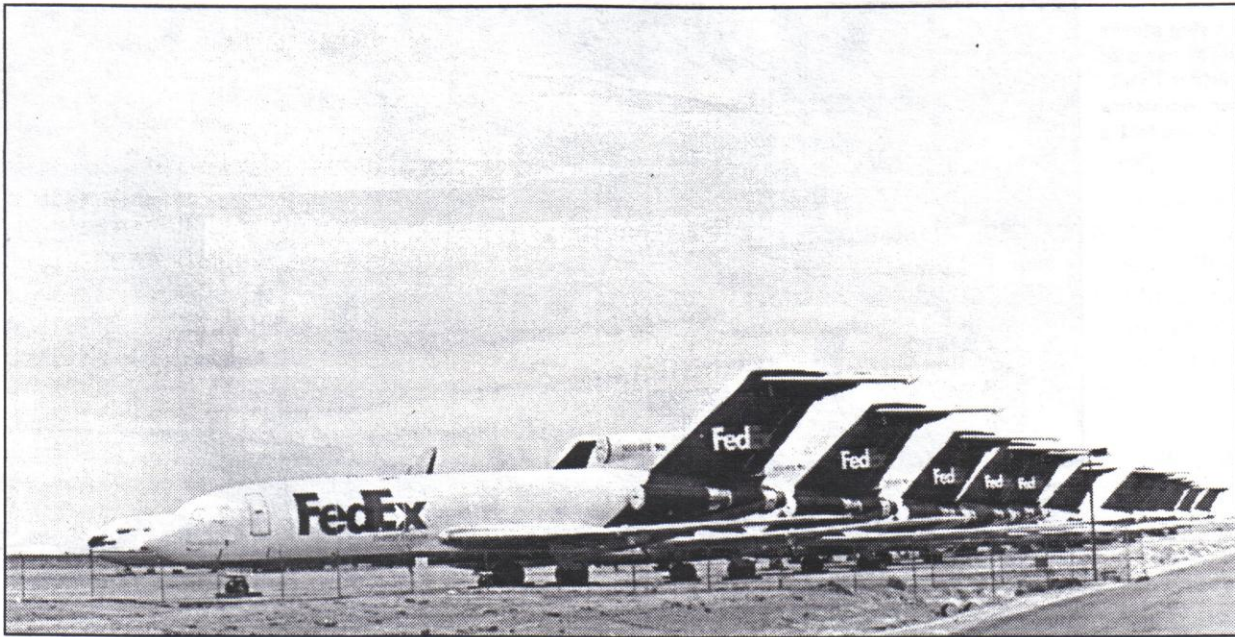
A few years ago Mike Burton mentioned that it is a bit of a hard sell to get folks to attend the Antelope Valley contest due to the long drive. I generally work weekends so I don't expect to make it to that contest in particular, but I've made the Mojave, Edwards, and Lancaster areas an annual destination due to the wide variety of aircraft available to see and photograph. The Antelope Valley really does have something for everyone. Here's a sampling of photos taken on two different trips.

The Mojave Airport is a civilian gold mine with aircraft in long term storage and also getting scrapped. Both times I've been able to get tours from the airport staff to take photos. There was a fleet of Convair 880's at Mojave that were there longer than they were in service with TWA. And where else but at Mojave can you find a hangerful of Saab *Drakkens*?

A few C-133s are also in storage. An ex-Eastern/Delta L1011 is slowly being reduced to scrap metal. Next on the tour is Edwards Air Force Base. Home of the Air Force Test Pilot School, guarded by the rocket-assisted F-104 on a pole. NASA's Dryden Test Center also has a nice display and tour that featured the SR-71s NASA was using for research a few



After retiring from military service, CH-54 Skycranes like this one found eager customers in firefighting contractors. This CH-54 waits for action at Fox Field's tanker base.



Former FedEx 727-100s soak up the sunshine at Mohave. Airliners come here for storage and salvage.

years ago. Boeing was using Edwards for flight testing of the new 767-400 when I last visited. The Flight Test Center Museum has a good display, including a Gloster *Meteor*.

South of Edwards is Lancaster's Fox Field. There is a small museum with a TF-102, KC-97, C-119 firebomber, and Armstrong Whitworth *Argosy* on display. The U.S. Forest

Service also has an air attack base here, so if you visit during fire season so can see ARDCO's C-54 tanker 151 and an Erikson Airplane CH-54.

Palmdale has the Blackbird Airpark, which I've yet to visit as I've always run out of time doing everything else.



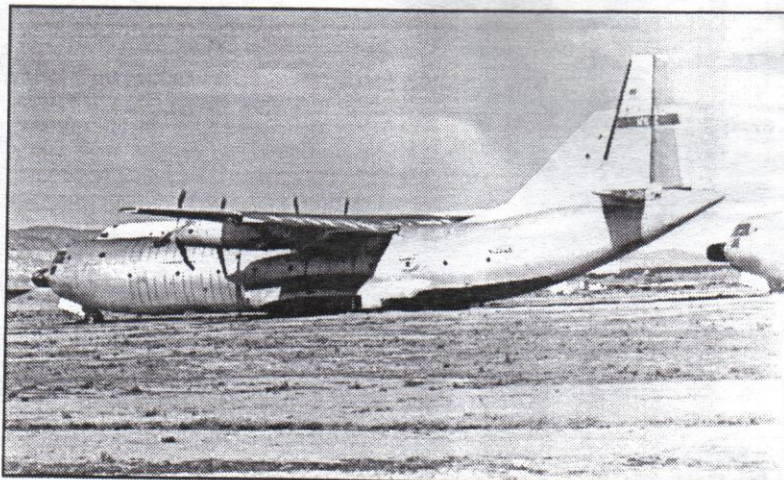
This Hemet Valley Flying Service C-119 had its career ended by a student pilot who retracted its gear while still on the ground. It remains at Fox Field, where the accident occurred.

This L1011 is being slowly cannibalized for parts to keep other *Tristars* flying. One of the major recipients of its parts is the RAF's fleet.



Among Mohave's hidden treasures are some Saab Drakens, formerly part of the Test Pilots' School fleet.

Another Mohave rarity is its small herd of C-133 *Cargomasters*. Unlike examples in storage at AMARC, these aircraft still have their engines.



Howard's DGA-5 and DGA-5 racers in 1:48

Continued from page 1

DGA-3 "Pete" to a third place finish at 162 mph, using a borrowed 98hp Wright-built Gypsy engine. While quite small, the monoplane "Pete" was a tribute to the design team of Howard and 18-year-old Gordon Israel. First place went to a biplane (Laird Solution) powered by a much larger 470hp engine, and the second place winner was a 400hp Travelair *Mystery Ship*. So all things considered, The DGA-3 was a Damn Good Airplane!

Adding Eddie Fisher, an excellent metalworker and mechanic, to Howard's team provided more horsepower in another way. Howard's DGA-4 "Mike" and DGA-5 "Ike" low-wing monoplanes came next. Howard figured he could build two planes of the same design for the cost of building one and a half unique designs. Initially powered by standard Menasco B6 engines that were rated for 180hp, the DGA-4 went on to have a supercharger added along with other refinements in the coming years, so "Mike" was the preferred entrant for Thompson races while "Ike" provided a great number of air fans demonstrable proof of the strong "commercial grade" design in lesser races and stunt shows. Constructed primarily of a welded-tubing fuselage and wood, the aircraft was fabric covered with an aluminum-sheathed engine.

The spirit of 1929 that led Howard to the races in 1930 paid off in 1935. With the four-seat high-wing cabin monoplane radial DGA-6 design, Howard's "Mr. Mulligan" looked far removed from the sleek, small dynamos Howard had previously entered in the races. Having won the Bendix cross-country race that year with the DGA-6, Howard entered "Mr. Mulligan" in the 1935 Thompson, knowing his pylon-racing

stressed radial still had an unfavorable amount of weight and drag but feeling a winner nonetheless. Persistence paid off.

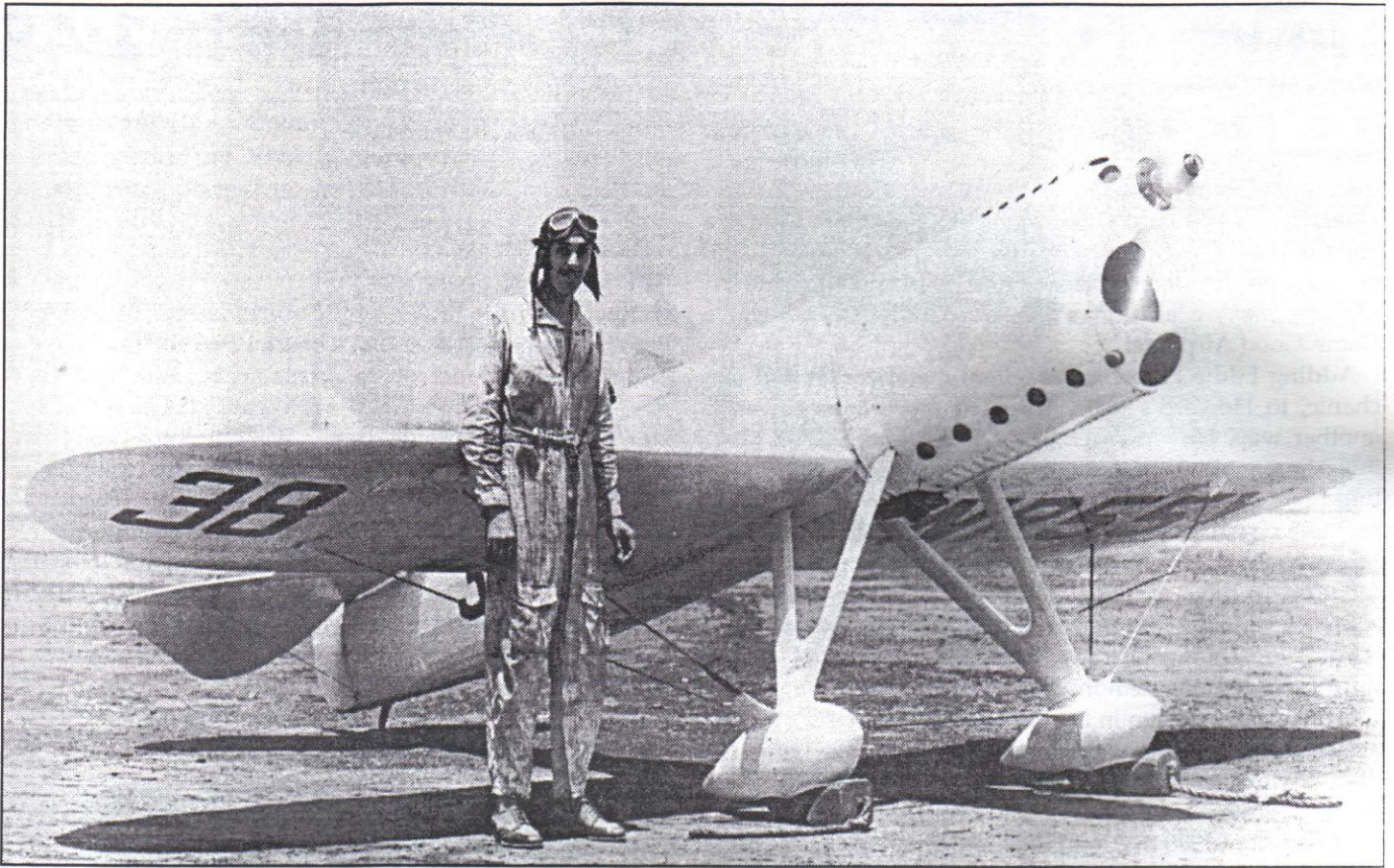
As the early challenger to favorite Roscoe Turner, the first qualifying attempt by the DGA-6 was foiled by a burned piston, a foreshadow of the race itself. All-night repairs put "Mr. Mulligan" on the race field in time, but the engine was hampered by the high altitude supercharger fitted for the Bendix, which would require special fuel for the low-level Thompson. That fuel was unavailable. So, watching his instruments all through the race, Howard's DGA-6 race pilot Harold Neumann moved patiently along into second place by the sixth lap, behind Roscoe Turner who had a commanding half-lap lead by lap nine. With 20 miles to go, Turner now found out what a burned piston could do to ruin one's day and the conservative, conscientious Neumann took "Mr. Mulligan" and the Howard design team into racing history with a win. He was so busy keeping an eye on that engine that he did not realize he had won until the officials ran up to his plane at end of race!

As in the 1929 race that saw civilians outpacing the best of the military, planes had to stay in the race to win! The 1929 Travelair could be matched in speed by some of the military entrants but they lacked the endurance. In 1935, Turner's plane may have been fastest, but "Mr. Mulligan" showed how races were really won—by cool minds watching for cool engines and making best of every opportunity to get ahead while keeping an eye on staying in the race.

The next time you visit Chicago (perhaps for the 2004 IPMS/USA Nationals next July), remember it has more than notorious gangster mob action make it a touchstone of 20th



The DGA-4 managed to compete respectably despite its small 93hp engine. "Pete" took fourth in 1930 and sixth in 1931.



Benny Howard poses next to "Mike." Roy Minor flew the DGA-5 in 1933, since Howard's airline pilot contract forbid him from flying in races.

century American history. It's also where Ben O. Howard lived and made his Damn Good Airplanes.

While currently not in the *Testors* catalog, the *Hawk Model Company* molds of the "Mike" can still be unearthed if you want to find one. Mine came by way of a contest purchase of its progeny when I spotted an old *Hawk* 50-center box for the Howard "Ike" air racer on a vendor table. With an incredibly reasonable price (not the original 50 pennies, but much closer to it than the usual collector's price), I just paid and went home. Only after I returned home did the box reveal a bonus "Pete" inside! There were no instructions, but the decals and all the parts were there, with no defects in the moldings. By the way, if you look for this one, it is not called "Pete." The model kit title is "Thompson Trophy Racer," just so you know.

A few years ago, our annual Air Racers contest was sadly barren, and considering the rich number of real subjects this seems somehow wrong. In an attempt to bring some three dimensional history to life and see if my skills had advanced since the days when I first knew this kit (I used to appreciate those engraved or raised locating points that Aurora, *Hawk*, Revell used to provide for getting the decals in place!), out came the two racers.

First, I carefully sanded off the thinly-raised lines on the fuselage and wings for the decals. Then, I smoothed out the scars. With references available to direct the placement of the decals, the lack of the *Hawk* instruction sheet was no problem.

There is no interior, not even then standard "bench" common to *Hawk* kits, because you get a "bench" where there is supposed to be an opening into the cockpit! A razor saw provided a quick cure for this. You then have a clean slate to

detail the interior. A simple stretched sprue framework is sufficient for the sidewalls, since the area visible through the cockpit opening is quite small. I made a control column from an bit of styrene shaped like an upside down "T," and I made a bucket seat from paper soaked with thin superglue. I found a scrap of a decal instrument panel (most likely from a P-51) that could be snugly cut to fit the very narrow confines of the cockpit. Suddenly, I had a more up-to-date looking 1:48 cockpit. Not having any pictures of the prototype's cockpit to work from, but plenty of images of similar types on file allowed me to make some good guesses in creating an interior. The interior was given a silver lacquer finish, because using black or gray would have soured the view, and it seems unlikely that any paint was used, since it would have added unnecessary weight on the real plane.

The fuselage halves line up nearly perfectly with the airfoil of the vertical stabilizer and rudder. Only a little flash needs to be cleaned up. The horizontal stabilizers are very thin one-piece parts. A clean fit at the fuselage meant only a tiny amount of filling was needed.

It was tricky work sanding the fuselage seams, though. The tail skid is very skinny and long, and it is easily broken off.

The scalloped area for the wing mounting is uneven. The one piece wing is very thin, with a good airfoil section and engraved flying surfaces, but has a poor match to the fuselage. There is a slight but distinct gull-wing crank right at the wing root. In the 1:48 drawings I had as a reference, this feature was clearly there. Apparently, the odd fit of the wing was in part due to *Hawk's* attempt to capture this shape. Some effort with scrap plastic sheet, some knife work, and superglue resulted in an acceptable blend of the wing to the fuselage. It won't win

any awards, but on the shelf with its racer brethren it looks just fine.

The gear legs are perhaps a little thinner than photos and plans would suggest they should be. But their shape is good, so on they went. The alignment of the three components may tax your patience, but it will pay off. The tire and wheel parts are single pieces, and the tires are more ballooned than they ought to be. I left mine alone after sanding off the flash. The propeller and spinner are a single piece. I had to enlarge the mounting hole, since the fuselage halves each have half the mounting shaft, and they aren't matched up well.

I masked the cockpit and wheels and left the prop/spinner off for painting. The base coat of white took several passes. One could do this airplane in overall silver, which was the initial scheme, but that would require further research (I have only read of the scheme and have no photos), and the kit markings are for the 1930 race scheme. Since my decals were glorious relics of the original issue, the decals had a very strong yellowish color where the "clear" carrier film was. Three weeks taped flat to a patio window in sustained summer sun "bleached" the film, but it didn't overcome the thickness of film nor hide the residual yellowing on the stark white paint. I trimmed the film with sharp number 11 knife from the decals, which comprise the registration NR2Y and race number 37. Rigging is needed to build a competitive model, but for my shelf example I skipped it.

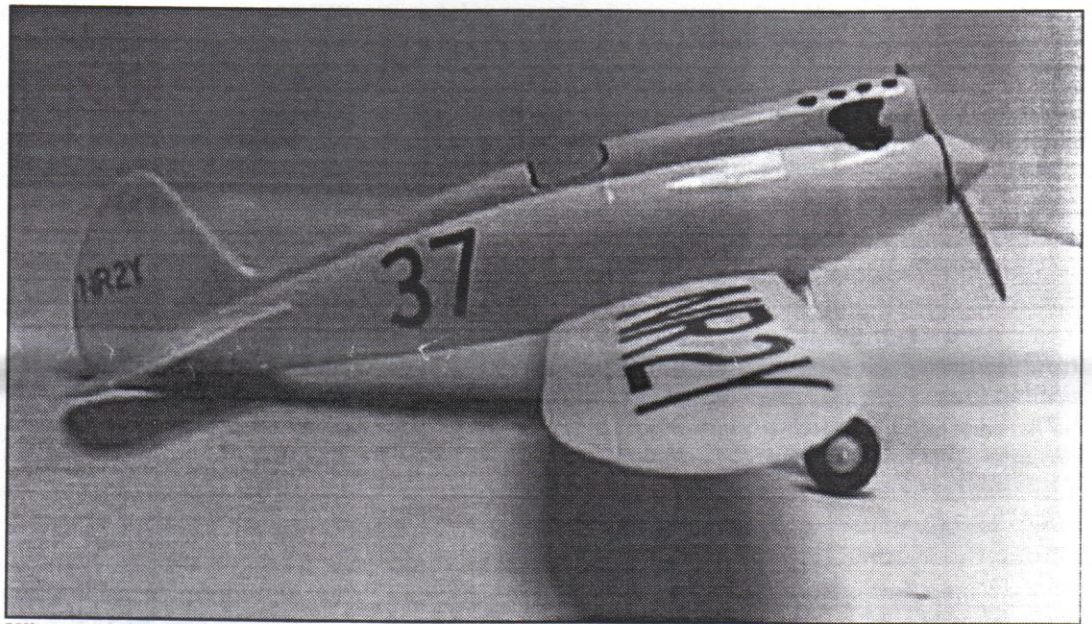
The DGA-5 "Ike" racer was another 1962 *Hawk Model Company* molding which came out again under *Testors* label. While I was quite pleased to get the kit at an excellent price, I would recommend you find a later *Testors* issue of the "Ike" if you aren't fond of "bleaching" decals. Other than that, this kit in any edition is lots of fun out of the box! It had delicately engraved panel lines throughout, which makes filling in the 1960s-period engraving for the decal a cinch. I gathered up my references, with Mendenhall's *The Air Racer* the most useful. Page 69 has clear drawings of "Mike" and "Ike" in 1:48. There are lots of great reference details on this one page, but having a template for recreating the tube framing inside the fuselage to replace the ridiculous bench seat provided in the kit was a godsend. Sprue, a scrap decal instrument panel and a superglue-soaked paper bucket seat shortly gave the model the look of a credible cockpit and made it ready for a coat of silver paint.

Before trusting the kit directions blindly, I taped the fuselage halves together to check whether or not the wing really could slide through the slot in the fuselage from the left side and maintain a proper alignment. Once I confirmed this was true, I glued the fuselage together and added the one-piece

horizontal stabilizers. This allowed me to get all the sanding and filling of the tail done with no wing in the way. The fit here was quite snug, and all I needed to do was some light sanding.

The one-part wing has a fine in-scale airfoil and matches the drawings in perfect detail. Sliding it into place went smoothly. It was secured with superglue, but a little filler is almost a given here as the slot is cut to allow the average consumer ease in building this kit. Still, this is really quite well done, tolerance-wise.

The single-piece wheel and tire components are each placed on the axle inside a wheel pant half. It is no harder to paint them before or after assembling the pants, because the tires are the only portion of the wheel visible. A clever pair of "V" struts is fitted and blended into the underside of the fuselage, which makes getting the pants onto those legs easier. A spreader bar has its own set of notched mounts on the wheel pods, and getting the alignment proves much less stressful than one might imagine.



Mike carefully cut around the decal images on his DGA-4 (pictured here) and his DGA-5 to remove the aged and yellowed film before applying them to his brilliant white racers.

The overall glossy white finish is best applied at this point of construction, or if you want to find the references for it. A 1939 Cleveland event "Ike" entrant wore an overall yellow finish.

My patient weeks-long sunning of the very old decal sheet did reduce the "golden age" look of the clear varnish carrier mightily. Application of the tiny NR56Y tail decal indicated that a further bleaching was still needed. Again, I tediously cut away most of the clear film on the gold with black outlining wing codes and black race numbers on fuselage. Detail painting in flat black to pick out the exhaust ports, radiator grill silver two-blade prop and white hub came next, followed by the installation of the tiny clear windscreen, and we have an elegant 1:48 scale airplane whose overall size fits comfortably within the dimensions of a 1:72 scale P-51 *Mustang*! That truly brings home to me how snug a fit this racer was to its pilot! There is no wasted space here! Rigging the model would be in order, but I plan to display my model and not enter it in contests.

AUGUST MINUTES

At the August meeting, our president reiterated the need for more contributions to the newsletter, threatening to print technical papers on the chemical creation of bubbles unless the membership put pen to paper (or paper to printer, as may be the case in this century). The much more important news was that Silicon Valley Scale Modelers' 2001 contest will be held next February 24. That's a Saturday, so plan ahead.

In model talk... Dave Balderrama found some interesting stuff at the flea market, including a book from 1973 that described the state of the art in modeling. This book makes for some truly frightening reading. Dave's got a *Revell* 1:144 MiG-29 under way, but he says the fit is awful. He had better luck with his *Academy* 1:200 Space Shuttle; he also ran across a great book to go along with it as a reference. Sami Arim improved upon *Skywave's* 1:700 RO-37 coastal submarine by substituting metal tubing for the periscope and deck gun barrel. Sami also gave the wooden deck a subtle amount of weathering that's especially impressive when one thinks about how difficult it is to weather wood in 1:35! Sami also displayed a kit of an early 20th century Russian coastal defense ship. Jim Priete has the optimistic goal of finishing his *Skybirds* 1:72 Supermarine *Scimitar* in time for the U.K. nationals. He says the kit is rough, but it captures the shape. He's dropped the flaps and slats on this British carrier fighter. Robin Powell is also battling the clock to complete his *Aircraft in Miniature* Vickers *Valiant* B.1, a vacuform kit based on the old *Contrail* model but supplemented with white metal parts. Robin's rescribed the wings and next will move on to the troublesome intakes. He has references for the interior, but until evidence surfaces of a *Valiant* with a convertible roof, he'll work on the outside of the model! Roy Sutherland brought his IPMS/USA national trophies, which he won for a 1:72 *Spitfire* and a 1:48 Bf 109. Roy's next award-winner is a *Mosquito* F.13, under construction from the *Tamiya* 1:72 kit. The interior features *Eduard* brass and plenty of scratchbuilt parts. Cooper Sutherland used the *Hasegawa* kit to build one of his favorite airplanes, the F-14 *Tomcat*. Harry Nevin has a friend who worked as a ground crewman for planes that had been flown by the American Volunteer Group in Burma, so he built a 1:48 P-40B for him as a gift. Mike Braun's 1:48 *Hasegawa* "Grace" torpedo plane gave him lots of experience with weathering; he discovered that it looks more realistic to have several tones of silver where the paint has chipped than it is to have just one. Jim Lund brought in what he describes as the "plane du jour," a 1:72 *Concorde* made from the *Contrail* kit and finished in Air France markings. Wasting no time, Ben Pada has a *Tamiya* Do 335 painted and almost ready for its landing gear. Ben built the Pfiel out of the box, finished it using *Gunze Sangyo* paints, and he says the rear deck is a tricky fit. Larry Roberts has begun a new life as an armor modeler by tackling the *Tamiya* Kettenkraftrad. It's his first military vehicle in over 25 years! Chris Bucholtz has the natural metal paint on his *Tamiya* 1:72 F-84E *Thunderjet*, although he plans to repaint some of the panels; he added drops of yellow, blue and purple paint to *Testors* metallizer buffable aluminum to get different tones. Steve Travis had his whole collection of 1934 Fords on the table, including his latest, a dry lake speed racer. Steve took a break from these super-modifieds to build a *Revell*

"Wheels of Fire" snap-together kit, which he says is nice by any standard. Mike Yamada's hypothetical Corvette Stingray III show car had its dashboard glare shield go missing, but Mike says *Revell* sent him a new one right away—well done, *Revell!* Always in search of obscure and historically insignificant subjects, Mark Schynert has embarked on the construction of a *Pavla* Borovkov-Florov I-107, the fastest combat biplane of World War II. Mark says this limited run kit is rough, but the resin interior parts included in the kit will help speed construction. He's also moving with determination through the conversion of an *Airfix* P-38F into the RP-38F *Swordfish*, although he had to spend some time with the tricky alignment issues a twin-boom aircraft like the P-38 brings up. Kent McClure's "Critter Commando" "Ratzies" have more paint on them now than they do last month. Greg Plummer's two-door hardtop station wagon custom car is coming along; although it's fictitious, Greg weathered it to make it look more like a family car! Ken also shortened a 1963 Buick, and gave it a '98 Mustang's roof and a scratchbuilt turbocharged engine to create another one-of-a-kind rod. In another vein, Greg also built *ICM's* I-1 fighter, which he says has a lot of pieces for such a small model. Mike Burton finished the *Hawk* Supermarine S.6B racer that he wrote about in the June Styrene Sheet, and several others one suspects will get write-ups in the future, including a herd of Tuskegee Airmen *Mustangs*. In 1:48, Mike used a *Monogram* B-model to depict "Ina the Macor Belle," and in 1:72 he built P-51C "Alice Jo" from the *Hasegawa* kit with the *Hawkeye* corrected resin wing. Another 1:72 *Mustang*, this one from the old *Hasegawa* P-51D kit, is under way and Mike says it will be his last 332nd Fighter Group model (at least, until more decals come out!). Also under way is a *Special Hobbies* Lockheed Model 10 *Electra*, which Mike says will be the first of his Lockheed spies series, in the colors of Amelia Earhart's ill-fated plane. Laramie Wright had two Shermans in gray primer, each with lots of brass parts added. His Jumbo had a shell ejection chute from a *DML* F-28 Pershing added, among other things. The gray primer, he says, helps him spot flaws before the application of the camouflage colors. Also dug in on the table was Laramie's *Modelcraft* Centurion, which he says has problems left over from the old 1970s *Tamiya* kit. Laramie's also been able to get the interior of his *Italeri* H-19 *Chickasaw* built in a day; he gives this new whirlybird a rave review. Cliff Kranz' *Godzilla* was built from the *Lindberg* kit, which came out in the early '90s. He also showed a kit he picked up at the 1977 IPMS/USA Nationals of a MiG-21, manufactured in the Soviet Union, which is the sort of kit Thomas Hobbes might have built. It's nasty, brutish, and several scale inches short. Newcomer Blair Smith went to town on an *MRC* "Judge Dredd" battle droid, adding detail and doing a great job of finishing the model. And the Model of the Month goes to... Anita Travis and her collection of Hollywood monsters! Anita built the he Polar Lights kits of the Wolfman, the Phantom of the Opera, Frankenstein's monster, the Creature from the Black Lagoon and Dracula, and she used some creativity to model the Invisible Man placing a phone call! The models had a truly nostalgic feel to them; perhaps the most monstrous thing of all is that Anita could finish so many of them!

EDITOR'S BRIEF

The editor wishes to extend his thanks to a number of people—Ken Miller, Mike Burton, Brad Chun, Rodney Williams, Kent McClure and Jim Priete—who have delivered on their promise to write for the Styrene Sheet. A special thank you goes to Harold Offield, who contributed from all the way up in Redding! Thanks, Harold!

This means two things. One, this issue is full of good stuff, and two, we can get a head start on October. But don't stop contributing now; the holiday months are often the most difficult for the Styrene Sheet, and the editor has to spend a week at Comdex in Las Vegas in November, meaning that extreme fatigue may keep the Styrene Sheet from coming out unless he can get an early jump on it! Keep those articles coming, unless you want Dave to write more about industrial chemistry (his next installment is on footwear safety. Please, for heaven's sake, write!).

This is, by a happy coincidence, a racing issue—the Howard DGAs were purpose-built racers, and the He 100 was built in part to take the world speed record. We usually have a September air racers contest, but we also usually postpone it until October. This will be the case again in 2000; the editor will spring for the prizes if the club members will bring in their racing aircraft. One reason we postpone the event is that Mike Meek, our biggest racing fan, is always up at Reno during our September meeting, and this year is no exception. Mike's up in Reno this week as a crew member, and as he does each year, he'll be providing us with photo coverage of the races in the next issue.

Looking a little farther ahead, we've nailed down the date for our 2001 contest. It'll be held on February 24, 2001, at the Milpitas Community Center. Our theme will be "Camelot, 40 Years After: 1961—1963." For those of you who have a tenuous grasp on history (or who have infiltrated our borders from another country), that time encapsulates the Kennedy

administration. It also allows modelers to vie for special awards in all fields—aircraft, armor, automobiles, ships and even space and sci-fi. We'll post a full listing of the categories at a later date, but for now, if you're building for the Kickoff Classic, keep the immediate pre-Beatles era in mind.

On the contest circuit, the next few months promise to be very busy. The weekend of Oct. 21-22 forces modelers to choose between events in Redding and Orange County; October 28 has a unique cash-prize contest in Fresno, organized by Ernie Gee; November 11 is the annual Antelope Valley Group contest, providing a great excuse to see the things Ken Miller discusses on pages 8 and 9; and November 18 promises the Mt. Diablo event in Vallejo. If you like modeling and our club meetings, by all means treat yourself to a contest. There are few things more enjoyable. The show in Fresno last month was attended by only a few SVSM members, but there were plenty of Fremont Hornets and other familiar faces. The models were great, of course, but the real fun was sitting down at lunch with Mike Burton, Randy Ray, Pete Wong, Ray Lloyd, Ernie Gee, Milt Polous, Lou Orselli and Paul Rogers. We had a very good time, and not just because Pete was drinking margaritas. Ray also told the wait staff that it was Pete's birthday—a lie—so they'd come over and treat him to an impromptu serenade. But the real fun was talking models on a relaxed weekend afternoon, without the pressing need to mow the lawn, take care of the kids or do the laundry. For a few hours, we were able to just hang out and have a good time, and that's something too few of us get to indulge in any more.

If you want to go to one of these events, ask around. There is a cadre of veteran road warriors who may have space for extra hands, or who may organize a car rental to get someplace. It's worth the effort to get there, and not just because of the models or the vendor tables, although those help!

—The Editor



Antelope Valley Group/IPMS

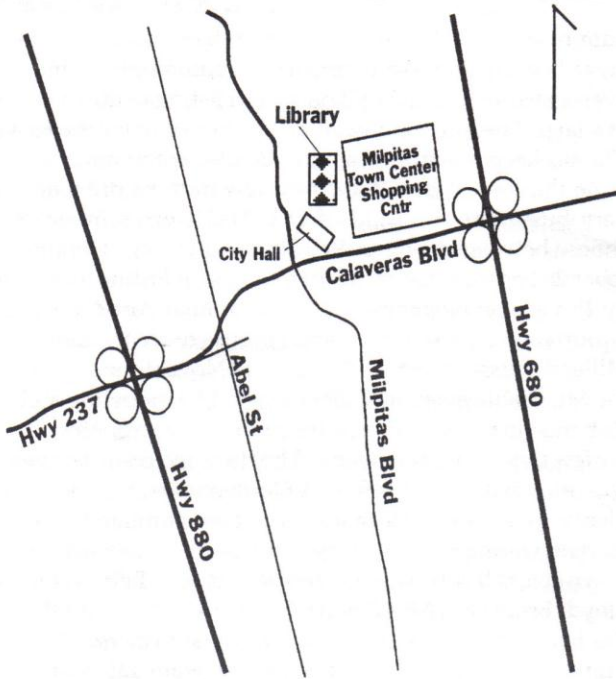
Plastic Model Club is pleased to announce

Our Fourth Annual Contest Saturday, November 11, 2000

Antelope Valley College, 3041 W. Ave K, Lancaster, California

Special Awards For: Best Korean War Model
Best X-Plane

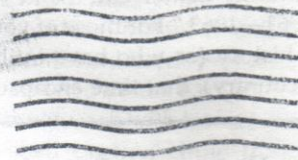
For more information, contact: David Newman, (661) 256-6359 or dnewman@as.net



Next meeting:
7:30 p.m.,
Friday,
September 15
at the Milpitas
Public Library
40 N. Milpitas Blvd.
For more information, call the
editor at (408) 723-3995
E-mail: bucholtzc@aol.com



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