

Messerschmitt M.20b

Build American Dave Linstrum's perky Pistachio!

his particular rendition of the famous Willy Messerschmitt design is the Lufthansa D-2349 'Rhon' as seen at Tempelhof airport - check the photo on plan for the 'Berlin' roof sign on the terminal behind aircraft. My model was based on an earlier Pistachio by Dr. John B. Martin of the MIAMA club, modelled after the Jane's three-view. Note the different rudder (no horn, straight TE instead of curve) in the three-view. We like photo documentation as proof of scale. Note that in the USA Pistachios are static judged relative to *each other* in a Mooney ranking from best to worst - and in between. Here in the States Pistachio is not an AMA Scale event - that would surely ruin it, in our opinion. It certainly ruined Peanut Scale.

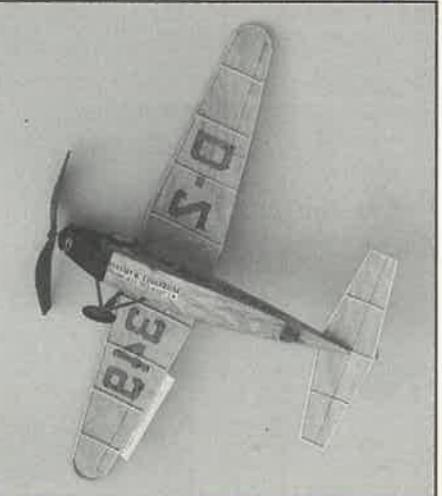
Our rules allow Pistachios to be either 8 inch maximum wingspan or 6 inch maximum overall length less prop. Our little Lufthansa liner follows the latter, with a 10 inch span - this makes a better flying model. Rules allow single surface covering, but for appearance we prefer covering both sides of fin/rudder and all of body.

Pistachios must be approached from a quite different point of view than Peanuts, particularly regarding weight - light flies longer! Your target weight should be 2 grams (less rubber) which means the best indoor balsa, foam, little glue, and light tissue or condenser paper with a light airbrushed finish. To get a good static score you must add light details. We made the canopy and side windows transparent (VHS tape wrap for latter) which caused one critic to remark "Where are the seats?" Details count, but there *are* limits!

Make two photocopies of the full-size plan (use one copy for patterns and tracing the scale lettering and numerals, etc., on tissue over a light table) and cover one with paper or tightly stretched kitchen wrap on your favourite board. A piece of dark coloured artist's mat board can also be picked up for a disposable cutting board. Use a fine scalpel or broken-to-a-point double edge razor blade for cutting.

CONSTRUCTION

This is not a beginner's model, so we will hit only the highlights. You will find that a small cosmetics tweezers, insect pins and magnifying glass will be



around curve, then fasten end. Be sure not to tape over actual curve needed. Place the part in a microwave for one minute on 'high', remove, cool and cut part loose! Do twice for wingtips.

Nice light wheels (non-rotating is OK) can be made by cutting discs from 1/16" foam (fast food lid), then painting with a thin coat of black craft acrylic paint. Cut hub discs from silver paper- look for magazine ads or promotional flyers. Cut landing gear struts from medium 1/32" sheet, colour with a silver marker. Affix to body.

The nose block is laminated with four cross-grain bits of 1/32", then a Teflon tube bearing is inserted with a bit of down and right thrust. Add a tiny Teflon washer to shaft before inserting in hub and gluing. Bend the special 'stooge friendly' rear hook and glue to rear of body. An open bay in tissue allows motor to be pulled out, then looped over stooge loop and pulled into place. Remove in opposite fashion. The loop accommodates any stooge.

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helpful- those itty-bitty pieces of 1/32" square are a challenge to assemble! You can start with the prop after finding a 3" diameter cylinder such as a tumbler or wine bottle. Cut two blade blanks from 1/32" with the grain parallel to TE. Cut another as a throwaway cap. Wet for five minutes in hot water, dry on napkin, then stack at 15 degrees to axis on cylinder (use a plastic prop as a guide) and wrap with rubber bands. Allow to dry overnight, then carefully remove from form. Cut a piece of hard 1/8" square an inch long, bevelling the outer 3/8" at 45 degrees to form blade seats. Pierce for shaft and attach blades.

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You may wish to add colour as a detail with a mahogany tone artist's marker.

Build the entire model from light 1/32" sheet, using a ply or metal slicing template for ribs as per plan. We find a thin metal ruler works fine for the few strips needed. Lay down the wing, tail and body sides to dry while you wet form the curved

We used ready-made silver tissue, but you can make your own by misting silver acrylic spray paint over white Japanese tissue. Rudder is yellow tissue - or try airbrush for opaque look. Cut the registration numbers from tissue or trace onto covering over a light table. It is essential to add all the surface details *before* covering. Tissue should be pre-shrunk on a picture frame before detailing.

FLYING

You will likely need a trim tab on the right wing TE to control the right hand spiral climb. Start out with low turns and build up to maximum on a loop of .030 to .032 stripped from FAI Tan II rubber. Thrust and rudder/wing tab can be used to get trim. ROG is not required - thus non-rotating wheels will suffice. Don't expect much of a glide, as the prop is too small to free-wheel. Despite this, Doc Martin was able to get 1 minute 20 with his M.20b in the 65 feet MacDill AFB hangar.

We hope you enjoy your indoor scale version of this historic 'flugzeug' of the 'thirties. As the Lufthansa Captain would say: "Gut Fliegen!"

