by BOB PALMER

Combining realism and appearance with top stuntability, this job may be the finest of its kind to be published in any magazine.

Stunt flying has greatly changed in the last three years; more time and more realistic design is needed to get those extra points. The Mars is qualified to do the A.M.A. stunt pattern and is designed also, to obtain full appearance points. Span is 49", wing area 404 sq. in.

A.M.A. rules call for a possible 89 points for appearance and give points for certain parts of the model. Taking into consideration all of these things, I designed the Mars. I decided upon a tricycle gear because, with this gear, take-offs can be held a little longer, looking more realistic, and giving you the fullest possible points; also, for good landings. It's difficult to get wheels in perfect place on a conventional landing gear to make good landings without that hopping effect, and with one hop, you'll get only 10 points.

In designing the wing, I have selected a 15 per cent section. Having built wings with different percentage sections, I decided the 15 per cent is ideal. You will notice in the plans the size of wood in this wing. It's light, but very strong; a little more trouble, but it's worth it. Weight will have a lot to do with performance. Keep this in mind in your purchases and building. The wing has a little sweep in the tips for appearance and less drag. Using a tricycle gear I could use a double-fin tail. This gives good stability and good action of the elevators.

The cowl is one of the features. By simply removing the one screw, the entire engine and tank is exposed, giving access to removal of either. This, my second experience with side mounting and first completely cowled engine, turned out better than expected. After I hit upon the idea of removing part of the cowl with the hatch block, construction became simple.

Having had quite a bit of experience in tricycle gears before, design was no problem and, in the initial tests, taxiing with full power on all the way around the circle, was not difficult and without swinging in on take-off. Landing required a different approach than with two-wheelers but, after a few practice landings, B-25 landings were a cinch.

This model is equipped with flaps. A lot of trouble has been experienced by persons (Continued on page 47)