



dart cart III

Designed by Bill Warner, this Easy-To-Build profile stunt and sport design is truly phenomenal. Capable of all maneuvers, its slow speed and landing characteristics are fantastic.

By JOE BRIDI

Are you flying more, but enjoying it less? Try this little model and see if your outlook doesn't improve. Airline Captain Bill Warner expressly designed this model to fly from small confined areas. Its easy handling characteristics at slow speeds is fantastic, yet it is gentle and forgiving enough for the beginner. It is also capable of all maneuvers that the pilot is proficient in accomplishing. All of the flight testing on the Dart Cart was done at the local schoolyard where room is at a premium, but for the Dart Cart there was room to spare!

This airplane is especially great for the beginner because of its slow speed approaches. Due to its light weight there is a minimum of damage from hard landings. Its power-to-weight ratio will keep you out of trouble as long as the model is built and kept light.

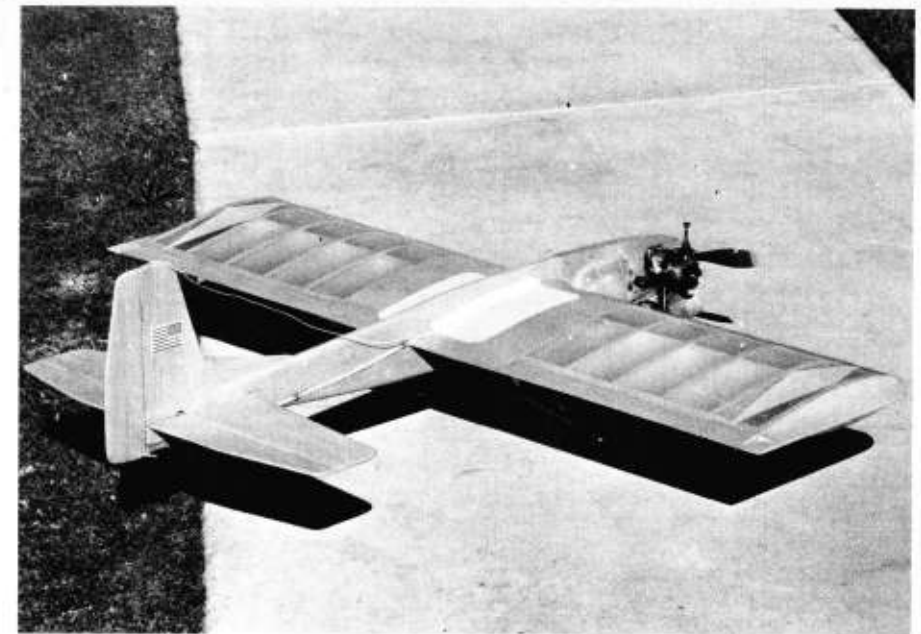
I recommend a good .35 engine for your Dart Cart. We used an O.S. .35 with a Perry carburetor and found that to be ample power. If you use a .40 you are almost assured of V.T.O.'s! This model could also be used as a test bed for some of you Formula I flyers that want to break-in that hot engine you're going to use in racing.

The model is simple to construct, but here are a few tips that might be helpful. Make sure that all surfaces are covered with silk or silkspan prior to assembly. This adds strength where strength is needed. The wing structure is strong enough for some of the new iron-on coverings if you desire, but I suggest silk (sorry, Sid) on the fuselage and fin area.

Mount all servos on aileron type mounts to soak up the engine vibration. The battery & receiver of course, are always packed in foam for protection. Always protect your radio equipment as best as possible to minimize the possibility of damage due to crashes. When using a .35 engine, vibration shouldn't be any problem on fuel, but we noticed that when a hot .40 was used the fuel had a tendency to foam when the tank was partially depleted. Be especially careful in mounting the fuel tank loosely and it won't give you any trouble.

We used a 10-6 Top Flite prop for the .40 pound version and a 10-5 or a 10-4 for the .35 prototypes.

Another nice feature is that the engine and fuel system is right out front where you can see it and work on it as necessary. Your fuel supply is always visible for fueling and you can detect any leaks that might occur. The ease of cleaning and the removal of the tanks



when you're done flying is simple. The tank can be removed so you don't soil the car upholstery with fuel!

The ground handling is phenomenal. Even when the wind is blowing hard, and the big ones are having difficulty returning to the pit area, the Dart Cart can return in any direction and taxi back with ease, much like steering a car. Spins, like 70 to 80, are accomplished with ease. On one occasion we turned 101 spins without really trying. Limbo is a piece of cake, either inverted or upright.

The battery should be located forward of the C.G. when using a .35 and to the rear of the C.G. when using a .40. You'll have to play with this since engine weight and installation of

equipment will vary with each builder. For the throttle and nose steering, we used flex cable and NyRod tubing. For the pushrods I used 1/32" music wire soldered into 1/16" O.D. brass tube running inside the inner tube of a large size NyRod. This works beautifully and is very simple.

We have built and extensively flown six Dart Carts to date, using various engines, airfoils, conventional and trike gear, and each one has been a pleasure to fly. We've had more fun with these "Profiles" than any other type so far. On all models we used the Orbit 6/12 I.C. radio without any problems. Give this model a try and I'm sure you'll agree with us that it's fun and easy to construct, and sheer pleasure to fly. ●



