THE LAUNCH OF AMERICA's first space shuttle was certainly a very dramatic milestone in space flight. Millions of TV viewers thrilled to the successful flight of Columbia. Those of us with experience of model gliders, felt an additional quickening of the heart beat when Columbia, on the final stages of the mission, assumed the role of a 75 ton glider! To celebrate this momentus flight, we felt we must try a simple space shuttle glider. Here then for your approval, and (we hope!) enjoyment, is Columbia 'in profile.'

Construction of Columbia is so simple that detailed instructions are unnecessary. However a few tips may prove helpful. Cut out the fuselage and nose doublers. Cement the nose doublers in place. Thrust nozzles, window details, can be drawn with black biro. 'Columbia' and 'US insignia' can be cut from the plan and affixed to fuselage if desired.

The wing shape is traced onto 1.5mm medium balsa (Fig. 1) and cut out. Lightly sand round all edges. The black edging can be added with black biro or strips of black tissue doped on. Slide wing through fuselage wing slot, and cement. Check that fuselage and wing are at right angles to each other. Add the fin (Fig. 2).

Push a pin attached to a length of thread into the balance point. Place weight (lead or folded cement tube) into the nose recess, until the model hangs level, or slightly nose down.

Over long grass on a calm day, obtain correct trim by test gliding into wind, varying the amount of nose weight, if required. Adding weight if Columbia tends to stall, and taking a little away if it dives. When trimmed to the best gliding angle, the model should touch-down about 30ft. from the launch point. If the model turns sharply, gently warp up the rear edge of the wing on the outside of the turn, slight fin trim can also be useful. Quite long flights can be obtained by hand launching with the wing banked to obtain a circular flight pattern. Good flights may also be achieved by gently hand launching into wind, from the top of a hill, or rising ground. You can also use the catapult/towline (Fig. 3). If you do, stretch back only a little for first tests with the model about 40ft from the dowel anchor. Always bank the wing before release for a circulating flight. Launching Columbia on a level keel at a height of about 2ft. above the ground will probably result in a spectacular loop! As you proceed with tests, you will find that pulling the towline back beyond a certain point does not always result in a longer flight.

subsequent racers were inspired.