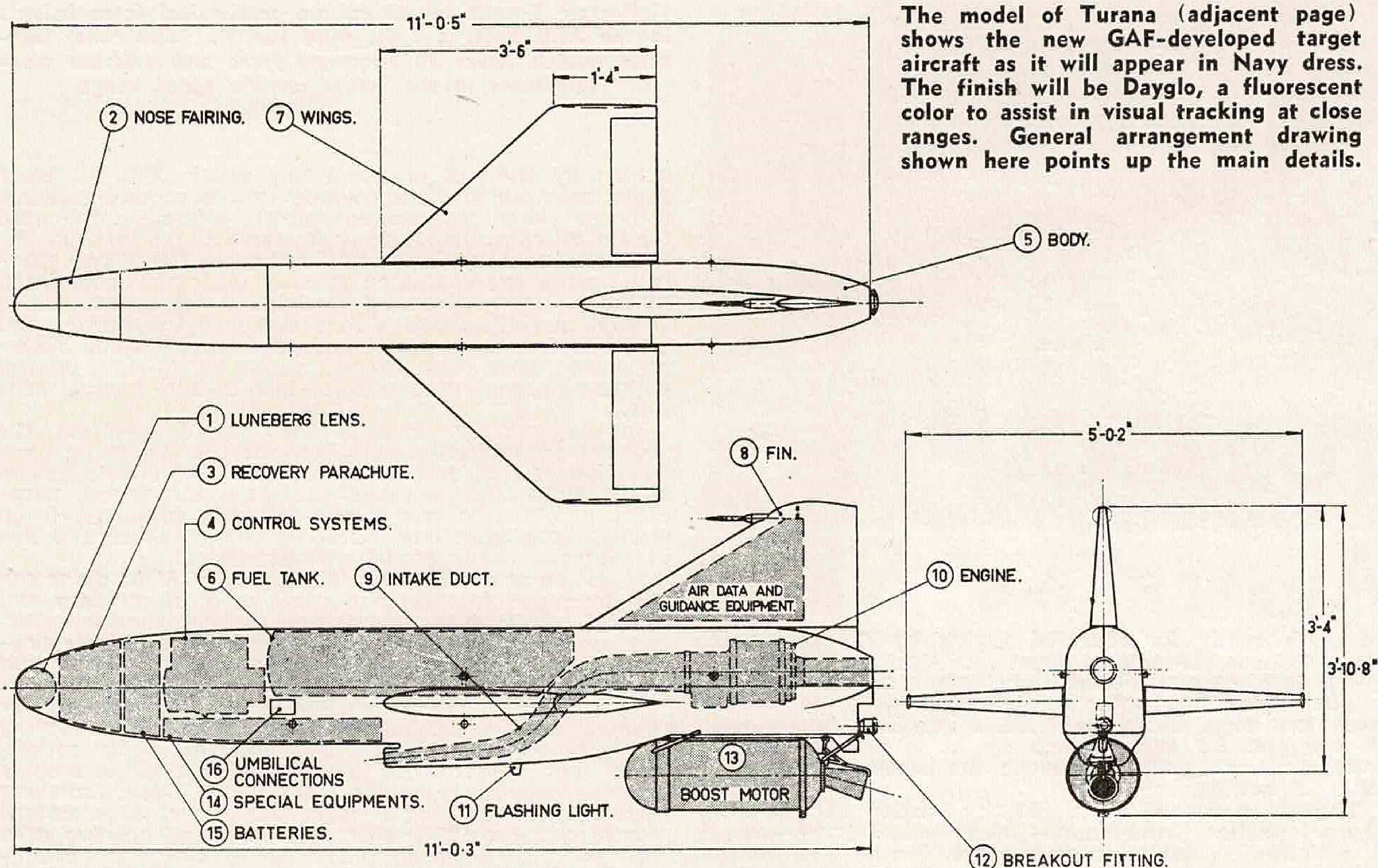




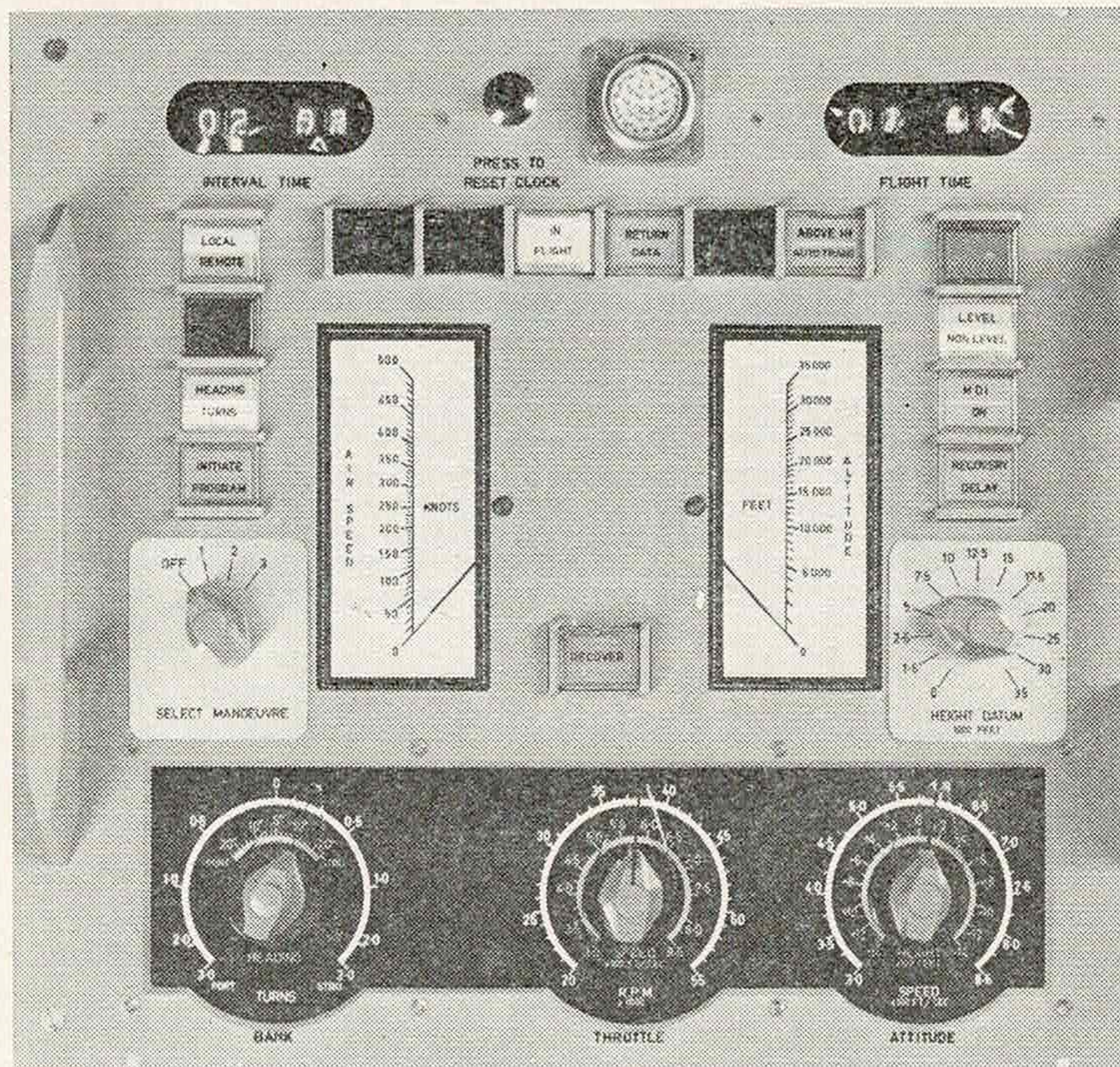
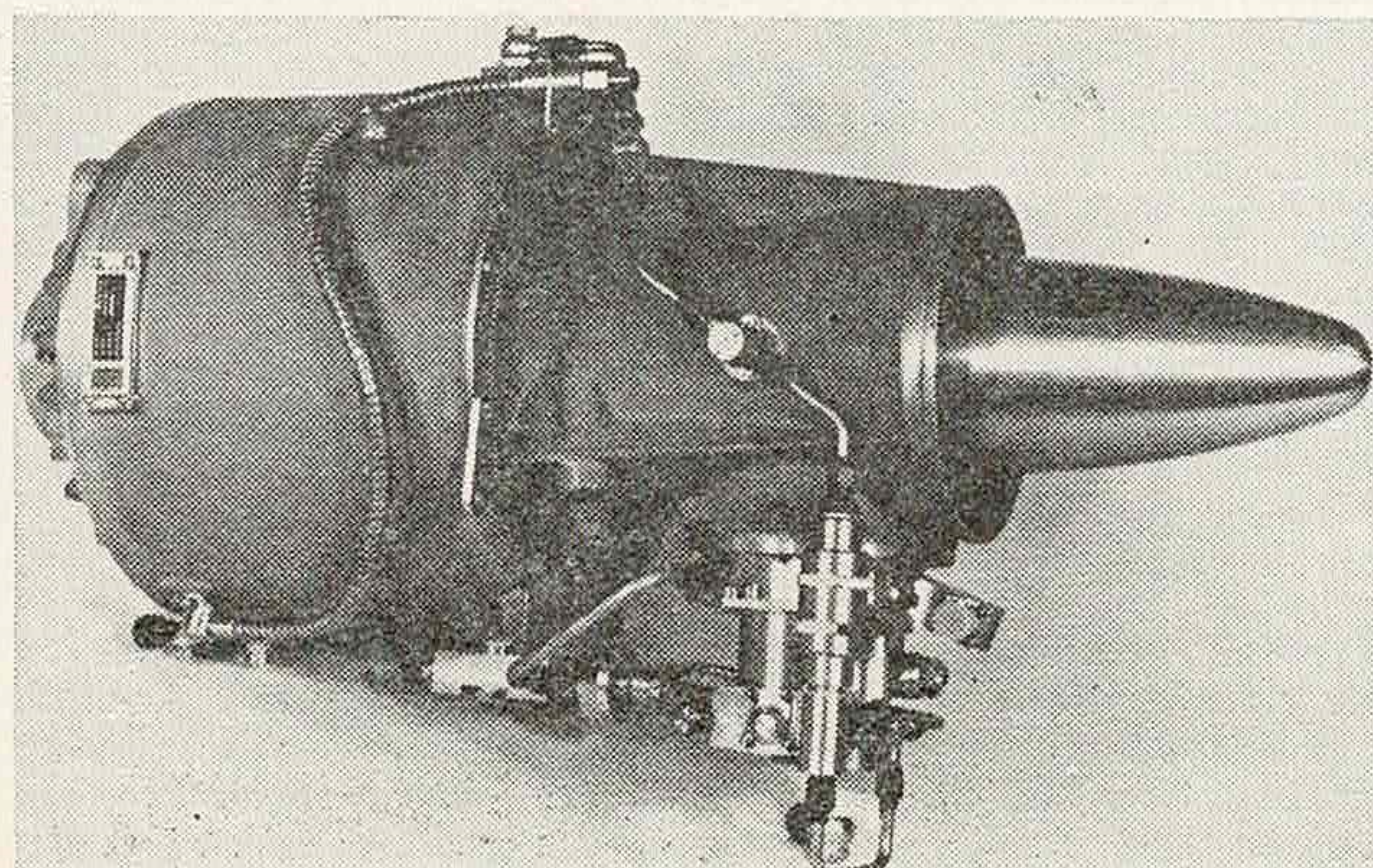
The model of Turana (adjacent page) shows the new GAF-developed target aircraft as it will appear in Navy dress. The finish will be Dayglo, a fluorescent color to assist in visual tracking at close ranges. General arrangement drawing shown here points up the main details.

launcher, for the holding and alignment attachments of Turana are, similarly to Ikara, at the sides.

The solid fuel sustainer of Ikara is replaced in Turana by a small jet engine, specially developed for the purpose by the French firm of Microturbo. Named the Cougar, this engine develops 72 kg. static thrust. It is actually, a development of the APU (auxiliary power unit) that is in the Anglo-French Concorde SST, and is at present under bench running trials in France. It has already been subjected to water-dunking, and simulations of other conditions to which it will be exposed in Turana. The rocket boost motor will be designed and manufactured in Australia.

After launching under rocket boost at a 55 deg. angle, Turana will climb rapidly to its desired height. When the boost rocket burns out, it is jettisoned, and the jet engine takes over the sustainer role as the aircraft is guided on its trials flight pattern. At the conclusion, the target is guided back towards the launching base; the nose fairing is broken away to deploy the parachute, the attachment of which is towards the tail so that the Turana is dropped into water nose-first, for undamaged recovery. The parachute arrangement is similar to that of the practice Ikara, except for the aft attachment; in the Ikara the vehicle is held horizontal to the surface by the parachute, which has caused damage to the wings on hitting the water.

GAF claim that Turana is easily recoverable, and can



ABOVE: Turana's target control unit which is the prime command control facility. Control is effected using open loop demands initiated by selecting appropriate dial settings and flight modes. Actual airspeed, altitude and flight events are presented if a return data link is employed.

LEFT: This mock-up of the Cougar engine is now at GAF undergoing installation trials. The compact arrangement has a basic diameter of only 11.1 in. and a maximum engine speed of 52,000 rpm. Its weight is only 58.4 lb.