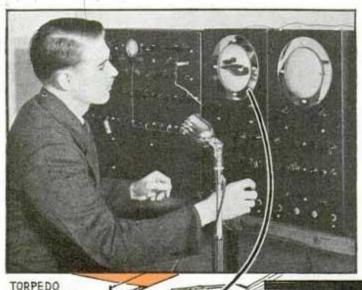


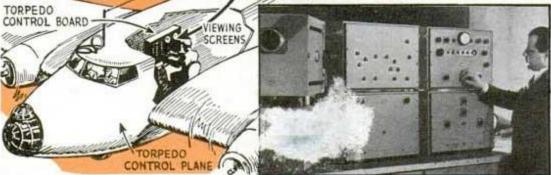
A ROBOT bombing plane, literally a flying bomb with a mechanical eye for seeking out its target, is the proposal of Dr. Lee De Forest and U. A. Sanabria, Chicago television engineer, who believe that such planes, built at an approximate cost of \$10,000 each, would be a simple and practical method of greatly increasing the accuracy of aerial bombardment.

In flight such a plane would be steered and operated by radio from a control plane that could remain as far as ten miles away. The engineers envisage a single-engine airplane loaded with either one large or a number of smaller bombs and containing in its fuselage a television transmitter and a radio-command receiver. Using a frequency-modulation circuit, the television transmitter would be hard to "jam" and would radiate a picture of the ground in front or below the robot plane. Using the information relayed to him from the robot plane's television set, the pilot of the control plane would be able to steer the robot



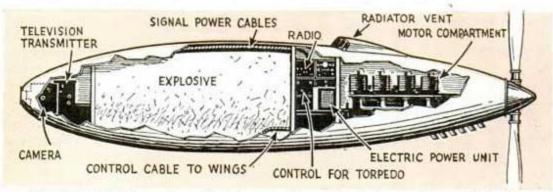
the bomb release devices. The radio control signals would be received by the robot by means of a dipole antenna in the tail, using a copper-tube shielded lead-in that would prevent reception of any signals except those from the control plane.

The flying bomb would be flown from its takeoff field by means of ground radio control, after which the control plane would take over its direction. It could be used for scattering bombs on a number of targets, for flying



directly over the target and then dive it into the ground. Control of the robot plane would be by means of super-high frequency radio, modulated with super-sonic frequencies. The control pilot would have some ten selector circuits at his command, each circuit operating through a relay on the robot plane to operate a small motor. One motor would control the throttle, two the elevators, two the rudders and ailerons, two the television mirror, one the teletransmitter, and one or two would control

a super-bomb to one particular target, or for reconnaissance work at low altitude in areas where it could be expected to be destroyed by anti-aircraft fire after at least some valuable information had been transmitted back by its television eye. The project embodies no new or untried devices and the engineers consider that it is entirely practical. On major raids it would be possible for the control plane to direct the operation of a whole fleet of robot bombers instead of a single plane.



Top of page, television receiver and viewing screen in master control room, with arrow indicating its position in plane; center, right, television camera, control units, amplifier and signal generators used in preliminary tests. Bottom, cutaway drawing of robot as visualized by artist