Remote Control Weapons

. . . . The present war has introduced the first remote-controlled weapon. The future will bring a far greater variety of more formidable and more powerful war machines. . . .

HUGO GERNSBACK

THE so-called secret Nazi weapon—which was not a secret at all—first appeared on a fairly large scale against the British Isles last June.

As long ago as last February, Prime Minister Churchill several times mentioned the fact that the Germans were going to launch their "secret weapons" against English cities.

The Nazis subsequently made good their threats. By means of their pilotless robot planes, carrying a high explosive and weighing about a ton, they indiscriminately sprayed the English countryside with these flying robot-bombs.

The type which was used during June was not radio-controlled. The planes were launched from secret roller-coaster chutes, then winged their way over the English Channel and plummeted down haphazardly over town and country in southern England. These particular Nazi rocket-propelled robot planes were steadied in their flight by a regulation gyro compass, but the Germans at the sending end had no idea where the missiles would finally land. This was wholly beyond their control because the robot planes could not change their course once they were launched. Wind drift, atmospheric conditions, squalls, etc., naturally affected the course of the robots considerably, so that all they accomplished was a slight degree of terror. From a military viewpoint the Naxi aerial robots were complete duds as they could not be sent or directed to a specific target. They demolished houses, killed people, and in general raised some havoc, but even the Nazis had to admit that their robot-bombs would have no effect upon the outcome of the war.

This is the first time in warfare that a major effort was made by any power to use long-distance robot missiles against an enemy. It is true that there is a parallel with the German "Big Bertha" supergun, during the first World War, which bombarded Paris from a distance of not quite eighty miles. This was orthodox artillery where the shell exploded and killed people indiscriminately, similar to what the robot planes did in England last June. But the Paris gun projectile weighed only a fraction of the new robot bomb, consequently the latter could do far more damage than the former.

So far the Allied countries have viewed the German effort with disdain and scorn, chiefly for the reason that it is not a military weapon and because the enemy cannot see and know in advance where the missiles will strike. Allied military men look upon the Nazi robot plane as a tacit admission that the German *Luftwaffe* has failed miserably, and further that the weapon was used primarily as an instrument of revenge in order to raise German morale.

It is certain that military science will not stop with the Nazi robot plane. It is only the forerunner and the first example of far more effective and frightful weapons to come.

Long distance rocket-bombs which are radio-controlled and can be aimed fairly accurately are no longer an impossibility. I referred to them in an article in the last issue of RADIO-CRAFT. But even more effective long distance robot weapons are in the offing.

As long ago as 1924—to be exact, in my former publication THE EXPERIMENTER Magazine, November 1924 issue, I was the first to describe in word and picture a pilotless robot plane, which was television-controlled. Here we have a weapon which—contrary to the Nazi terrorizing robot—can be conveyed over hundreds of miles to the exact spot desired, without any human being aboard the machine. The television-controlled airplane sees in six directions at the same instant—something no human being can accomplish. The television plane, as I described it twenty years ago, has six photo-electric eyes which can see north, south, east and west, up and down simultaneously. A continuous image of what the plane *(Continued on page 693)*

Radio Thirty-Five Years Ago

In Gernsback Publications

FROM the August, 1909, issue of MODERN ELECTRICS:

This was the first special wireless number of this or any other magazine.

The Nauen Wireless Plant (Complete story of the famous German plant located near Berlin with illustrations.)

How to Make a Polarized Relay, by *H. W. Secor.*

Musical Wireless Receiver.

A New Type of Wireless Transformer, by *A. Press.*

Wireless Dirigible Torpedo (Account of first radio-controlled torpedo.)

The New Telefunken System, by the Berlin Correspondent.

HUGO GERNSBACK
Founder

Modern Electrics	1908
Electrical Experimenter	1913
Radio News	1919
Science & Invention	1920
Radio-Craft	1929
Short-Wave Craft	1930
Wireless Association of America	1908

Airship Run By Wireless.

Paris-America Wireless Accomplished.

Wireless Waves Can Be Seen (First account of Paris scientist, M. Abraham, who projected a wave form onto a screen).

Some of the larger libraries in the country still have copies of Modern Electrics on file for interested readers.

Method of Testing Short Circuited Condensers, by *I. Wolff.*

A Novel Detector, by *D. C. Spooner.*

Wireless Lightning Protector.

New Type of Loud-Speaking Telephone.

Detector Construction by *L. Spangenberg.*

New French Wireless Apparatus, by *A. C. Marlowe.*

The Construction of a Loop Antenna Relay, by *A. C. Austin, Jr.*

A Variable Condenser, by *L. W. Teller.*

Attachment for Wireless Key, by *Eric M. Luster.*

A Conductive Wireless System, by *E. E. Gourley.*

REMOTE CONTROL WEAPONS *(Cont. from page 649)*

sees—in all six directions—is radioed back to headquarters where observers view the six-image screen as the plane proceeds on its course If another plane or planes approach from any point, the distant radio-control officer can put the plane through evasive tactics and elude the pursuers. The plane can even be equipped with guns, which can be fired by remote control as desired. After the television plane has negotiated the various war hurdles and evaded interception flak, etc., it can then discharge its bombs on the target, or (if necessary) the plane can carry a single large load of explosive which is detonated on contact—blowing up the plane itself, should this be desired. If the plane is to be saved, it could drop bombs in the manner of present-day bombers, and then return to its base—all by radio-control.

All this is not an impossible picture and you may be sure that long distance robot military planes of this type will be in use in the future.

One thing about them—they most likely will not be used to terrorize the population and kill people needlessly as the Nazi robots are doing now. In war, whenever possible, every High Command prefers to use weapons for purely military purposes.