the gate, was built by first settlers at Troy, Dr. Carl W. Blegen, field director, announced.

"This first Troy, which began before 3000 B. C. and continued at least no later than 2500 B.C., probably was ruled even then by a king," Dr. Blegen explained.

Troy was rebuilt no less than nine times, as one Troy after another met with some disaster. The seventh city is now believed the one conquered by the ruse of the Trojan Horse, after Greeks vainly besieged its walls for 20 years in order to reclaim stolen Queen Helen, in the twelfth century B.C.

Discovery that Trojans of 3000 to 2500 B.C. had their own distinctive art is also revealed. Dr. Blegen reported finding a heart-shaped human face carved on a slab in a parapet. Pronouncing this sculpture older than any ever found in Greece or Crete, both centers of extensive archaeological investigations, Dr. Blegen said this Trojan art is far from crude. It is as old as Egypt's famous Old Kingdom sculptures, or the great carvings found in Mesopotamian cities.

"It is to be inferred," said Dr. Blegen, "that this earliest Troy not only had a king but a royal court, as well, which fostered progress in art."

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A TOWER OF ILIUM

Not "topless" were these first towers of Troy, nor able to boast of highly finished construction; yet for their time they were doubtless formidable. This one guarded a city gate.

AVIATION

Robot Lands Airplanes Without Aid From Pilots

A FORECAST of the future of aviation, when planes will take off and land automatically without human effort, was made at the meetings of the Society of Automotive Engineers by Capt. G. V. Holloman of the U. S. Army Air Corps of Wright Field, Dayton, Ohio.

Under the new system, which the Army has already used on great cross-country flights from the Midwest to New York, to Virgina and then back to Wright Field, the landings of the planes have been entirely without action by the pilot, whose only job is to see that robot mechanisms are operating.

Under the automatic blind landing system a plane has only to get within 20 miles of even a fog-bound airport and it arrives safely at its destination. Four shortwave radio stations, plus the automatic controls in the plane, accomplish the actual landing.

When within 20 miles of the first radio station the pilot levels off the airplane, lowers the landing wheels, adjusts the landing flaps and sets the propellers for their minimum pitch. Then he closes a master switch and can sit back.

The robot controls turn the plane toward the first station of the landing system and adjust the gasoline throttle until the plane is in a glide that will take it down to 1,000 feet above the elevation of the runway of the airport. If this altitude is reached before the plane flies over station No. 1, automatic adjustment levels the plane off into constant altitude flight at 1,000 feet.

When the plane comes over station No. 1 (five miles from the airport) the radio homing device automatically tunes on station No. 2, having a slightly different radio frequency. At the same time the plane is held in level flight at the altitude of 1,000 feet. When the plane passes over station No. 2 (two miles from the airport) the robot controls tune the landing device on station No. 3, which is directly in front of the landing runway at the airport.

At the same time the controls put the plane in a long glide at the rate of 400 feet drop per minute. It holds this glide until an altitude of 200 feet above the elevation of the runway is obtained and then the plane is automatically leveled off at 200 feet altitude.

At station No. 3 the robot tunes the controls on station No. 4, which is at the opposite end of the airport's runway and thus fixes the line on which the plane will land. At the same time the plane is put into its "let down" glide—as pilots call it—and again drops down at a rate of 400 feet per minute until it touches the ground.

At the instant of contact with the ground the robot controls push in the throttle and cut off the gasoline supply and, at the same time, operate gently the brakes on the wheels to bring the plane to a stop.

Capt. Holloman adds:

"Now that automatic landing is an accomplished fact, it is well within the realm of reason to visualize an airplane taking off from an airdrome, flying to its destination, and landing, the whole being accomplished completely automatically, thereby relieving the flight crew of all duties other than observing the instruments to see that the equipment is functioning properly."

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AVIATION

"Flight Strips" Proposed To Aid Distressed Planes

DESPERATE hunts for landing fields, with the gas getting low and the fog closing in, may be a thing of the past for airline pilots, if the scheme proposed to the 35th annual convention of the American Road Builders Association by Lt.-Col. Stedman S. Hanks is adopted. Instead of cruising around hunting for a place to land, pilots of the future will find a highway and set their planes down on "flight strips" built beside the main roads by the highway departments.

Proposed not only as emergency landing fields, but for the use of private pilots, these paved strips beside main highways, at least 200 feet wide and 1800 feet long, built and maintained by highway engineers, on state-owned land, may also be used as way-stations, from