

BANDING WITH RADIOS?

(The following is reprinted from Science News Letter for June 10, 1961.)

The ancient mystery of how homing pigeons manage to navigate over unfamiliar territory and find their way back to the home loft has attracted Navy interest.

The Office of Naval Research is using a new system that makes it possible, for the first time, to track a pigeon during the entire flight. There are hopes that the work, which is part of a research program in biological orientation, will lead to new concepts for developing miniaturized navigation and detection systems.

The equipment got its first trial when a pigeon was tracked during a 20-mile jaunt to its home in the Philadelphia area. It carried a tiny but powerful radio transmitter, weighing less than an ounce, on its back. Attached to the transmitter was a 40-inch antenna, trailing below and behind the bird, and partially encased in a glass fiber rod to keep it from tangling with tail feathers.

A beacon receiver designed to operate with the transmitter can pick up the signal from any direction over a 20 mile range. Two receiving stations were set up along the probable flight path to record directional information at exact, predetermined time intervals.

The transmitter permits trackers to pinpoint the bird's location at any time, although the exact path is normally plotted after the flight.

Later, a more complex system of sensory devices may be built to monitor environmental changes and the bird's reaction to them, measuring such items as blood pressure and respiration.

The Navy's scientists' next projected move is the tracking of larger birds - notably the albatross. They want to find out ways to get the birds to move away from airfields such as the one at Midway Island, where they frequently endanger aircraft during take-off and landing.

American Electronic Laboratories, Philadelphia, developed the system for the Navy. The same firm is now working on a tracking system for aquatic animals, such as porpoises, whales, sharks and marine turtles, which come close enough to the surface to permit the instrument package to transmit.

EBBA NEWS
DEADLINE

Regional Editors, and others who have news for EBBA members, are requested to send in their material for the November-December issue on or before November 15.
