## WINDING DATA FOR PILOT SUPER WASP COILS Using Pilot No. 185 coil form

#### ANTENNA COILS:

Jumper pins No. 1 to No. 4 except for BLUE RING, 220-550 meter broadcast band. Windings connected between pins No. 1 and No. 2. All windings wound centrally on form.

- 1. RED RING-14.2-28 meters, 4 <sup>3</sup>/<sub>4</sub> turns.
- 2. ORANGE RING-27.1-53 meters, 9 ½ turns.
- 3. YELLOW RING-51.2-101 meters, 20 ½ turns.
- 4. GREEN RING-99.3-202 meters, 47 ½ turns.
- 5. BLUE RING-220-500 meters, 100 turns (secondary) from pin No. 1 to pin No. 2, 27 turns (primary) from pin No. 2 to pin No. 5. Primary, small winding placed at top of coil form with 1/8 inch spacing between primary and secondary windings.

#### **DETECTOR COILS:**

All tickler windings are spaced 1/8 inch below the grid windings. Windings are spaced centrally on the coil form. Use No. 24 double silk covered wire for all but the blue coil. Use No. 28 double silk covered wire for the blue coil. Windings on the blue coil are double layer bank-wound in 6 turn sections. Windings on all other coils are single layer straight wound.

- 1. RED RING-3 ¼ turns from pin No. 1 to pin No. 2 (grid winding), 5 turns from pin No. 3 to pin No. 4 (tickler).
- 2. ORANGE RING-7 ½ turns from pin No. 1 to pin No. 2 (grid winding), 6 turns from pin No. 3 to pin No. 4 (tickler).
- 3. YELLOW RING-16 ½ turns from pin No. 1 to pin No. 2 (grid winding), 7 turns from pin No. 3 to pin No. 4 (tickler).
- 4. GREEN RING-46 ½ turns from pin No. 1 to pin No. 2 (grid winding), 15 turns from pin No. 3 to pin No. 4 (tickler).
- 5. BLUE RING-99 turns from pin No. 1 to pin No. 2 (grid winding), 27 turns from pin No. 3 to pin No. 4 (tickler).

#### ANTENNA WINDINGS

All the coils are close wound. Starting from the bottom, the turns are wound counterclockwise as viewed from the top. The bottom wire of each coil is attached to pin 2 and the top wire to pin 1. There is a wire connecting pin 1 to pin 4. Pins 3 and 5 are unused. Note the odd pin numbering as discussed above.

Since the holes in the forms are not spaced the same and are not vertically aligned with each other, there are fractional turns as listed below.

### WAVELENGTH TURNS

14.2 to 28 meters 4 5/8

27.1 to 53 meters 9 1/2

51.2 to 101 meters 20 1/2

99.3 to 202 meters 46 1/8

## **DETECTOR WINDINGS**

Each detector form has a tickler winding and a detector winding. Turns for each coil and the spacing between coils are listed below. The spacings between the coils are a little irregular and, where it appears to matter, a range is given.

All the coils are close wound. Starting from the bottom, the turns are wound counterclockwise as viewed from the top. In each case, the detector coil is wound above the tickler coil.

Connections are made to the pins as follows:

Bottom of detector winding pin 2 Top of detector winding pin 1 Bottom of tickler winding pin 4 Top of tickler winding pin 3

Pin 5 is unused. Note the odd pin numbering as discussed above.

### DETECTOR TICKLER SPACING

WAVELENGTH TURNS TURNS BETWEEN COILS

14.2 to 28 meters 3 1/4 4 7/8 1/16 to 3/32 in.

27.1 to 53 meters 6 5/8 5 7/8 1/16 to 3/32 in.

51.2 to 101 meters 17 5/8 6 7/8 1/16 to 3/32 in.

99.3 to 202 meters 46 5/8 14 7/8 1/16 to 3/32 in.

# COIL POSITIONING

The lowermost turn on each form is the following height above the top of the base of the form:

# ANTENNA DETECTOR

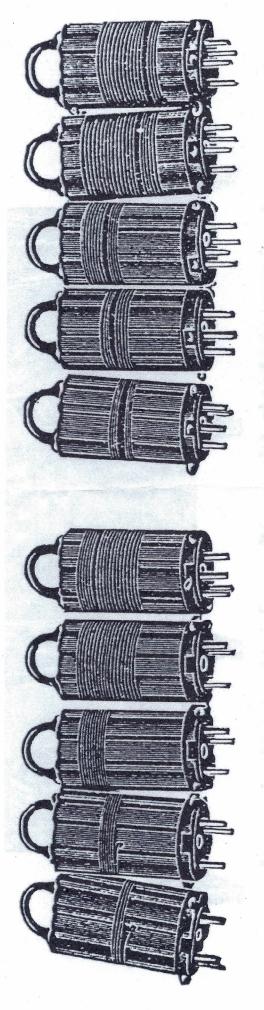
WAVELENGTH COIL COIL

14.2 to 28 meters 0.91 in. 0.90 in.

27.1 to 53 meters 0.74 in. 0.96 in.

51.2 to 101 meters 0.68 in. 0.67 in.

99.3 to 202 meters 0.35 in. 0.12 in.



The coils for the Super-Wasp. Left, antenna stage coils; right, detector stage coils. They are used in pairs, one in the left-hand can and one in the right.