

**T**hrough the passing of time, one apparatus that has changed little has been the telegraph key. Samuel Morse first developed and used his system in 1837. The standard type of telegraph device we associate with today has all been based on the Morse System.

From 1915-1920, the keys that were used were J-1 through J-35. they were used as follows:

**J-1 Key** - Telegraph; model 1915 for set type SCR-49

**J-2 Key** - Telegraph; on mounting base 3 1/4 X 5 1/2 X 1/2 used in set SCR-49

**J-3 Key** - Telegraph; adjustable; folding; on Mounting base 3 3/8 X 5 5/32 " used in SCR-71.

**J-4 Key** - Telegraph; silent; for instruction purposes L.S. Brach Co.

**J-5 Key** - Telegraph; flame proof; adjustable; equipped with binding posts, type TM-8, and mounting base; for use in airplanes.

**J-6 Key** - Telegraph; adjustable; heavy handle; open gap; mounting base 4 1/16 X 1 3/4; for use on airplanes.

**J-7 Key** - Telegraph; adjustable; flame-proof; mounting base 5 1/2 X 2 5/8; with winker lamp socket on same base; for use on airplanes.

**J-10 Key** - Telegraph; for use on radio tractor set.

**J-11 Key** - Telegraph; flame proof; silent; equipped with buffers; used for instructional purposes.

**J-12 Key** - Telegraph; adjustable; high-speed; mounting base 2 1/2 X 3 1/2.

**J-14 Key** - Telegraph; folding; adjustable; shunted by a 6 ohm resistance; used by set box type BC 47.

**J-15 Key** - legless; bunnell type; steel lever 4 19/32 inches long; black fiber button 1 1/8 inches diameter by 1 1/2 inches high, over brass form 3 by 2 inches; equiped for mounting on wood base of Set, buzzer, sending, type EE 15.

**J-16 Key** - Strap; consists of spring 3 1/2 long, one end of which is drilled for attaching to panel, the other end has bakelite buttons, one inch diameter and contact point; second contact point is provided for attachment to panel beneath the strap contact; used in Set, Signal Lamp, type EE 10.

**J-17 Key** - Flashing; strap; unmounted; comprises a 1 31/32 X 3/8 X .025 inch German-silver spring with brass button 9/32 inch diamant by 5/8 inch high; other end fitted with bolt and nut for attachment to block, panel, or base; comprises also a contact point to be attached similarly to block, panel, or base beneath button.

**J-18 Key** - Open circuit telegraph; legless; platinum or platinum-iridium contacts; phosphor-bronze lever; hard rubber switch knob and lever tip; approximate over all dimentions, 2 1/2 X 5 1/2 X 2 inches; used in Set, induction field telegraph, type EE-21.

**J-19 Key** - Telephone; 2 way; comprises a rubber handle which, by moving a brass body, serves to crowd together several German-silver strip springs on one side, while at the same time it permits a like number on the opposite side to draw apart; locks in both operating positions and makes and breaks 2 contacts with each movement; comprises appropriate insulating parts and mountings; handle is 7/8 inch high by 3/8 inch diameter; used to connect a telephone set direct to either of two lines.

**J-20 Key** - Telephone; double-pole, single-throw; comprises a brass body to which is attached a hard rubber knob, 1 by 3/8 inch diameter, by which the body is moved so that it presses together several German-silver contact springs, making contact; reversing, it permits them to separate and break contact; used in Switch box, type BC-95.

**J-21 Key** - Strap; formerly designated "Key strap, large"; comprises a slate base, 5 3/4 inches long by

3 1/2 inches wide, upon which is mounted a spring brass strap with binding post connections at one end and a hard rubber button at the other end; equipped with upper, lower, and center contacts.

**J-22 Key** - Strap; formerly designated "Key, strap, small"; comprises a slate base 4 inches long by 2 inches wide upon which is mounted a spring brass strap with pinding-post connections at on end and a hard rubber button at the other end; equipped with upper, lower, and center contacts.

**J-23 Key** - Wireless telegraph; for use on sets of 1 to 5 kw.; formerly designated "Wireless Key M1911"; comprises a black fiber base, 3 1/2 inches wide by 1/2 inch thick by 6 5/8 inches long, on which is mounted a heavy brass lever, 7 3/4 inches long by 5/16 inch square, fitted at one end with a hard rubber button, 1 3/16 inch diameter; special care is taken in the insulation of this key; 2 flat silver contact buttons are provided, 1 on the lever arm and 1 attached to the base, the faces of which meet flush when the key is closed.

**J-24 Key** - Oil break; formerly designated "oil break wireless telegraph key"; comprises an insulating base, 15 1/2 inches long by 6 inches wide by 1 1/2 inches thick, on which are mounted, suitably connected, a commercial legless telegraph key, a small wooden zinc lined tank, and an electromagnet; the depression of the key closes a low-voltage circuit and causes the magnet to move a lever and bring together 2 contacts closing a high-voltage circuit under the oil in the little tank.

**J-25 Key** - A radio sending key first used on Set, 1-kw, field wireless wagon, type SCR-41; comprises a phosphor-bronze lever mounted on a 3/4 inch slate base, 8 1/2 inches long by 4 1/2 inches wide; one end of this lever supports a hard rubber button and the other end a heavy contact which is brought flush with a similar contact mounted on an arm directly above it whenever the key is depressed.

**J-26 Key** - Radio telegraph; Mckinney type; comprises a small telegraph key mounted upon a wooden box which measures 12 7/8 inches long by 9 inches wide by 3 3/8 inches high; a carefully balanced curved arm extends from the key through

a hole into the box and supports at its end a high voltage contact; the other contact is mounted on an insulating block attached to the floor of the box a glass window in the top of the box provides a view of the high-voltage contacts; first used in the wireless telegraph set of the Jolo-Zamboanga, pla P.I.

**J-27 Key** - Radio telegraph; Mckinney type; comprises a small telegraph key mounted upon wooden box which measures 12 1/4 inches long 4 3/4 inches wide by 3 1/4 inches high; a carefully balanced curved arm extends from the key through the hole into the box and supports at its end a high voltage contact; the other contact is mounted on an insulating block attached to the floor of the box designed for 3 kw marine wireless sets.

**J-28 Key** - Open circuit; leg; nickeled-steel lever hard rubber button; platinum contacts; over-all mensions, 5 1/4 inches long by 2 7/8 inches wide 3 1/4 inches high, including legs.

**J-29 Key** - Closed-circuit; leg; nickeled-steel lever; hard-rubber switch knob and button; platinum contacts; over-all dimensions, 5 1/4 inch long by 2 7/8 inches wide by 3 inches high, including legs.

**J-30 Key** - Closed circuit; telegraph; legless; lever of nickeled steel; switch knob and button of hard rubber; platinum contacts; approximate over-dimensions, 5 1/4 inches long by 2 3/4 inches wide by 1 1/2 inches high.

**J-31 Key** - Combination; leg; for open and closed circuits; brass lever, hard rubber switch knob and button; platinum contacts; over dimensions a proximately 6 1/4 inches long by 3 5/8 inches wide by 4 inches high, including legs.

**J-32 Key** - Telegraph; open-circuit; legless; steel lever; equipped with tungston contacts; to be mounted on a table.

**J-33 Key** - Open-circuit telegraph key, tungst contacts, legless, steel-lever type. Key and body be made of brass or tough die cast metal and drill for 2 flat-head wood mounting screws.

**J-34 Key** - Flashing; German silver strap, 1 1/32 by 3/8 by 0.025 inch; with brass button 9/32 inch diameter by 5/8 inch high; mounted on wooden base 1 7/8 by 3 7/8 by 9/16 inch. Contained in Set box, type BC-84, used in Signal Lamp type EE-6.

**J-35 Key** - Flashing; German silver strap 1 1/32 by 3/8 by 0.025 inch; with brass button 9/32 inch diameter by 5/8 inch high; mounted with sicket, type SO-8; on wood base, 2 7/16 by 5 3/8 by 9 1/16 inch; contained in Set box, type BC-81; used in Signal Lamp EE-7.

The following keys; J-2, J-5, J-12, J-30, were used and in service through 1945. During World War II, there were a few new keys developed. Many of the keys, such as the flashing and early aircraft keys were obsolete and discarded. The following keys were developed, used during this timeframe, and still in the army inventory at the close of WWII:

**J-36 Key** - Telegraph; high-speed vibrating type. Vibroplex or equal.

**J-37 Key** - Radio; open circuit; molded bakelite base and phosphor-bronze lever. Part of Radio Receivers and Transmitters BC-148, BC-151, BC-156, and BC-157. Radio Control Boxes BC-177, BC-206, BC-206-A and BC-235.

**J-38 Key** - Telegraph; consists of Key J-30, mounted on a bakelite base; dimensions of base, 4 3/4 inches long by 3 inches wide by 1/4 inch thick; two extra binding posts are provided at the upper edge of the base so as to provide means for connecting a headset in series w/key and the line. Part of Code Practice Equipment EE-81.

**J-40 Key** - Radio; open circuit; part of Radio Sets SCR-177-B AND SCR-245-D.

**J-44 Key** - Same as Key J-37, except mounted on a bakelite base with a switch which, when closed short circuit the key contacts; requires but does not include 2-conductor cord. Part of Radio Sets SCR-178 and SCR-179.

**J-45 Key** - Includes Cord CD-201. Part of Radio

Sets SCR-193, SCR-203, SCR-245-A, SCR-245-B and SCR-245-C.

**J-47 Key** - Same as Key J-44 except without voice-telegraph switch. Part of Radio Sets SCR-177-B and SCR 188-A.

**J-48 Key** - Waterproofed telegraph key, 4 inches by 5 5/8 inches by 1 1/2 inches with 1 feet of 2-cord cable and Plug PL-55. Part of SCR-248.

**J-51 Key** - Hand operated key to operate Signal Lamp M-227. Single contact with two binding posts. Part of Signal Equipment SE-11. Used with but not part of Signal Lamp M-227.

By October 1953 the following keys were in the inventory: J-36, J-37, J-44, J-45, and J-47. Few changes were made in equipment between World War II and Korea.

## Telegraph Key

