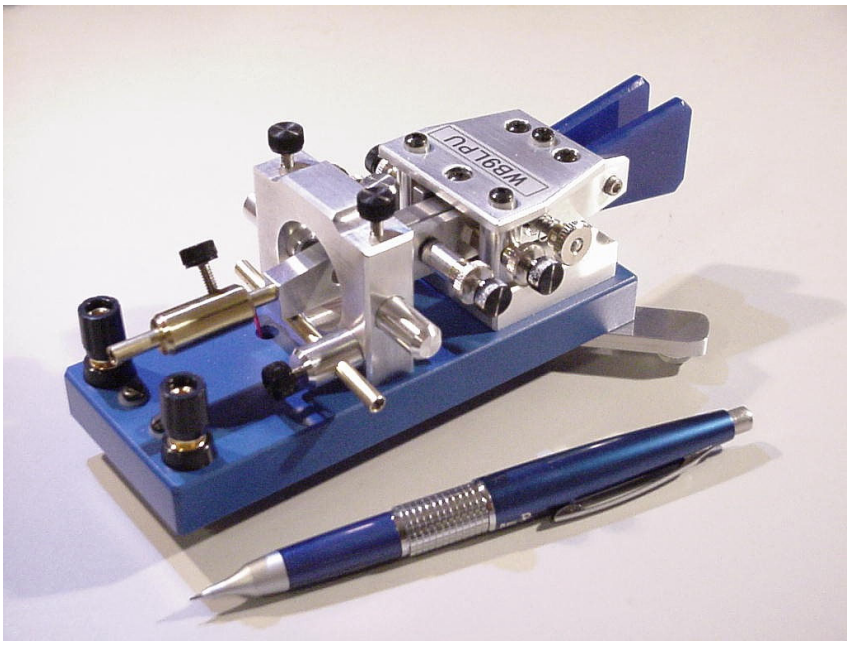
The Parkwood PaddleBugs

The progress continues

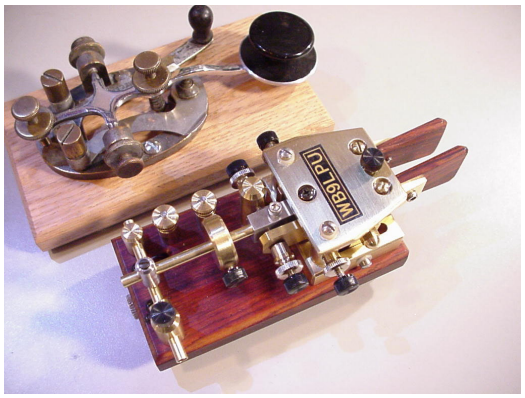
By Richard Meiss, WB9LPU

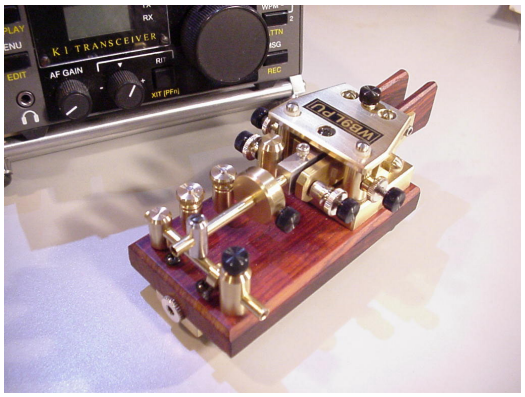


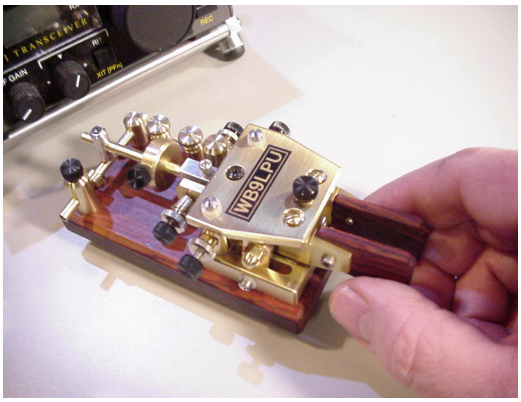
This WB9LPU **PaddleBug** is another step in the evolution of a series of magnetically-operated semi-automatic telegraph keys. Like its predecessors, it can function as either a bug or an Iambic paddle. Current features include:

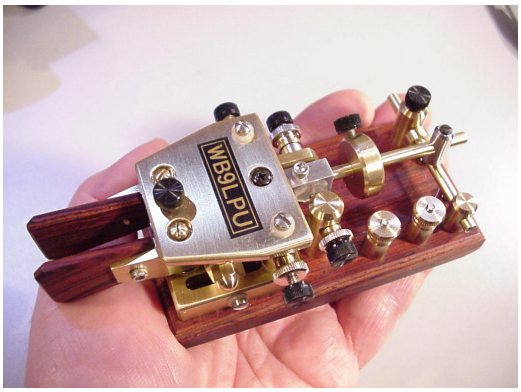
- Pendulum forces created by opposition between rare-earth permanent magnets. No power source required.
- Magnet positions set basic speed range (resetable), while a sliding weight makes changes within the range.
- Works from 5 wpm (or less) to 35 wpm (or more).
- Six instrument-grade ball bearings provide pivots for paddle-arm and pendulum.
- Paddle-arm springs can be either mechanical or magnetic. Mechanical springs are shown above.
- All critical adjustments fitted with carbon-steel spring washers for easy and stable settings.
- "dit" contact is a sealed magnetic reed switch.
- Mechanical parts machined from aircraft aluminum or C360 brass.
- Base measures 2" by 5". Can be made of brass, exotic hardwood, or painted steel (shown). Colors include blue, red, or gray.
- Fingerpieces of exotic hardwood or colored Lucite.

The **PaddleBug Jr.** has many previous PaddleBug features, but it is smaller and has an internal magnet system. Here are some pictures of the prototype. Its base measures 2" by 4", and is stable without outrigger feet, although they do help if you are heavy-handed.



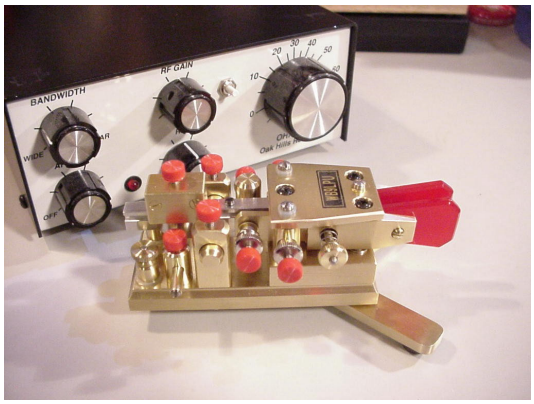


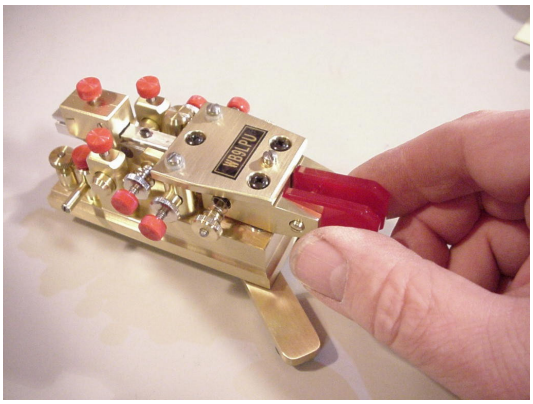


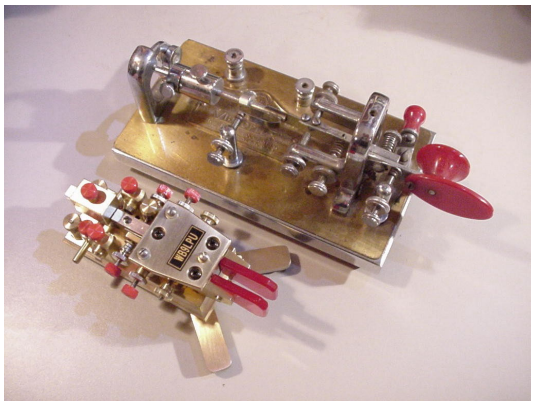


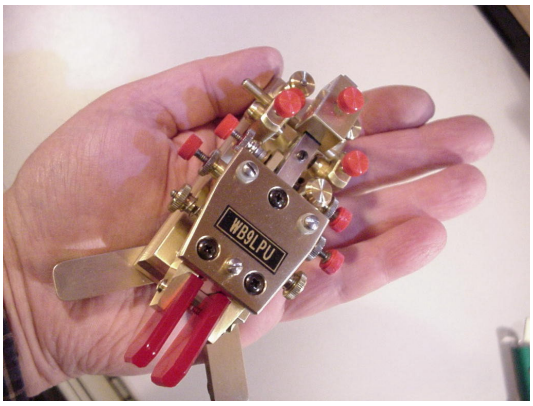
This can also be built from the same variety of materials as used before. Because of the different magnet system, the paddle-arm springs must be magnetic.

The TinyBug is the latest addition. The prototype shown below is scheduled for some improvements. It will have the internal magnet mechanism of the PaddleBug Junior, and it will be smaller than this prototype. The size of the base is 3.5" by 1.5". Outrigger feet (that fold in) add to its stability.









While it is tiny, this bug (which also can function as an iambic paddle) is very stable and works like its larger cousins. Because of the need for stability, only brass will be used in its construction - a wooden base might not be steady enough.

This is the status of the bug development effort as of February 2002. Work schedule permitting, I will begin making a few more of each type and hope to "roll them out" at Dayton in May. It appears that the right-angle magnetic bugs, elegant and functional as they were, were too complicated to produce in any significant number. The current PaddleBugs, which share parts and designs with the Parkwood Paddles, seem to be a step toward making an instrument which (in my humble opinion) rivals the feel and function of conventional bugs.

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