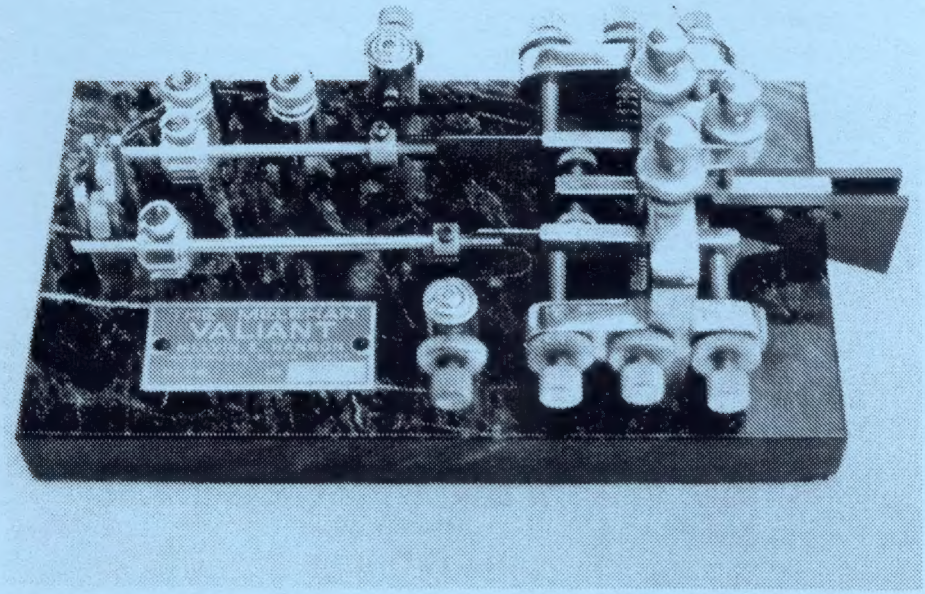
the Vail Correspondent

No. 11 April 1995

the quarterly journal for telegraph instrument collectors



The MELEHAN VALIANT

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Inquiries that require a response cannot be answered unless you enclose a SASE, and require patience in any event.

All **Back issues** are currently available and are $3 each, postpaid in the U.S., Canada and Mexico. Other countries, $4 each (sent airmail).

At the operating desk.

As we suggested in TVC10, this is one issue that every key collector will want in his reference library. Beginning on the following page, we present the definitive article on the Melehan Valiant key. Since Randy Cole, KN6W, lives about an hour's drive from Huntington Beach, he decided to see if he could find out a bit more about Melvin Hanson and the Melehan Valiant key, and maybe even locate one or two for his collection. With a lot of work, a bit of luck and the help of people like W6NKR and W6NHZ, he achieved these goals. And, to the good fortune of TVC readers, Randy wrote his article. We are all indebted to Randy for his excellent research and reporting.

In addition to his principal article, Randy also tells us how many Valiants were made, using a simple mathematical technique that we can use for other serialized artifacts. See "How to Estimate Production Quantities" on page 14.

The Landline column brings us an appropriate item for discussion this month -- Tom Perera's "April Fool" sounder. Developers of early landline equipment did their best to circumvent other's patents, or to come up with new, patentable designs. Sometimes the operation and design of these instruments puzzle us even today. Here's one that may have you scratching your head.

The article on page 20 is one I have had on deck for some time, and I finally found the chance to run it. It addresses a pet peeve of mine, and yours, too, if you've ever received a key damaged in transit. Let's all vow to use a *big* box when packing bugs, and ask others to do the same.

Those who turn to the ad pages first have already noticed the "biz card" ads on page 23. Whether you run one or not, let us know what you think of the idea.

Many of you will be glad to hear that the new home Carla and I have been building for the past year is finished, our old home is sold, and we are settled in. Now maybe I can get back to attending flea markets and visiting friends. --*W1IMQ.*

MEL HANSON'S KEYS

by Randy Cole, KN6W

(Editor's note: To dispel any confusion at the outset, other writers have misspelled both Hanson's name as well as the acronym "Melehan," a contraction of Melvin E. Hanson's name. In the article that follows, Randy Cole gets it all right.-W1IMQ.)

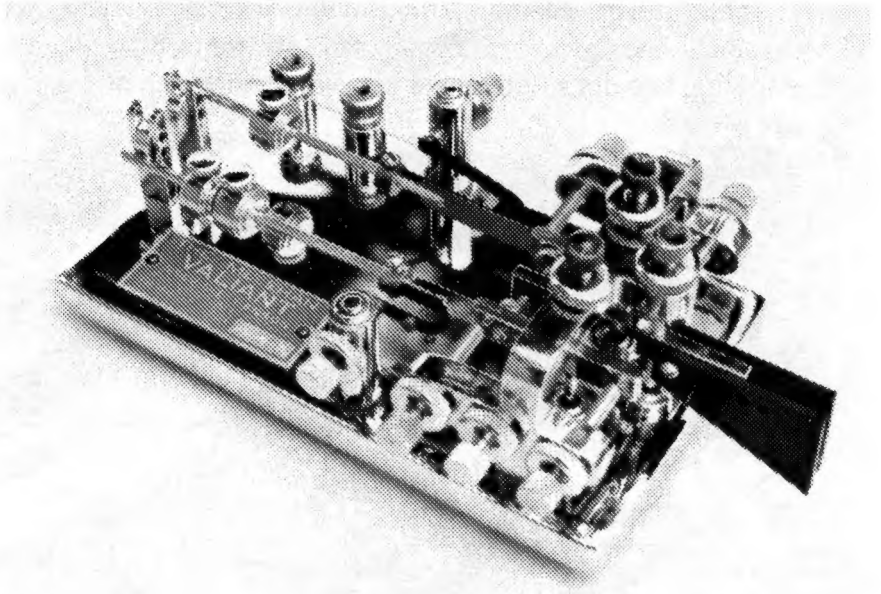
Mel Hanson stared with amazement at the haywire circuit connected to Ed Hahn's Vibroplex. The wires weren't even soldered, just twisted together. "THAT is what you've been using?" he asked Ed. "Look at all the hours I've spent on this one," Mel said, handing him the impressive-looking key he had brought with him.

That's how Ed Hahn, W6NHZ, remembers a meeting with Melvin Hanson in 1939. Ed had developed a keying circuit based on a Type 27 tube which was connected to the dash contact of his Vibroplex. The result was a keyer which made dots mechanically and dashes electronically. He and several of his friends who lived near Long Beach, CA were using them on the air. That's how they met Mel Hanson, who lived about 15 miles away in Huntington Beach.

Mel Hanson was born Melvin Elbie Hanson in Minnesota in 1918. By the time he was in high school the family had moved to Huntington Beach, California. He got his ham license and the call W6MFY in 1935. Callbooks from then to the start of World War Two list his address as 821 Main Street, Huntington Beach, probably his parent's house. No callbooks were published during the war, and the first callbook after the war (spring 1946) lists his address as 912 Ocean, Huntington Beach, probably his grandmother's house. By that time he was a first-class CW op, and he and W6NHZ competed with each other at speeds up to 65 WPM.

W6MFY probably had no trouble making on the air

contacts, because he had a monster antenna. Nowadays Ocean Avenue in Huntington Beach is lined with expensive ocean-front condominiums, but back then there were about as many oil derricks along Ocean Avenue as there were houses. Ed and Mel snuck out one night and erected a flattop antenna between two derricks about 1100 feet apart, and 102 feet in the air. It ran parallel to the beach, and likely spanned both 9th and 10th Streets. Now THAT's an antenna...



Deluxe Melehan Valiant, SN DL-6-70.

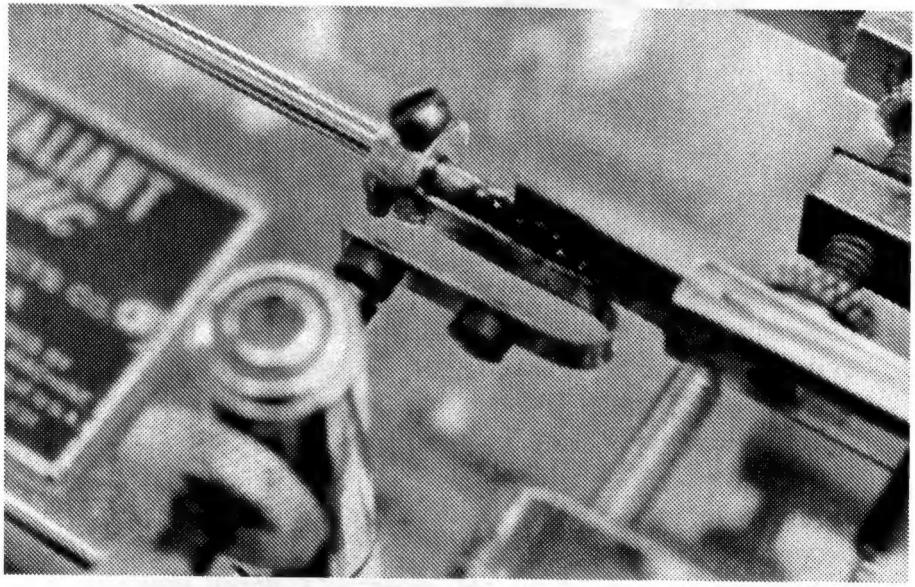
Mel operated a machine shop in Huntington Beach. His shop was located on the north side of Walnut Street, on an alley between Main and Third just a block up from Ocean Avenue and the beach. The building is long gone, replaced by a municipal parking garage for beach-goers.

In the late 1930's, Mel was experimenting with a mechanical key that made both dots and dashes automatically. After considerable experimentation, W6MFY perfected his key, named it the "Melehan Valiant" and began selling them just before the war. The Melehan is one of the most elaborate mechanical keys

ever made. It's also one of the largest, with a base that measures 4 inches by 7 inches.

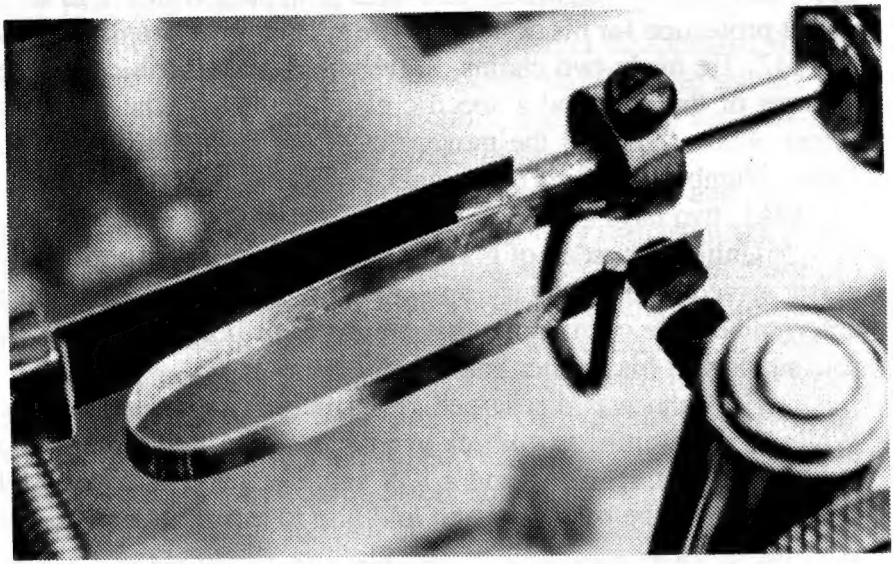
Although the Melehan is sometimes called a fully automatic key, it's really a dual semi-automatic key. There are three levers, each with its own pivot. Twin paddles are mounted on the center lever, which either pushes the left (dot) lever to the left to generate dots or the right (dash) lever to the right to generate dashes. As a result the Melehan can generate strings of dots or dashes but not both at once like an iambic keyer.

The dot lever generates strings of dots just like any bug, but Hanson added one twist, namely two separate contacts on the dot spring, giving two dot speed ranges depending on which of the two contacts is used.



Double-contact dot contact spring.

A much longer mainspring and dash contact spring on the dash lever are used to produce the slower period of vibration needed for dashes. However, a "movement limiting finger" is attached to the dash contact spring's collar. The purpose of the metal finger is to keep the dash contact closed longer than it is open. Otherwise the spaces within a string of dashes would be too long. Ted McElroy made a similar device for the dot spring of some of his bugs, and called it a "dot stabilizer."



"Movement limiting finger" on dash contact spring.

To produce CW with the proper weighting and spacing, both sides of the Melehan must be adjusted to the same speed -- not an easy job. Then the operator must learn to develop a rhythm that keeps both halves of the key in synch. A Melehan is very difficult to learn to use. To quote ace CW op Ray Furlong (W6QIL, SK): "It'll pick you up and throw you down."

There isn't much doubt that Mel Hanson made and sold the Valiant before the war, but he apparently didn't advertise them, relying on word of mouth and his on-the-air contacts to sell his new key. Another friend of Mel's, Marion Henson, W6NKR, met him in late 1937 or early 1938, when he was starting to develop his original key. At that time the dot spring didn't have the second contact, and the dash spring was more "rounded". Marion had a prewar Valiant with an unplated brass base, which he sold during the war. Marion also sold a few more Valiants while he was stationed in Alaska from 1940 to 1942.

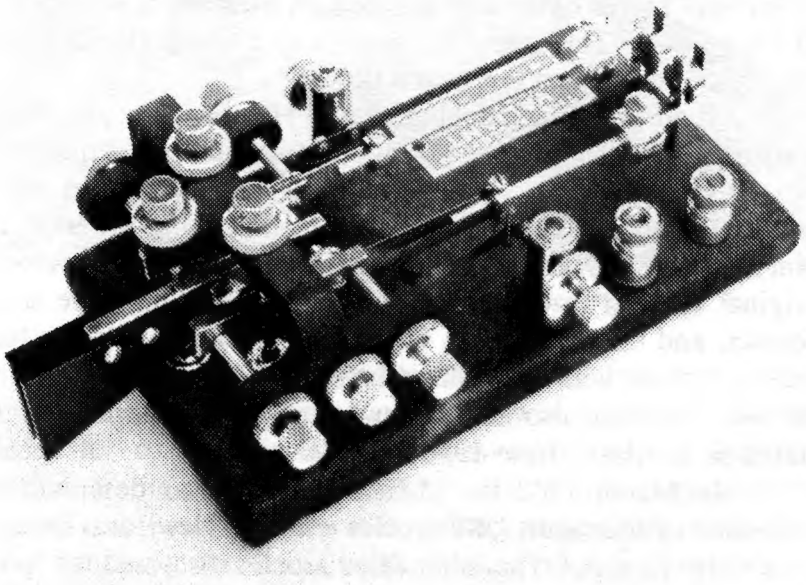
In March 1942 the Melehan Valiant was described in a collection of four short QST articles entitled "New Ideas on Semi-Automatic Keyers." The other three articles discussed the motor-driven Equable Key, a home-brew key which also made both dots and dashes mechanically, and an improved two-tube electronic

keyer and paddle. The article may have prompted W6MFY to seek patent protection for his design, and he applied for a patent on May 5, 1942. He made two claims, a general claim describing all the features of the key, and a specific claim describing the retaining finger which restricted the movement of the dash contact spring. Patent Number 2,329,531 (see back cover) was granted on Sept. 14, 1943, two days before Hanson's 25th birthday.

Unlike almost all of his contemporaries, Hanson apparently never served in the military during the war. He may have been deferred because of his skills as a machinist or because he was the sole support of his mother and sister.

Ed Hahn was discharged from the service in early 1946. While he was waiting to go back to college, Ed visited Mel for two weeks. Ed built his old friend a KW amplifier, and in return Mel pointed him to the parts bins and told him to assemble a couple of keys for himself.

One of the two keys that Ed put together had a "standard" black-crackle base, and the serial number on the nameplate is "ST-6114". This key (see photo below) may allow us to date the Melehan Valiants -- more on this later.



Ed Hahn's standard model Valiant.

The author believes that most Melehans were made during late 1945 and 1946. Even though Mel Hanson was building and selling keys before the war, the ham market disappeared for the duration of the war. W6MFY apparently didn't try to sell his key to the military or to landline operators, and his shop was probably very busy with military parts orders during the war.

In 1945 the war began to wind down and military production began to decline. Hanson probably realized that the ham market would soon be full of returning servicemen with money to spend, eager to get back on the bands. According to Ed, one or two orders came in every day while he was there in early 1946.

Ads for the Melehan Valiant first appeared in Radio News for February, April and June 1946. The Deluxe chrome-base model was $27.50, from Melehan Radio, 821 Main Street, Huntington Beach. (Oddly, the Walnut Street address of Hanson's machine shop has never been seen on any documents connected with Mel Hanson or his keys.) The only other known ads for the Melehan ran in the June and August 1948 issues of QST. The price was the same, but the name in the ad is now Melehan Radio Products Co., 7061 E. Monroe St., Rt. No. 1, Anaheim. The June 1948 ad carried an enigmatic note that said "Deliveries of this superior instrument have been interrupted because the manufacturer would not substitute inferior materials or in any way change the perfected design."

The call W6MFY was reissued to someone else in 1952 as WN6MFY. At the time calls were reissued after five years, so apparently Hanson let his license expire in 1947.

Mel Hanson's friends lost contact with him in the early fifties. Ed Hahn last visited Mel sometime just after 1951, at his machine shop which was then located in Long Beach. Melvin Hanson committed suicide in December, 1962, at his mother's house in Huntington Beach.

Nameplates and Serial Numbers

There are two types of Melehan nameplates. Most Valiants have the earlier "Huntington Beach" nameplate. Serial numbers on these nameplates generally start with either "ST" or "DL", then the digit "5" or "6", and then a two or three digit number. Most have two

dashes, e.g., ST-5-22 or DL-6-181, but some have only one, e.g., ST-6114.

Based on the serial numbers and Ed Hahn's observations, it seems reasonable to assume that the first digit on the nameplate represents the year of manufacture, "5" for 1945 or "6" for 1946.

Melehans with a black base have a serial number beginning with "ST", and keys with the deluxe chrome-plated base have a serial number beginning with "DL". The chrome-plated Melehan pictured in Ingram's *Keys, Keys, Keys* (CQ Communications, 1991) has an "ST" plate, but is known to have started life as a standard model.

Ed's Melehan, Serial ST-6114, made in March 1946, would then have been the 114th Melehan made in 1946, indicating a brisk production rate at the time.

A few Melehans have the later "Anaheim" nameplate. This nameplate raises a number of intriguing questions. As in the 1948 ads, one of the names on this plate is the Melehan Radio Products Co. of Anaheim. The other name on the plate is the Schultz Tool & Machine Mfg. Co., also of Anaheim. Did Hanson contract with Schultz to build the keys for him? Did he sell the design and manufacturing rights to Schultz? Nobody knows. And none of his friends recall Hanson ever living or working in Anaheim.

Serial numbers on the later nameplates all start with "A" followed by a dash and then four digits, e.g., "A-1014", "A-1023" or "A-1037". Those are the actual serial numbers on the only three known Melehans of this type. The "A" probably stands for Anaheim.

Melehan Variations

Of the approximately 300 Melehan Valiants made (see "How To Estimate Production Quantities" on page 14), the author has located only twenty that remain. Of these twenty, four are in museums. The AWA Museum has two, including one from Lou Moreau's collection. The ARRL has one in storage, and the Ford Museum and Greenfield Village has one on display. The other sixteen are in private collections.

Only five of the twenty known Melehans have the black crackle base, which wasn't widely advertised, even though the "ST" on the nameplate of black-base keys probably means "Standard" and the "DL" means "Deluxe".

Hanson made one major change during production. Early Melehans have two sets of pivot bearings for the central lever. Moving the central lever changes the distance from the pivot to the friction pins that move the dot and dash levers. Figure 2-11 on Page 23 of *Keys, Keys, Keys* shows one Melehan with the extra pivot position and one without. This change seems to have been made in 1945.

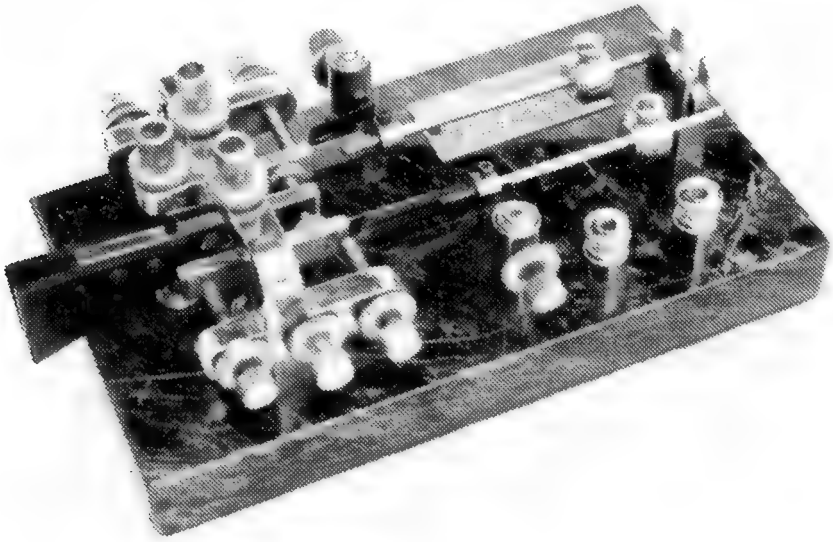
One Melehan with a Schultz nameplate reputedly has a different damper assembly, made in the form of a "T" with damper wheels on both ends of the cross arm. The serial number on the key is A-1037, which is the highest known serial number, making it the newest known Melehan.

There are three notably unusual Melehans. Smiley White,

WB4EDB, has a semi-automatic key with distinctive machining like that of a Valiant, but no nameplate. Perhaps it was made on special order, or was an experiment.

There is at least one left-handed Melehan Valiant in existence. Since the Valiant is symmetrical, the dot and dash levers can easily be swapped. The only real differences are placement of the setscrews on the dot and dash spring collar and possibly placement of the nameplate.

The Melehan on this month's cover (also shown below) has a green marble base and a nameplate with the serial number "SPDL-6-98". The designation "SPDL" probably stands for "Special Deluxe", and leaves little room for doubt that the key was a special-order factory job. The base is almost an inch thick, all the hardware on the underside of the base is inset, and the underside is covered by a sheet of neoprene rubber. It's obvious that this key was well thought out. The thick base compensates for the fact that marble is considerably less dense than steel, and the use of inset hardware and neoprene pad keep the top of the base at the right height. This key is from the estate of Ray Furlong, a well-known CW op and Elmer par excellence.



The marble-based "Special Deluxe" Valiant.

Unsolved Mysteries

I hope that this article has resolved some of the mysteries surrounding Mel Hanson and his keys. Other mysteries still remain, however, including:

Where are the pre-war Melehans?
What did Mel Hanson do during the war?
What was the Schultz Tool & Machine connection?

The author welcomes any information on any of the above, and any other information about Mel Hanson and his keys.

Acknowledgements

This article couldn't have been written without the information supplied by Ed Hahn and Marion Henson. Ray Furlong also provided important dates and addresses before his untimely death. Thanks also to Joel Kosoff and Larry Nutting. TVC thanks Mike Wilson at Stow (Mass.) Radio Shack for the text file disk transfer. All keys and photos: Randy Cole KN6W collection/photo.

About the Author

Five years ago, Randy Cole, KN6W (1218 S. Alvira, Los Angeles CA 90035) bought a J-38 like the one he used as a Novice in the early sixties. Shortly afterward, he bought a deluxe Blue Racer like the one he used back then. Then came ten more J-38s, more Vibroplexes, and a goal of collecting one of every model, color and style Vibroplex made since 1940. Now he specializes mostly in Vibroplexes, and is still looking for a 1904 Vibroplex and a Midget (aren't we all?)

Randy's other amateur radio interests have included chasing DX and amateur satellites, beginning with Oscar 6. He has done research, development and teaching in the filed of digital signal processing (DSP) for almost twenty-five years. He lives in Los Angeles with his long-suffering and somewhat bemused XYL Carolyn.

How to Estimate Production Quantities

by Randy Cole, KN6W

One of the questions concerning collectible keys such as the Melehan Valiant is determining how many might have been made. Most collectors have accepted the figure of five hundred or so for the Melehan that appears in *Keys, Keys, Keys* (D. Ingram, CQ Communications, 1991). That figure probably came from Lou Moreau, whose August, 1985 "Key and Telegraph" column in the AWA's *Old Timer's Bulletin* said "records show only four or five hundred were sold."

What records was Lou talking about? In a telephone conversation with the author, Lou said that she met someone who claimed to have a Valiant with a serial number over five hundred, but that she had not seen the key. Lou's friend may have owned a Valiant made in 1945 with a serial number like DL-5-xx. There's a valuable lesson here for all of us about making assumptions and checking facts.

So is there a way to estimate the production of Melehan Valiants? Yes, there is, and it's really pretty simple. The method will also work for keys and other products with sequential serial numbers.

First, collect as many serial numbers as possible. Two existing Melehans have no serial number. One of those has a nameplate with no serial number, the other reputedly has no nameplate -- not even holes for one. The serial numbers of two more are currently unknown. That leaves sixteen serial numbers, as follows:

ST-5-20, ?-5-21, ST-5-22, DL-5-29, V1(?)-5-38
DL-6-51, DL-6-63, DL-6-70, SPDL-6-98, ST-6100, ST-6114, DL-6-173, DL-6-181
A-1014, A-1023, A-1037

Here's the method: For each group of keys with similar

serial numbers, add the serial numbers and divide the sum by the size of the group. This gives the average, or mean. If the serial numbers seem to start at a number greater than one, say 100 or 1000, subtract the starting number to get the actual mean.

The estimated production of keys in that group is simply twice the mean. If there is more than one group of serial numbers, add the estimates together to get a total estimate.

How does this work? Suppose you made 100 keys of your own design, and gave them serial numbers from 1 to 100. If you added up all the serial numbers and divided by 100, you'd get a mean close to 50 (actually 50.5). Further suppose that, like every other key manufacturer on earth, you threw away or lost your production records. Then years later a crazy key collector decides to gather all the serial numbers he can. The mean serial number should be about 50, and the more numbers he or she gathers the closer the mean will get to 50, or half the number of keys you made.

For example, take the five Melehan serial numbers with a "5" in the middle. The sum of 20 + 21 + 22 + 29 + 38 is 130. Dividing by 5 gives a mean of 26. Doubling 26 gives an estimated production of 52 keys.

Similarly, the estimated production of keys with a "6" in the middle of the serial number is 212.

It looks like the Anaheim production started with serial number 1000. Taking that into account, the estimated Anaheim production was 49 keys.

The production estimates are consistent with the highest serial numbers in the groups. The highest "5" serial number is 38 out of an estimated 52 keys, the highest "6" serial number is 181 out of an estimated 212 keys, and the highest "A" serial number is 37 out of an estimated 49 keys.

Adding the three estimates gives a total of 313 keys. It's not as many as previously thought, but it means that there are probably at least a few more of Mel Hanson's keys out there, just waiting to be found.

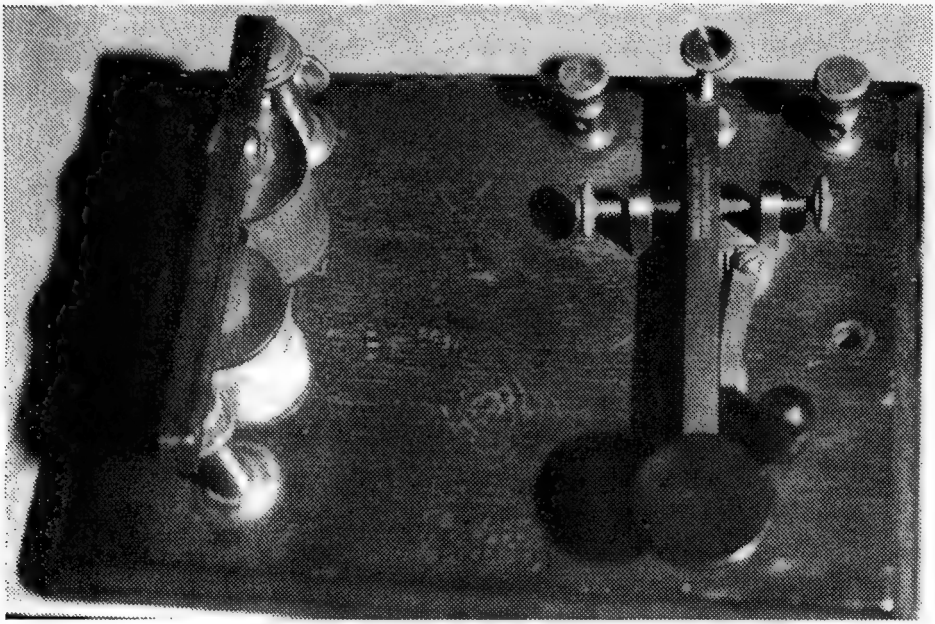
This simple estimation method was suggested to the author by Professor Richard Bucy of the University of Southern California. Purists note: This method has been simplified a bit, and any inaccuracies are the fault of the author.

The April Fool Sounder

Tom Perera, K2DCY, is a well-known instrument collector here on the east coast. His collection is one of the largest in this area. He knows what he wants and, apparently, how to find it. And with such dedicated collecting, it's not unexpected that he would come across an instrument that causes us to scratch our heads.

Tom has a Tillotson sounder that he calls his "April Fool Sounder." He displayed it at the Fall '94 AWA Conference in New York. This sounder, part of a KOB, is of unusual design: The two coils are in line with the lever, rather than in the usual transverse configuration.

Tom described this sounder in the N7CFO Keyletter (No. 7 p. 74), stating that "it consists of a square steel armature running from front-to-back and PIVOTED in the middle of one of the two coils which are lined up from front to back. The two coils are in series and it is clear that when they are energized, one of them pulls the armature down. The puzzle is: what does the one around the armature pivot do?"



Close-up. Note armature pivot atop coil.

In his key list (it is item no. 72), Tom is more emphatic concerning the oddly positioned coil: "the armature is pivoted at the top center of one of the coils which can't possibly make any contribution to the operation of the sounder." Since the presence of this non-working coil will, he feels, mislead the casual observer, Tom calls the device his "April Fool Sounder."

Well, maybe. Magnetic flux flows through ferrous metal just as current flows through copper wires. Magnetic flux flows across the reluctance of an air gap just as electricity flows though the resistance of a carbon resistor. And as in a series electrical circuit, the elements may be transposed (a series circuit is, like mathematical addition, commutative) and they may be divided or combined without affecting the operation of the circuit.

For example, a series circuit consisting of a ten-volt battery and a ten-ohm resistor may be changed to a loop with two five-volt batteries, a three-ohm resistor and a seven-ohm resistor. The result, a current of one ampere, is the same in both cases.

We'll demonstrate this in the following figures. The first shows "clapper" and "hinged" styles of electromagnets (relays). The relays could also represent simple single-coil sounders. Both magnets work, even though the air gap and the armature hinge

have been transposed, or moved around in the magnetic circuit. Note the different ways in which the steel armature (moveable piece) of the relays is pivoted at the yoke (the extension of the core). As we see, the actual series location of the armature pivot or the air gap is unimportant.

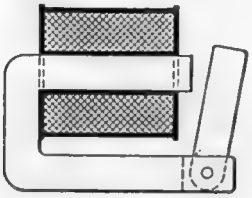


FIG. 35.—Clapper type.

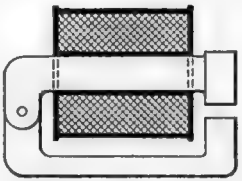


FIG. 38.—Hinged type.

Next we show two horseshoe magnets; one has one coil, the other has two coils. These are magnetically equivalent if the coils, like analogous batteries, are wired in series, and proper polarity (series-aiding) is observed. The two-coil form will operate just as does the original single-coil form; each coil contributing its share.

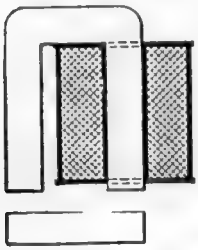


FIG. 31.—One-coil horseshoe electromagnet.

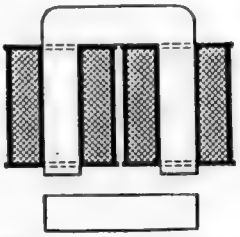


FIG. 42.—Two-coil horseshoe electromagnet.

We may conclude that, far from incorporating a coil that does not contribute to its operation, each coil in the Tillotson instrument contributes to the magnetic flux developed across the air gap. It is a workable variation of the "clapper" magnet design.

(We need not rely on theory; our conclusion may be empirically tested by separating the series-connected coils and powering up only the "pivot" coil.)

Now if you really want to scratch your head over some electromagnets, consider these "April Fool" designs. And for the record, they do work.

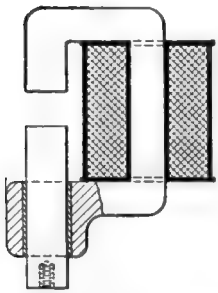


FIG. 37.—Slidable-armature type.

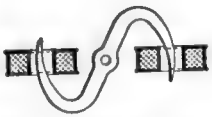


FIG. 47.—Rotary solenoid.

FIG. 50.—Spiral-frame type.

References: Magnets *by Charles R. Underhill (McGraw-Hill Book Co., 1924).* Radio Physics Course *by Alfred A. Ghirardi (Murray Hill Books, 1932).*

Dial-Up Day

Reader Jack Proefrock, K6QEQ, reminds us that the fourth Saturday in April (the 22d this year) is Morse Day, "when the chapters of the Morse Telegraph Club meet all over the country to celebrate the birthday of Sam Morse." (Actually, he was born on the 27th, in 1791, in Charlestown, Mass., but the celebration is, as stated, always on the fourth Saturday.) The principal activity is QSO via the club's "dial-up Morse hubs." Those with the necessary landline interface can dial John "Ace" Holman's hub at (610) 647-1628, and can reach Jack Proefrock's dial-up (from 0800 PST on) at (310) 865-6754. And by the way, it's landline -- a/k/a American -- Morse! For technical aid on the dial-up interface, contact Ace at 1 Beth Circle, Malvern PA 19355; (610) 644-2471.

Packing Bugs for Shipment

I knew there'd be trouble when I saw the small size of the package. The bug was perfect before it was mailed to me; when I opened the box, both the paddle and the knob were broken.

John Rhilinger, KC1MI, had a similar wrenching experience. When he opened his package, he found not only a broken paddle, but also a bent main lever.

The fellows who sent John and I those keys certainly had good intentions, and thought they had packed the bugs well. But through their ignorance of proper packing methods, they caused the originality of these bugs to be totally and permanently destroyed.

The most common cause of this damage is using a small box. Always assume the box will be dropped from a great height onto the paddle-end. No matter what kind of padding you use, if the box is too short, that irreplaceable, original paddle will break.

The Vail Correspondent recommends the following packing method to give those bugs a fighting chance in transit.

1. Turn the main (dot) lever stop screw so that it contacts the lever (permits no motion). Fasten the pendulum to the damper with a twist-tie. (These steps protect the mainspring and moveable dot contact spring from uncontrolled movement of the pendulum.) Lock all adjustments securely.

2. Remove the paddle and knob. Put them in a plastic baggie. Put this and the bug in a second baggie. Wrap and tape this bundle firmly in newspaper, bubble-pack or sheet foam rubber.

3. In a large box, place three inches (minimum) of foam peanuts and center the key package on that. There should be at least four inches of space all around the bug, and at least three inches above and below it. If not, get a larger box.

4. Now fill the box with more peanuts. Overfill it, so that the bug will be held tightly in place in the box. Seal well.

5. If you can't get peanuts, use tightly wadded newspaper and an even bigger box.

If you remember only two things, here they are: Use a box that is "too big," and pack firmly. If you are having a bug shipped to you, ask the seller to pack it this way. Better yet, send him a photocopy of this article.

unclassified ads

When responding, say you saw it in The Vail Correspondent.

Wanted: Bugs, keys. By beginner collector. **For sale:** Telegraph Sounder, dual coil, "J.H. Bunnell & Co." Poor condition, $15. Dave, W1DWZ, (508) 378-3619.

Resonators. Repros of the Bunnell "Acme" pedestal model. Hoods wine red, gray, WU green or natural, pedestals black. 4' cord, felt base, drilled for main line or local sounder. $45 includes UPS. No CODs. Jack Proefrock, 20814 S. Hawaiian Ave, Lakewood CA 90715/TDC.

Wanted, Chandler Code Course. Also J-36, Vibroplex Champion, Lightning Bug and Zephyr in exc. cond. S.E. Watkins, K4OWN, 13003 Fennimore Terr., Midlothian VA 23113-482.

For Sale: Antique McElroy Code Aptitude Test; set of three 78 RPM 12" discs. New original pack, $18 incl UPS. A. Nutkis, 2085 Kennedy Blvd, Jersey City NJ 07305.

McElroy multi-color 9" X 14" reproduction Chart of Codes, $12 ppd USA, $14 DX (US funds). J.F. Rhilinger, KC1MI, 37 Pearl St., Boston MA 02125. (617) 825-9763.

Wanted in any condition: Bugs by Melehan, Dow, United Electric, "(any)-plex", Xograph, AtoZ, Standard, etc. Also need manual/ schematic copy for small Hammarlund HK-1B (or series) keyer, Hallicrafters TO keyer wetted relay, and old issues of Electric Radio. Write: WJ5J, 5678 College Drive, Baton Rouge LA 70806.

16 page plus list of telegraph items. Refundable $2 plus two stamps to Joe Jacobs, 60 Seaview Terrace, Northport, NY 11768. (516) 261-1576, Fax (516) 754-4616.

Have complete set of 10 American Morse Instructograph tapes. Might sell but prefer an interesting trade. Also have duplicate Champions, Lt. bugs, dlx Blue Racer, Lionel J-38, others for sale/trade. Randy Cole, KN6W, 1216 Alvira St., Los Angeles CA 90035. (213) 939-9847.

Go-Devil wanted. The last model made; it had an overlay of plastic (?) with the name on it. Joe Johnson, 2755 Greenbrier Dr. Cleveland TN 37312.

Knobs with 8/32 female insert, $1. J-36 teardrop paddles, $1. Square cut paddles, 50¢. All bakelite. Min order $5. Outside North America add $2 postage. Tom French, W1IMQ, 151-B Barton Road, Stow MA 01775. (508) 562-5573.

Telegraph keys wanted! Send SASE for latest list of over 400 keys for trade. Tom Perera, K2DCY, 11 Squire Hill Road, North Caldwell NJ 07006.

References by W1IMQ: Bunnell's

Last Catalog, 36 pg softcover, $6.95. Introduction to Key Collecting, 64 pg softcover, $9.95. Add $2 s/h to order. Artifax Books, Box 88-T, Maynard MA 01754.

key clicks

Letters will be published as space permits, and may be edited.

Congratulations on the excellent J-38 article [TVC10]. I mentioned your article on the Internet Boatanchors mailing list, and one of the people there brought up something interesting. He said that the Signal Corps had a remote controller for radios which was called the RM-29. It was a box that plugged into the key and mike jacks of the radio and allowed a line to be run to a remote handset and J-38 key. The line from the key to the RM-29 was connected to the "LINE" side of the J-38, and the handset was connected to the "TEL" side.

I thought this was interesting because it describes another Signal Corps use for the J-38, and it gives a more logical explanation for the "TEL" lettering. In the school system hookup, it seems to me that it would be logical to letter the two left posts as "PHONES." I don't know how true this all is, but I thought I'd mention it. *Randy Cole, KN6W.*

I enjoyed the picture of "The Combination Vibroplex" [TVC10 p. 12], but I must say I doubt that it was actually made by Vibroplex. The drilling jigs used to make the bases were (I should say are) designed only for a standard size base. It is possible that the Company made a special order base but based on your book and discussions with others, it appears that Vibroplex didn't do very much custom work. If it did, none of it has shown up in collector's hands. *S. Felton Mitchell, WA4OSR.*

As the new owner of The Vibroplex Company, Mitch's informative comments add to our knowledge of these keys, and indicate just how scarce Paul Mezzapelle's special order example may be.-W1IMQ.

I've enjoyed reading the Vail Correspondent these past few months! I appreciate all the information you've been putting in the magazine as it really makes me a more knowledgeable collector. *Derek Cohn, WB0TUA.*

fishing expedition

TVC needs your help in the following areas:

Photo of your Bunnell "Gold Bug," its serial number and label details; also a photocopy of the patent (or just the patent number).

Some "Sematics" are marked "patent applied for." Was a patent ever issued? If so, we need a photocopy or the patent number.

If you are researching an article for TVC and need help, let us know. We'll publish it here with your return address.

BIZ CARDS

Inquiries from several readers resulted in this new printing experiment for us -- business card ads. We aren't exactly sure how things will go both printing-wise and cost-wise with these cards, but we'll give it a shot.

Yes, you can still run your free "unclassified ad" in each issue in addition to a biz card. But for those times that you don't have anything to sell, and nothing particular you are looking for, you can let your fellow readers know you are still interested in buying/selling/trading things telegraphic with a business card ad. Your card will serve as a constant reminder to others that you are still out there, and still looking. As John Rhilinger, KC1MI, writes, it "sounds like a very good idea for all of us to show interest in keys."

Here are the details: You send us a standard size business card (2" high by 3.5" wide) and eight bucks, and we'll print it here for four issues. In order to fit our format, your card will be printed at 64% of its original size. Keep this in mind, by the way, if you are having new cards printed up and have a choice of print size. (Heck, I can hardly read some of your cards at 100%.)

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Telegraph historian and
key collector. Specialist
in T.R. McElroy keys.

Sept. 14, 1943. M. E. HANSON 2,329,531

TELEGRAPH TRANSMITTER

Filed May 5, 1942

Fig. 1

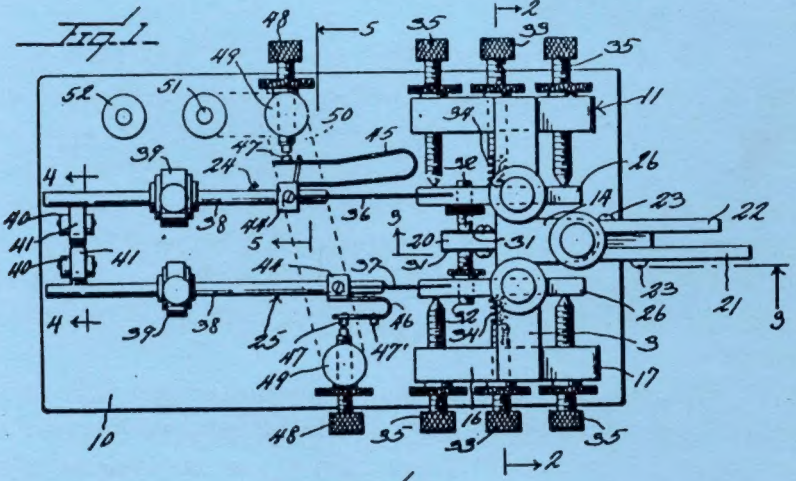


Fig. 5

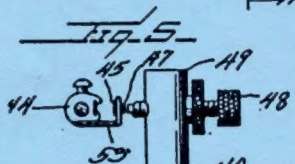


Fig. 2

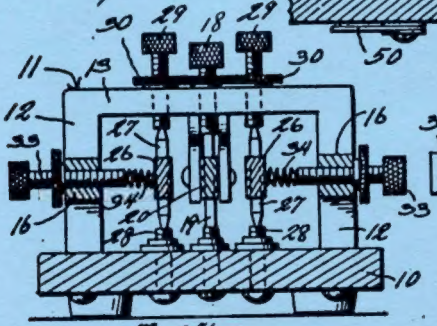


Fig. 3

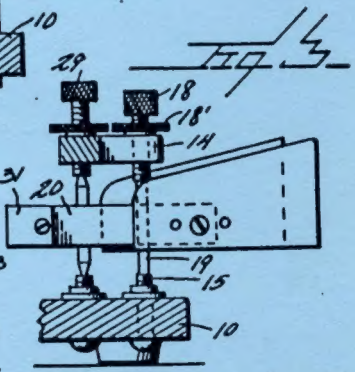
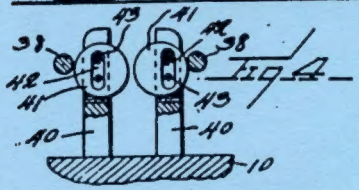


Fig. 4



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