BRASSPOUNDER

February 2023, Issue 177

Welcome friends to February's Brass Pounder!

As it is Valentine's month…

I have little to report this month but a few items of note, so here goes.

Ray Chandler, G4XUZ wrote to me and said

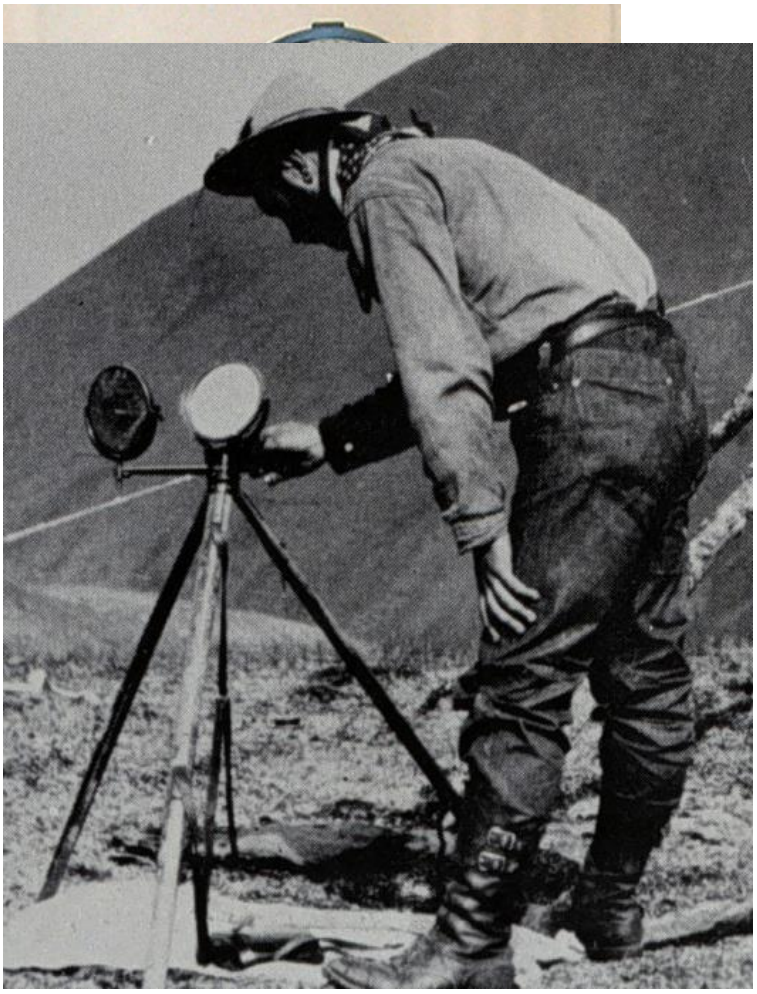
"Very interesting to read in BrassPounder about the Photophone and its use in WW1, but there was another light-beam communications device used at that time and earlier.

The Mance heliophone was an ingenious but very simple contraption for sending Morse, with the advantage of being purely mechanical (so no electronics to fail in the field!). The Morse key shifted the angle of a mirror which had been aligned at key-down to direct a beam of sunlight to the receiving station. A second mirror could be utilised so that the Morse flashing could be sent in any direction and not limited by the sun's position.

A web search for "Mance heliophone" produces plenty of information and pictures, and there's an actual example to be seen in the Royal Signals Museum at Blandford Camp (a 'must visit' for all radio amateurs!).

73, Ray G4XUZ”

Well I did google it and used Wiki, and as I am a financial contributor to wiki I feel entitled to use the following..



Description[edit]

Fig. 2: German heliograph made by R. Fuess in Berlin (on display at the Museum of Communication in Frankfurt)

There were many heliograph types. Most heliographs were variants of the British Army Mance Mark V version (Fig.1). It used a mirror with a small unsilvered spot in the centre. The sender aligned the heliograph to the target by looking at the reflected target in the mirror and moving their head until the target was hidden by the unsilvered spot. Keeping their head still, they then adjusted the aiming rod so its cross wires bisected the target.[4] They then turned up the sighting vane, which covered the cross wires with a diagram of a cross, and aligned the mirror with the tangent and elevation screws so the small shadow that was the reflection of the unsilvered spot hole was on the cross target.[4] This indicated that the sunbeam was pointing at the target. The flashes were produced by a keying mechanism that tilted the mirror up a few degrees at the push of a lever at the back of the instrument. If the sun was in front of the sender, its rays were reflected directly from this mirror to the receiving station. If the sun was behind the sender, the sighting rod was replaced by a second mirror, to capture the sunlight from the main mirror and reflect it to the receiving station.[5][6] The U. S. Signal Corps heliograph mirror did not tilt. This type produced flashes by a shutter mounted on a second tripod (Fig 4).[5]

The heliograph had certain advantages. It allowed long distance communication without a fixed infrastructure, though it could also be linked to make a fixed network extending for hundreds of miles, as in the fort-to-fort network used for the Geronimo campaign. It was very portable, did not require any power source, and was relatively secure since it was invisible to those not near the axis of operation, and the beam was very narrow, spreading only 50 feet per mile of range. However, anyone in the beam with the correct knowledge could intercept signals without being detected.[3][7] In the Boer War, where both sides used heliographs, tubes were sometimes used to decrease the dispersion of the beam.[3] In some other circumstances, though, a narrow beam made it difficult to stay aligned with a moving target, as when communicating from shore to a moving ship, so the British issued a dispersing lens to broaden the heliograph beam from its natural diameter of 0.5 degrees to 15 degrees.[8]

The range of a heliograph depends on the opacity of the air and the effective collecting area of the mirrors. Heliograph mirrors ranged from 1.5 inches to 12 inches or more. Stations at higher altitudes benefit from thinner, clearer air, and are required in any event for great ranges, to clear the curvature of the earth. A good approximation for ranges of 20–50 miles is that the flash of a circular mirror is visible to the naked eye for 10 miles for each inch of mirror diameter,[9] and farther with a telescope. The world record distance was established by a detachment of U.S. signal sergeants by the inter-operation of stations on Mount Ellen, Utah, and Mount Uncompahgre, Colorado, 183 miles (295 km) apart on September 17, 1894, with Signal Corps heliographs carrying mirrors only 8 inches square

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So now we know. Many thanks Ray, just the sort of feedback I like.

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On a different note, my old Tentec Orion 2 has temporarily bitten the dust – something went pop so it's on the bench awaiting my investigations. In the meantime I am using my older Tentec Corsair 2, a venerable lady with impeccable manners and performance. I did consider for a short while buying a new radio but as I cannot honestly see where the Corsair 2 lets me down and a new rig might not, I kept me money.

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As you see from the tables the Chadburn cup has been off to a rip roaring start…a real cliff hanger I think (c'mon…it IS…). I'm a tad disappointed in the number of entrants, but hey ho…can't please 'em all.

Straight Key Week

This years forthcoming SKW isn't a week at all, it's 8 glorious days! It will be called Straight Eight and it's intended as a fun filled full eight days of straight key wonderment. The operation will be H24 but with the proviso that we are INVITED to concentrate calls around the cardinal hours of 00,03,06,09,12,15,18,21,00. I hope it works out for everyone!

Awards

Name	Callsign	Member	Awards
Charlie	NP3K	#5110	Millionaire 17 Million Endorsement
Tomas	NW7US	#7055	Basic + Silver + Gold Century, Millionaire, Millionaire 2–9 Million Endorsements, Spectrum 80m, Spectrum 40m + 30m + 20m Endorsements, Prefix, Prefix 50 + 100 + 150 Endorsements
Fabio	IK0IXI	#14539	Millionaire 15 Million Endorsement
Matthew	KC2IGE	#17228	Basic Century, Millionaire
Vladislav	IU0HMB	#18894	Millionaire 9 Million Endorsement
Egbert	ON4CAS	#20957	Basic Century, Silver Century, Gold Century, Millionaire, Millionaire 2–4 Million Endorsements, Worked All States, Prefix, Prefix 50 + 100 + 150 Endorsements

I am delighted to see a 9M6 station join the club, Jeof, 9M6AUA. From QRZ…Jeof is a musician and singer and has one wicked /m station…just look at this!! Jeof, we LIKE!!

New members

Also we have Boyet, 4F3BZ from The Phillipines….welcome Boyet.I can't I think.
really show you much from Boyet's QRZ page because it so full of certificates he has won. Welcome Boyet, a man to add value to any club

Also from that part of the world, we welcome Aki, JA5CUX, and this is his photo. It looks old maybe 1980, 1990? Maybe a bit of Info Aki .?

Of course we welcome all new members especially the many US stations. I remember back in the 80s we all got confused by the plethora of Russian callsigns but I think the Americans have taken that mantle! Welcome cousins, welcome!

New Members

Name	Call	No.	Name	Call	No.	Name	Call	No.
Boyet	4F3BZ	#21737	Mike	N9UXC	#21970	Travis	N3YLI	#21989
Aki	JA5CUX	#21738	Dan	NK7H	#21971	Mark	WB5YEY	#21990
Jeof	9M6AUA	#21739	Phil	N7CTT	#21972	Joseph	KI7IH	#21991
John	G4COS	#21924	Doug	KB8M	#21973	Kevin	AF5SW	#21992
Steve	2E0BZR	#21925	Michael	KB3LAN	#21974	Ed	K4EFL	#21993
Claire	M7EAH	#21926	Mark	N5DIT	#21975	Charles	N8DD	#21994
Salvatore	IT9DSZ	#21927	Chuck	KI5JUB	#21976	Jason	KX4HV	#21995
Dave	G4NOW	#21928	John	AC7FX	#21977	Carmene	KC7EAH	#21996
David	G8LHD	#21929	Mike	N8XYM	#21978	William	WB9RAS	#21997
Manu	DL9EBG	#21930	David	W9VOP	#21979	Michael	KE4EST	#21998
Chris	DL1ENZ	#21932	James	KE8EON	#21980	Mark	K5LOD	#21999
Ian	G4HTO	#21933	Timothy	WI8V	#21981	Adolph	KC1W	#22000
David	G3VBQ	#21934	Jay	WB5PGX	#21982	Doug	K0FO	#22001
Jon	2E0VGI	#21935	Syl	K1ZFN	#21983	Craig	KG5YVN	#22002
Andrew	M0DEL	#21936	Bernard	KM4IRN	#21984	William	KG6PTT	#22003
Chris	G7BED	#21937	Beth	KI5ZEM	#21985	Pavel	VA4ADM	#22004
Allan	OZ8A	#21938	Jason	KD4BJW	#21986	Steve	W4XSP	#22005
Matthew	WA0V	#21968	Douglas	VA7LM	#21987			
Matthew	KC3OSU	#21969	Sergio	KB8QPT	#21988			

Comments for Chadburn Cup for Clubs January 2023

Entrant	Comments
G6HH	Oh-What-Fun. Richard G0ILN
MX0PCN	Hard going. Bands awful most days. David G4YVM

Results for Chadburn Cup for Clubs January 2023

Club	Callsigns	Posn	Total	Jan	Operators
Hastings Electronics and Radio Club (HERC)	G6HH	=1	1	1	G0ILN
The Pelican Radio Group	MX0PCN	=1	1	1	G4YVM

Comments for Ladder January 2023

Entrant	Comments
Greg DL3GJ	Just a few QSOs in January... 73 de Greg DL3GJ
Andy G0LLX	Good fun despite the poor condx on 40m .. hope for better condx in Feb .. 73
Darren G0OTT	Nice to meet up with members again. Operating from a makeshift shack in the corner of the back room with a linked dipole at 5M. Hope to make as many activities as I can this year. 73 Darren
Tony G3ZRJ	Thanks for ladder points, hope to work you for real QSO soon 73 Tony
Robin G4DNP	Looking forward to an active year. Best 73s Robin
Ray G4XUZ	Very mixed condx, but good fun as always. Thanks to all. 73, Ray G4XUZ
John G4YTJ	Two good afternoon sessions for me this month. Sadly ON4ANE was just too weak to work on 22nd, callsign copied but nothing more.
Richard G6HH	That's it from G6HH Hastings Electronics and Radio Club (HERC). It has been fun giving away a few extra points. Richard G0ILN
Dave G7WHI	Sorry for the rusty morse..
Enzo M0KTZ	Only one session, and a few QSO, as other commitments allowed. Good fun nevertheless
Phil M0PBZ	QRM Noise at times and conditions a bit flat but okay
Pete M5ABN	Very little activity this month except for ladder. 73 Pete M5ABN
Les MM0UMH	Happy New Year from the whisky island. :-)
Norbert ON4ANE	73 de Norbert ON4ANE
Jan PA0SIM	Afternoon session on January 22 kept me busy on 40m HI. 73 Jan PA0SIM

Results for Ladder January 2023

Callsign	Posn	Total	Jan
MM0UMH	1	84	84
M5ABN	2	67	67
G3XVL	3	56	56
G4YTJ	4	50	50
G3ZRJ	=5	48	48

PA0SIM	=5	48	48
M0PBZ	7	46	46
MW0BGL	8	42	42
G0OTT	=9	39	39
G4TPJ	=9	39	39
G0JHK	=11	36	36
G4YTK	=11	36	36
ON4ANE	=11	36	36
G0DFC	=14	34	34
M0MCL	=14	34	34
G4XUZ	=16	30	30
M7TSM	=16	30	30
G0LLX	18	23	23
SP7OGP	19	20	20
M0SHM	20	18	18
G7WHI	21	15	15
G4DNP	=22	7	7
G6HH	=22	7	7
DL3GJ	=24	5	5
M0KTZ	=24	5	5
IU8OJT	26	4	4

* *Check log*

February 2023

First day	Last day	Event	Times
Sun 19 Feb		FISTS Winter Sunday Sprint	2100-2300 UTC
Sun 26 Feb		FISTS Eu Ladder	1400-1600 UTC, 1800-2000 UTC

March 2023

First day	Last day	Event	Times
Wed 01 Mar	Fri 31 Mar	FISTS Chadburn Cup	0000-2359 UTC
Sun 12 Mar		FISTS Eu Ladder	1400-1600 UTC, 1800-2000 UTC
Sun 26 Mar		FISTS Eu Ladder	1400-1600 UTC, 1800-2000 UTC

April 2023

First day	Last day	Event	Times
Sat 01 Apr	Sun 30 Apr	FISTS Chadburn Cup	0000-2359 UTC
Sun 09 Apr		FISTS Eu Ladder	1400-1600 UTC, 1800-2000 UTC
Sun 23 Apr		FISTS Eu Ladder	1400-1600 UTC, 1800-2000 UTC
Mon 24 Apr	Fri 28 Apr	EuCW QRS Week	0000-2359 UTC