

Subject: 23cm Skeleton Alford Slot

From: G8MNY@GB7CIP.#32.GBR.EU
To : TECH@WW

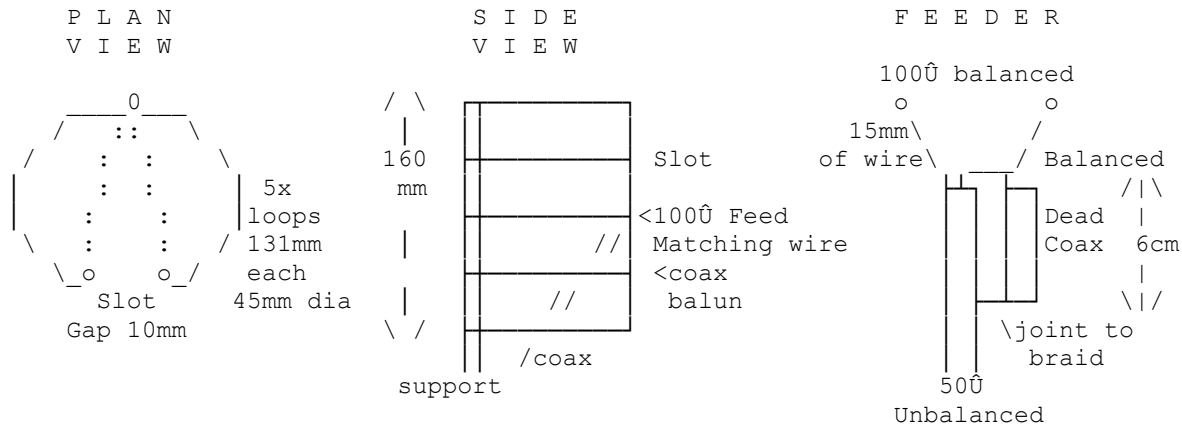
WALK-ABOUT ATV AERIAL

By G8MNY (published in BATC's CQTV 8/92, Updated for Packet Dec 03)
This is a modified skeleton Alford slot antenna with gain of 6dB or so, but still small enough to be mounted on a hat. An unusual feature, is the "short circuit ends" of the slot, that have been neatly folded inside the end loops to keep the size down.

PARTS

- 1.4M of 1.5mm Copper Wire
- 1M of Solder.
- 2M of UR43 Coax.
- 1 UR43 coax plug.
- 1 Drinks Bottle/Toy Baseball bat (Ray dome)
- .5"x2"dia Expanded Polystyrene
- 1 Hard Hat/Camera mount
- 12" of Tin Foil (if no tin hat)
- 1 idiot to ware it!

The aerial is simple to construct, even if fiddly with the small Balun & matching stubs. Tuning up should just be a matter of bend adjustments to alter the gap of the slot.



: = shorting Vs on top & bottom of slot 2x 43mm long
o = slot verticals
0 = supporting backbone

HARD HAT MOUNTING.

Put a piece of polystyrene foam onto bottom of the aerial & affix this to the hat, secure the coax (tape or clips). Cut a drinks bottle with suitable tabs to fix onto thy hat, to form raydome. This is required as doorways, tend to completely wipe out the aerial when one doesn't duck! Line the inside of the hard hat with tin foil, to reduce any chance of becoming a hot head.

BASEBALL BAT MOUNTING.

Cut open a toy plastic bat down one side, carefully insert the aerial. Use foam polystyrene pieces to centrally locate & support the aerial. Run the coax out of the handle. Tape up the vertical cut. Mount the aerial on the rear of a shoulder camera mount etc.

IN USE

Although I had lots of comments as to what it looks like, (even from police at shows) the performance of this aerial has been very good. From low lying ground level with 1 watt of Colour ATV & sound pictures have been Rx at P2 over 5km. From RSGB VHF Convention at Sandown Race course years ago, in the building on the 1st floor, GB3HV at High Wycombe gave a P3 Colour report over a distance of 35km. Pictures from it were being Rx by the HCATV group on the BATC stand at the rally.

Why don't U send out an interesting bul?

73 de John G8MNY @ GB7CIP
/EX