

# Direction finding systems *and how to make your own*

David G7URP..... *and friends!*





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- ✦ Used on bottom of planes to home ground signals
- ✦ In second world war RADAR added to RDF systems
- ✦ Now Armed forces use to track frequency hopping







A US Navy  
High  
frequency  
direction  
finder



# A US Navy High frequency direction finder





# Amateur Direction finding



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- ✦ Also great for SWLs as no transmission needed



# Practical RDF systems



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- And a much more sophisticated one.....



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# Practical RDF systems

- ✦ And a much more sophisticated one.....



- ✦ And Bob G8SDU has one ;o)



# Practical RDF systems



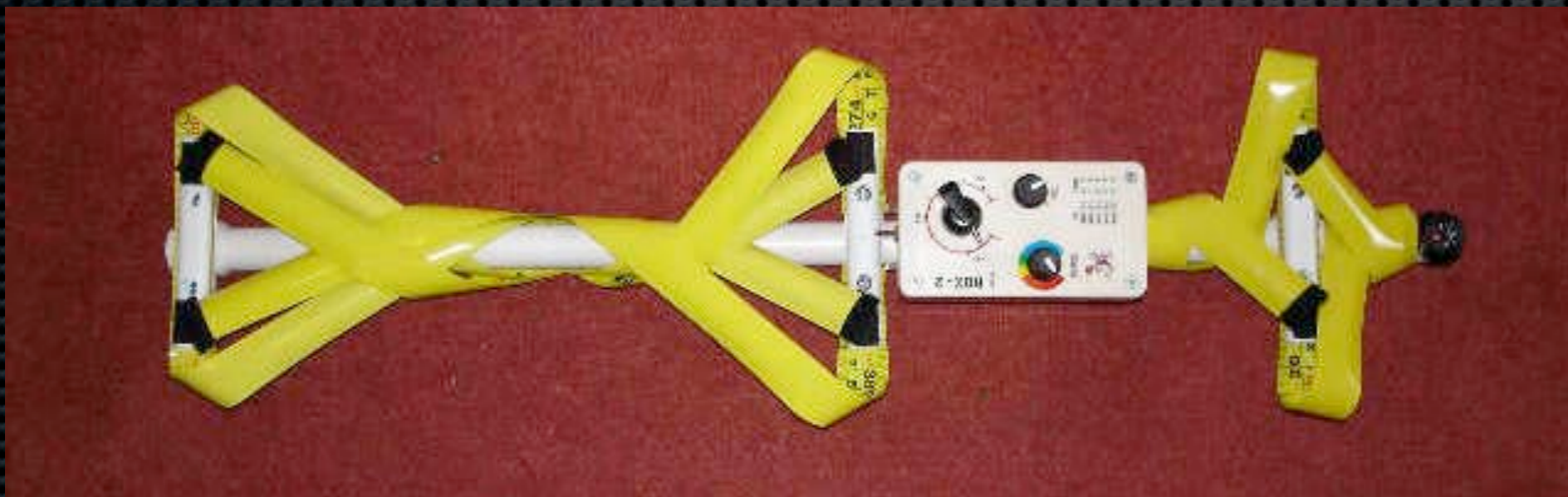
# Practical RDF systems

- Another semi-professional system by G3ZOI



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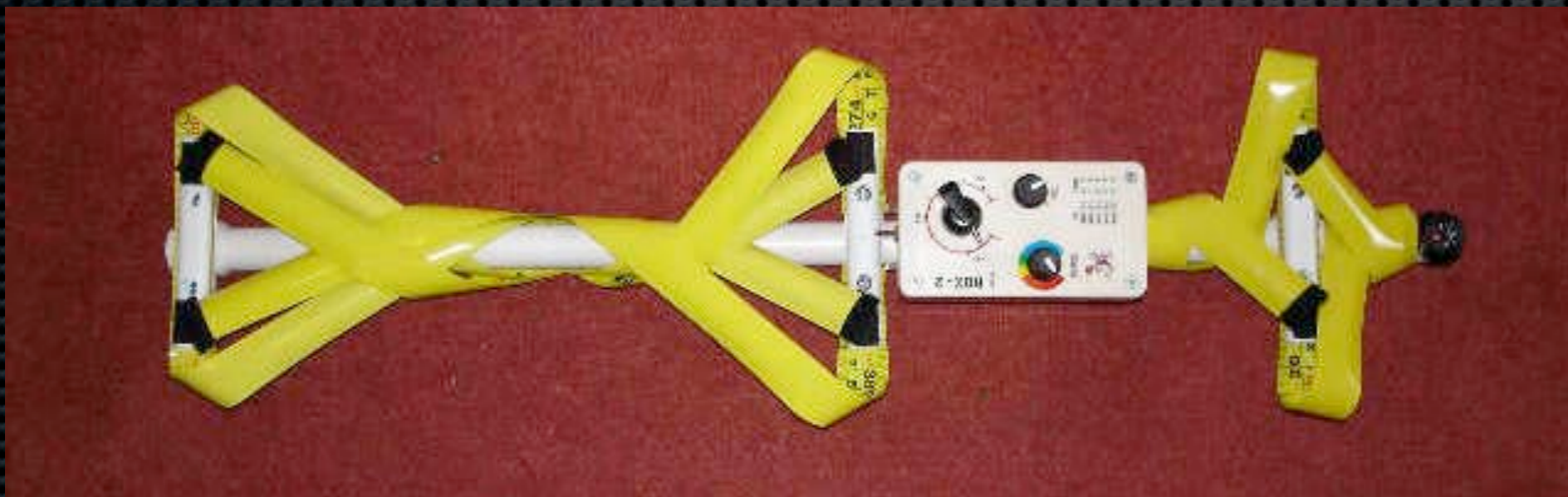
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# Practical RDF systems

- ✦ Another semi-professional system by G3ZOI



- ✦ Very popular with Scouting and Youth Groups.....



# Practical RDF systems



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# Practical RDF systems

- ✦ So now the clubs own Direction Finder project, DF 100
- ✦ Doug G3HUL developed from Practical Wireless ideas
- ✦ David G7URP engineered into easy to build kit
- ✦ Kit of all electronic parts and cable just £4
- ✦ Just need tin, wire, battery, wood & use of 2m handy



# The NARC DF100 kit



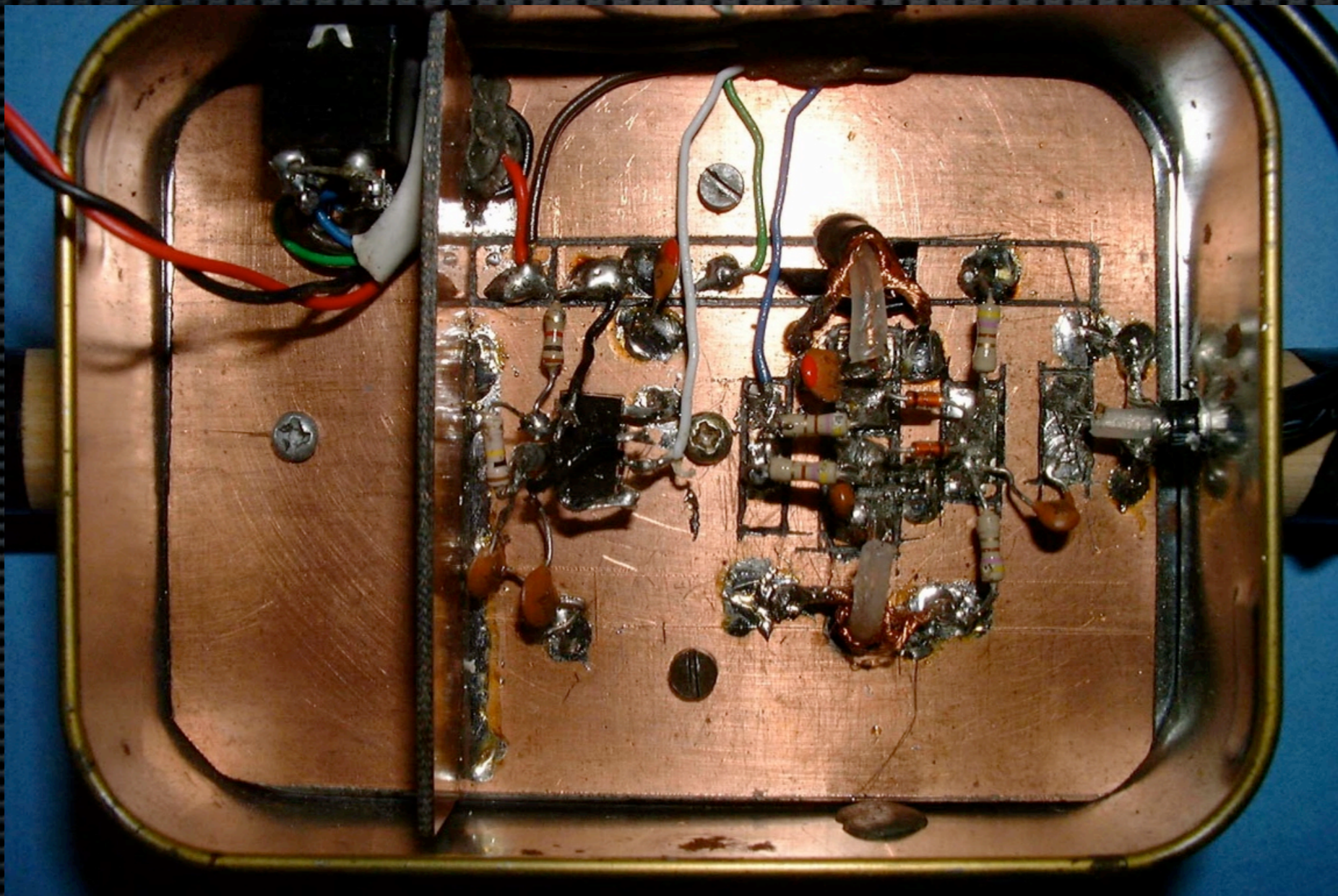
# The NARC DF100 kit

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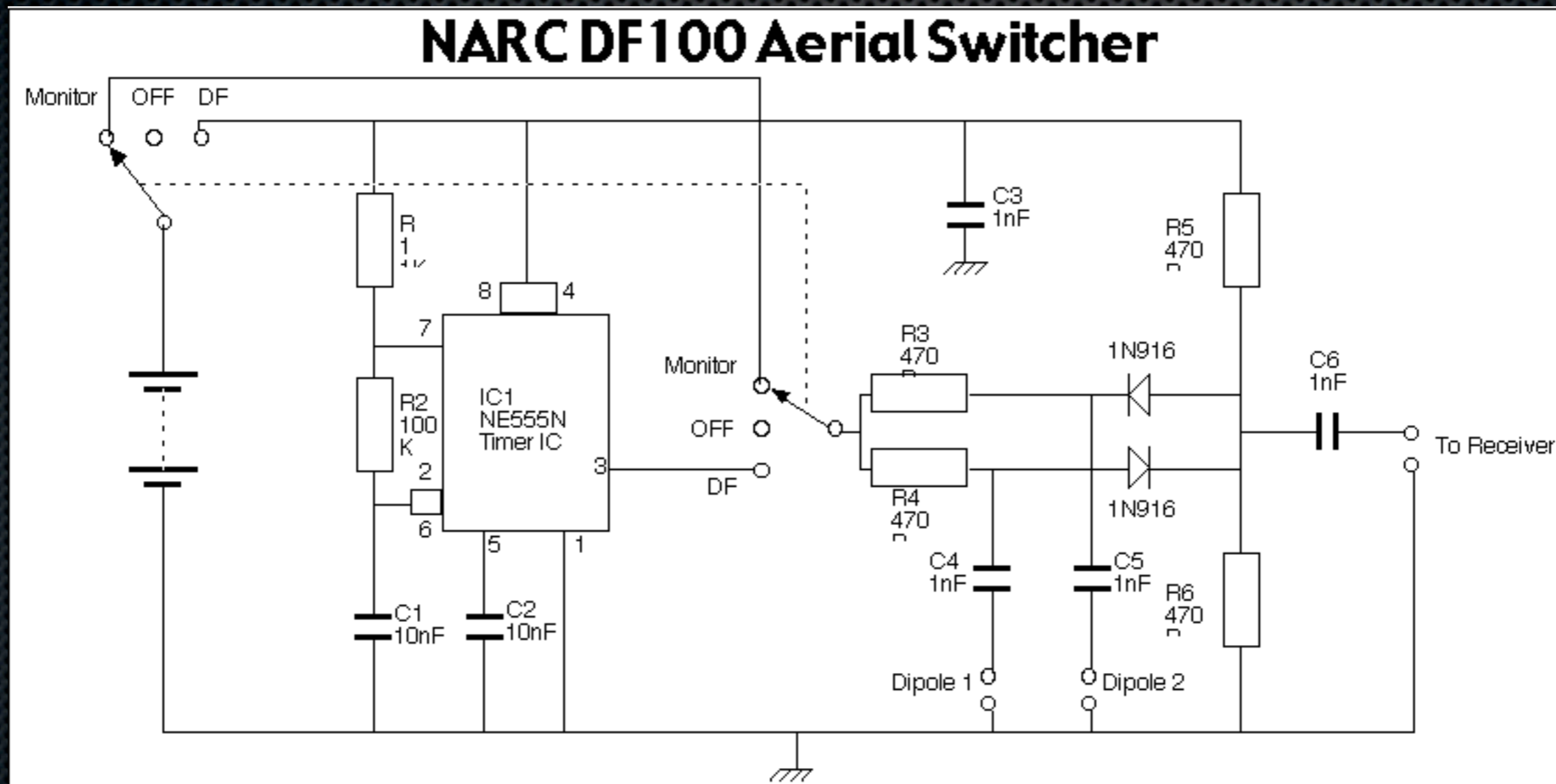
# The NARC DF100 kit

- The DF100 Circuit diagram:



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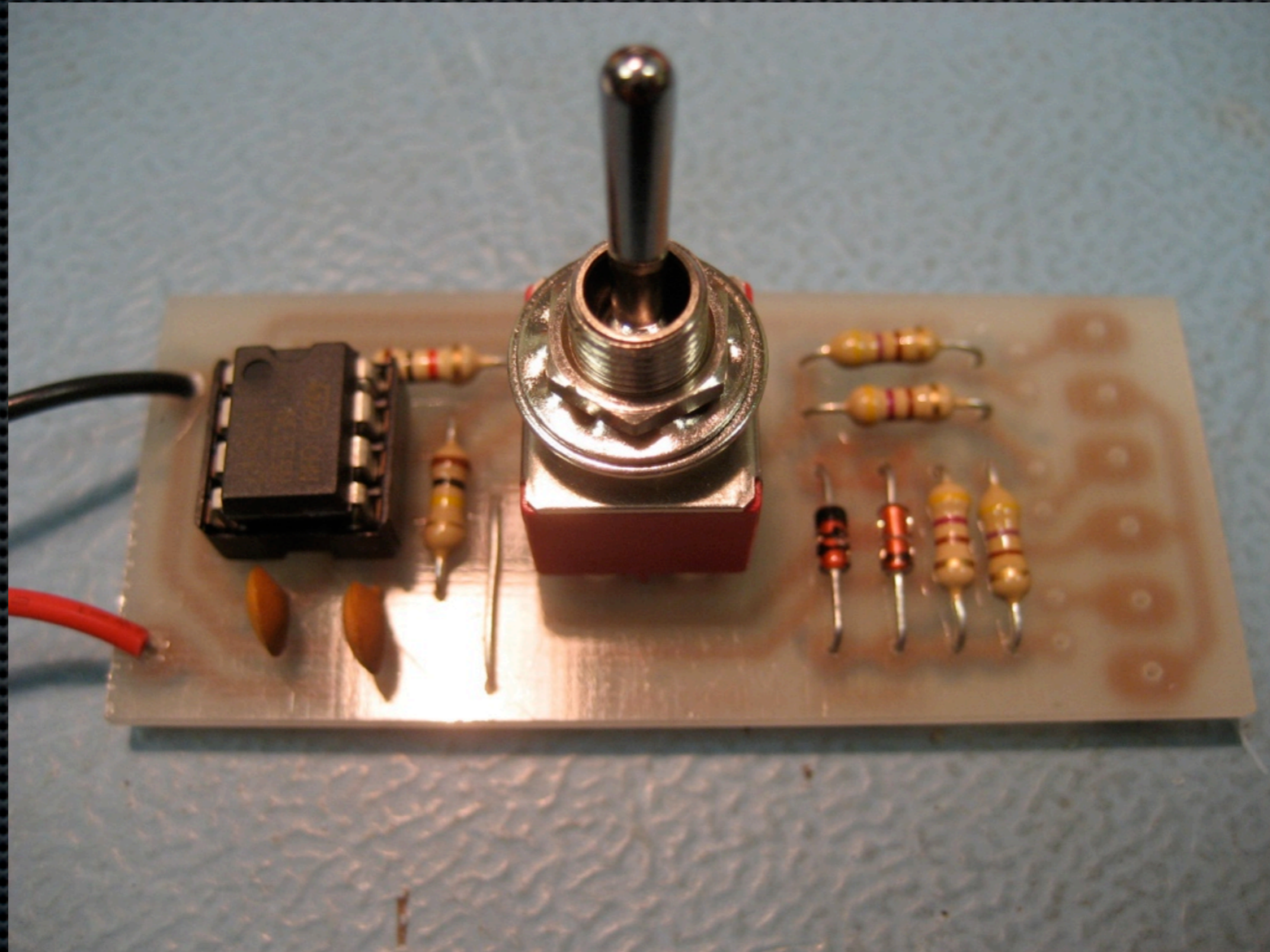
# The NARC DF100 kit

- The main circuit board without coax connected



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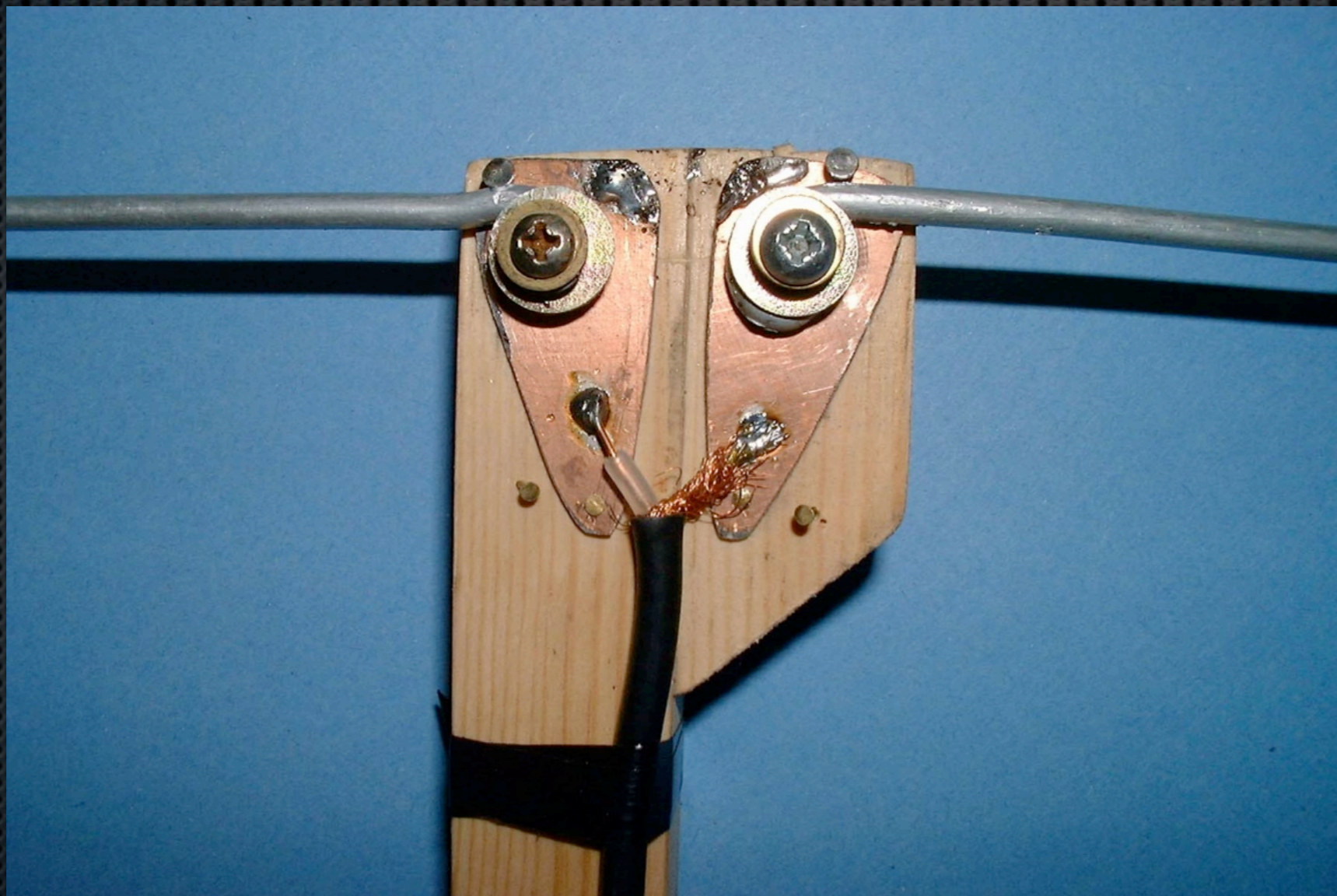
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- Dipole elements made from coat hanger wire etc!



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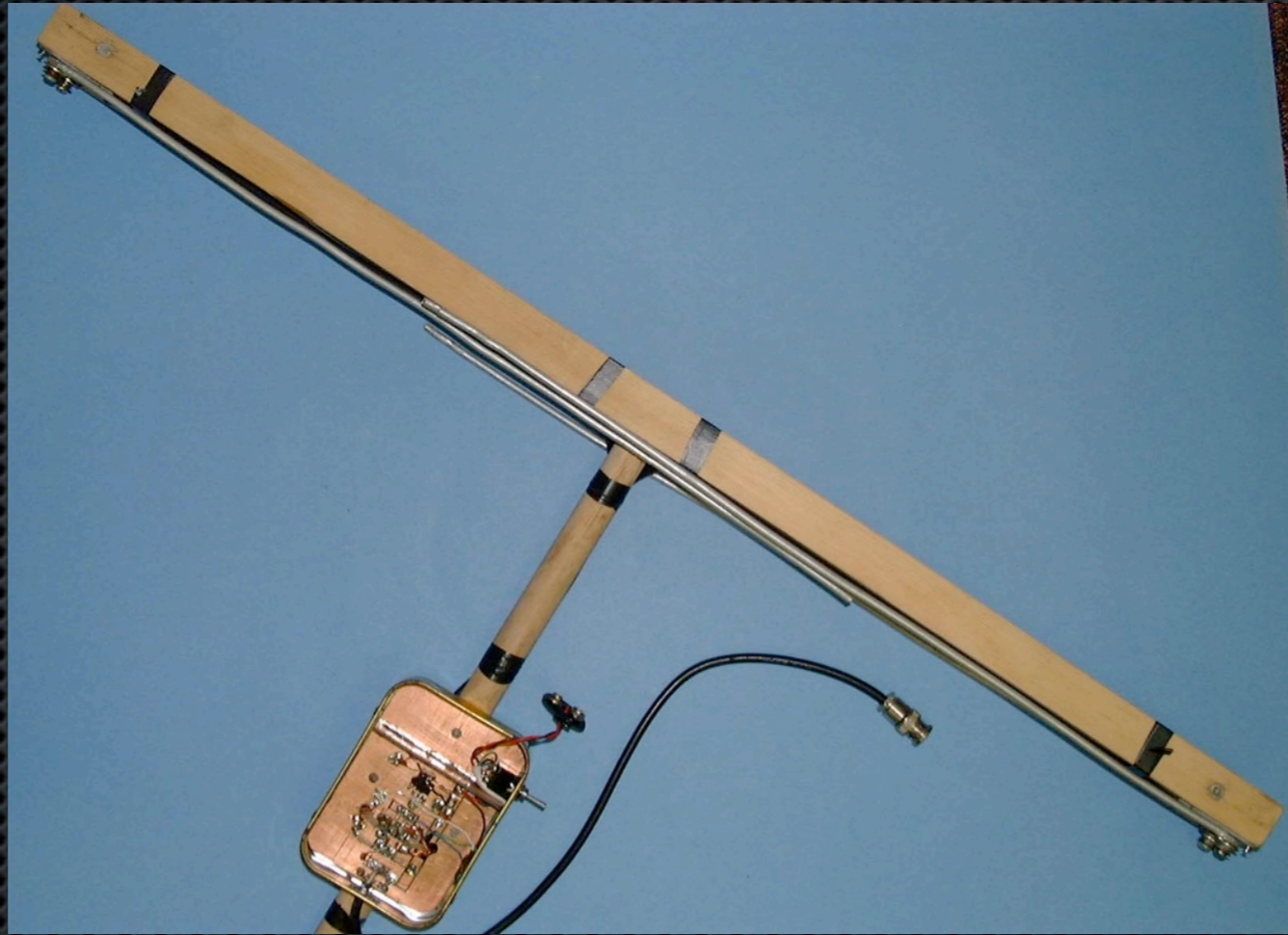
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- The finished unit can look like this.....



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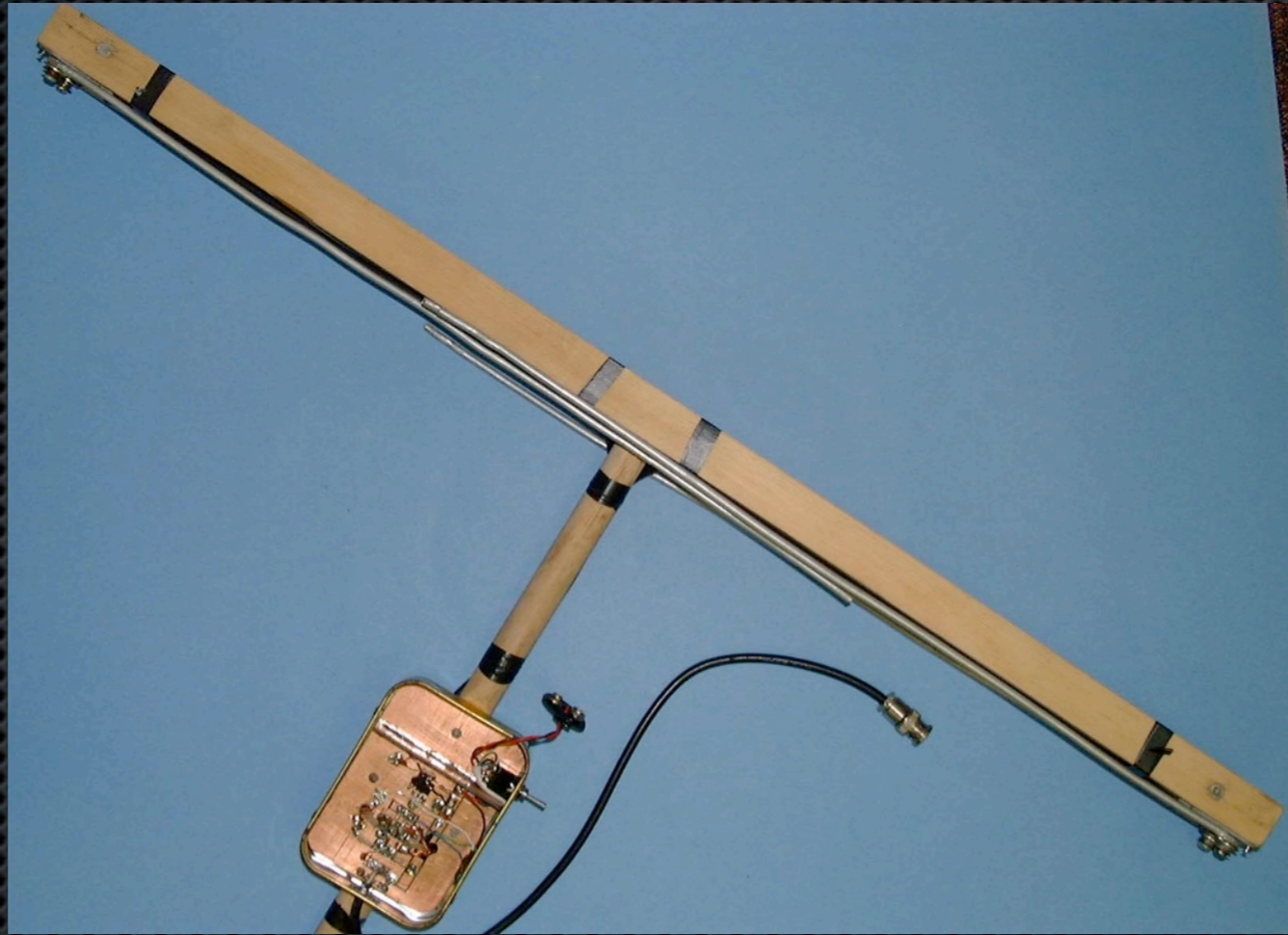
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# The NARC DF100 kit

- ✦ The finished unit can look like this.....



- ✦ Or many other variations - choose which is best for you



So what next.....



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- ✦ Collect a leaflet tonight or download



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- ✦ Collect a leaflet tonight or download
- ✦ Put together your own kit or buy kit for £3 (special)



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- ✦ Collect a leaflet tonight or download
- ✦ Put together your own kit or buy kit for £3 (special)
- ✦ Many people happy to help you build and test
- ✦ In 2 weeks time learn how to use RDF to find the fox!



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- ✦ Make your kit by 4th June for 'Friendly Foxhunt'



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- ✦ Make your kit by 4th June for 'Friendly Foxhunt'
- ✦ Have a go at winning the Trophy on 16th July!



Very soon you could be.....





Very soon you could be....





Very soon you could be.....



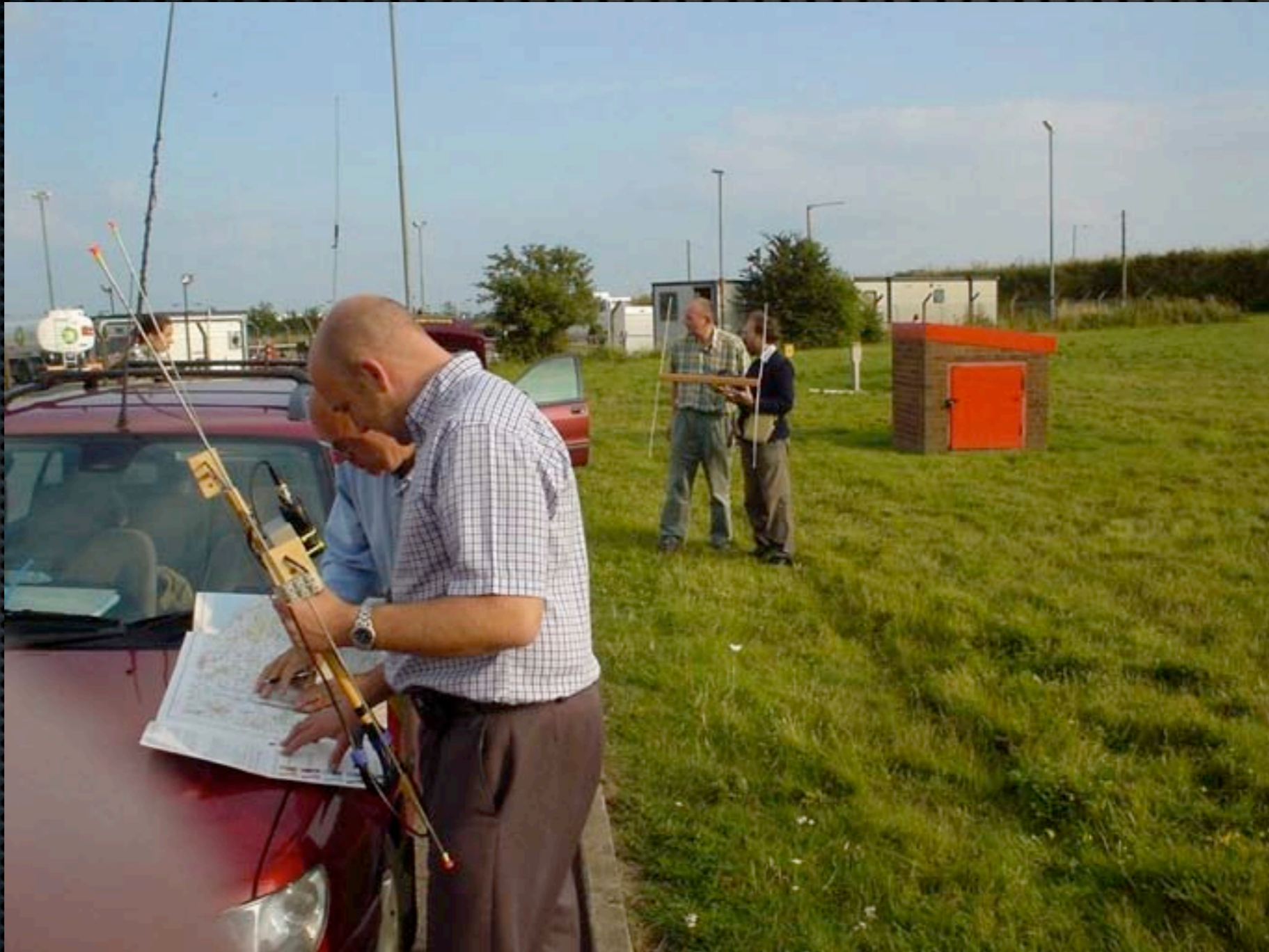


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Very soon you could be....





Very soon you could be....





Very soon you could be....





Very soon you could be....





Very soon you could be....





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Very soon you could be....





Just one word of warning...



# Just one word of warning...

- Test your equipment first and take a map with you.....



# Just one word of warning...

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# Just one word of warning...

- Test your equipment first and take a map with you.....



- Otherwise you could end up like poor Kevin in the middle of a protest march somewhere in Norfolk ;o)



NARC Direction Finding Fun!



# NARC Direction Finding Fun!

- ✦ **Brought to you by David G7URP, NARC and .....**



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# NARC Direction Finding Fun!

- ✦ Brought to you by David G7URP, NARC and .....



- ✦ Thank You!



# Useful DF contacts

- ✦ NARC DF100 kit leaflet: [www.norfolkamateurradio.org](http://www.norfolkamateurradio.org)
- ✦ G3ZOI DF kits [www.open-circuit.co.uk/home.php](http://www.open-circuit.co.uk/home.php)
- ✦ G3ORY 80m kit [www.ardf.btinternet.co.uk/80mrx.html](http://www.ardf.btinternet.co.uk/80mrx.html)
- ✦ RSGB RDF committee: [www.ardf.btinternet.co.uk](http://www.ardf.btinternet.co.uk)
- ✦ Ramsey kits: [www.ramseyelectronics.co.uk](http://www.ramseyelectronics.co.uk)
- ✦ Basingstoke ARC: [www.basingstokearc.co.uk](http://www.basingstokearc.co.uk)
- ✦ ***HAVE FUN!***