

Starlink RV

AND

Its 30 metres of Cabling!



# The Problem

- We travel full time with a lot of stuff,
- So neat storage is a necessary discipline
- To tame our Starlink RV cable and store the antenna, we bought:
  - a 60L Storage Tub (from Bunnings)
  - a little foam for packing
  - a Flat Out Compact Multireel



# Stage I: Hanging it through the doorway

- The Starlink cable itself is a pretty standard cat 6 shielded & earthed ethernet cable, but . . .
- The terminals into the modem are proprietary
- So stage I consisted of passing the cable from the antenna outside, through the caravan door, and into the modem
- And then doubling over the excess cable and winding it onto the Multireel
- PS An ethernet cable being repeatedly banged by a caravan door has a limited lifespan!
- So . . . .

# Stage II

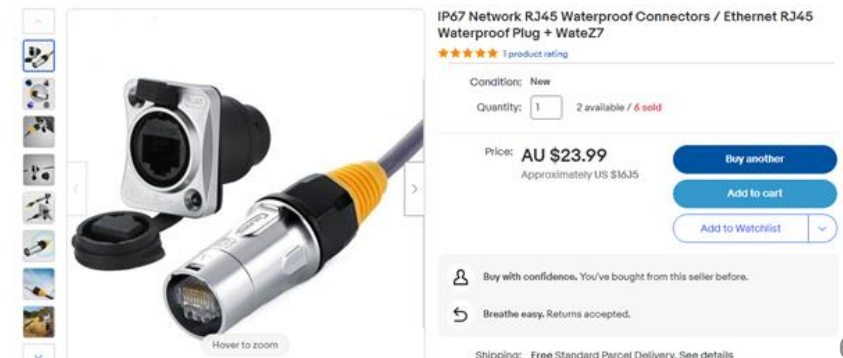
- Sometimes it would be ideal to mount the Starlink antenna on the caravan roof with just a short cable running through a weatherproof plug to the modem
- Other times, it would be handy to be able to run a loooong cable out to a spot where the antenna can get a clear field of view of the available satellites (presently in Australia, that means the low southern horizon)
- That means cutting the cable into a short dish-connected section, and a long 'extension' section
- All connections would then have to be weatherproof

# The Bits Required

- I travel with 5 toolboxes – of course! (Standard, Heavy, Electrical, Plumbing & Materials)
- My electrical kit include an ethernet crimping tool (of course!)
- Jaycar provided the [shielded RJ45 plugs](#) I'd need to splice the cables
- eBay provided the (very rare) [IP67 Network RJ45 Weatherproof Connectors](#) consisting of panel-mounted Jacks (sockets) and matching plug casings



(c) Peter Rowe





# Modifying the Caravan

- Our Jayco Jay Flight is a US import and has a rear weatherproof access port (presumably for rear-mounted generator wiring?)
- I cut a circle of 4.5mm Perspex and mounted 1 of the 2 weatherproof RJ45 Jacks to it
- I cut the interior modem cable just long enough to reach from its place on the caravan's rear table, into the back of weatherproof RJ45 Jack installed on this exterior port.



# Roof Mounted Antenna

- If we have good Southern visibility from the caravan top, I'll mount the Starlink Antenna on the top, rear of the roof
- From there, the short permanently-attached lead, with it's new IP67 weatherproof plug sheath, plugs straight in
- And the 'extension cable' stays in the Starlink storage tub.





# The Extension Cable

- The Starlink 'extension cable' needs to have the same socket and plug configuration as the modem and antenna
- So, one end of the extension cable has a IP67 weatherproof plug sheath
- The other end of the cable is wired to a small waterproof project box into which a second IP67 Panel Mounted Jack is fitted
- The project box is plastic-welded to the central hub of the Flat Out Multireel



# Far-away Antenna

- If, to gain a clear view of the Southern sky, we need to position the antenna at a distance:
- I plug the long extension cord sheathed plug into the caravan's rear jack
- I plug the antenna sheathed plug into the Multireel's mounted jack





# Final Bit

- To avoid inviting disaster in the form of water intrusion into a skyward facing jack and plug assembly . . .
- We drilled a large tent peg and mounted a screw into it
- We then use the Multireels rear mounting slots to keep it upright – and watertight!

