

Initiated by: Tom Booler

Project Manager:

Proposed Priority: Fast Track Normal

Title: Impact of seasonal rains around the Curtin MRO site

Affected item(s):

April 2017: Heavy rainfall and poor water drainage over large cleared areas creates a flood, shifting tiles and surface-laid cables. Eight tiles on the Eastern edge of the 'South' hex were submerged for an indeterminate period of time, requiring extensive repairs.

January 2018: Heavy rainfall caused seasonal creeks to flow and at least one to break its banks and spill into a wider area. This caused damage to Ph2 long baseline tiles positioned in lower lying areas adjacent to this creek.

Expected impact on cost (\$AUD):

Impact on schedule:

Other impacts:

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Date:

2018-02-08

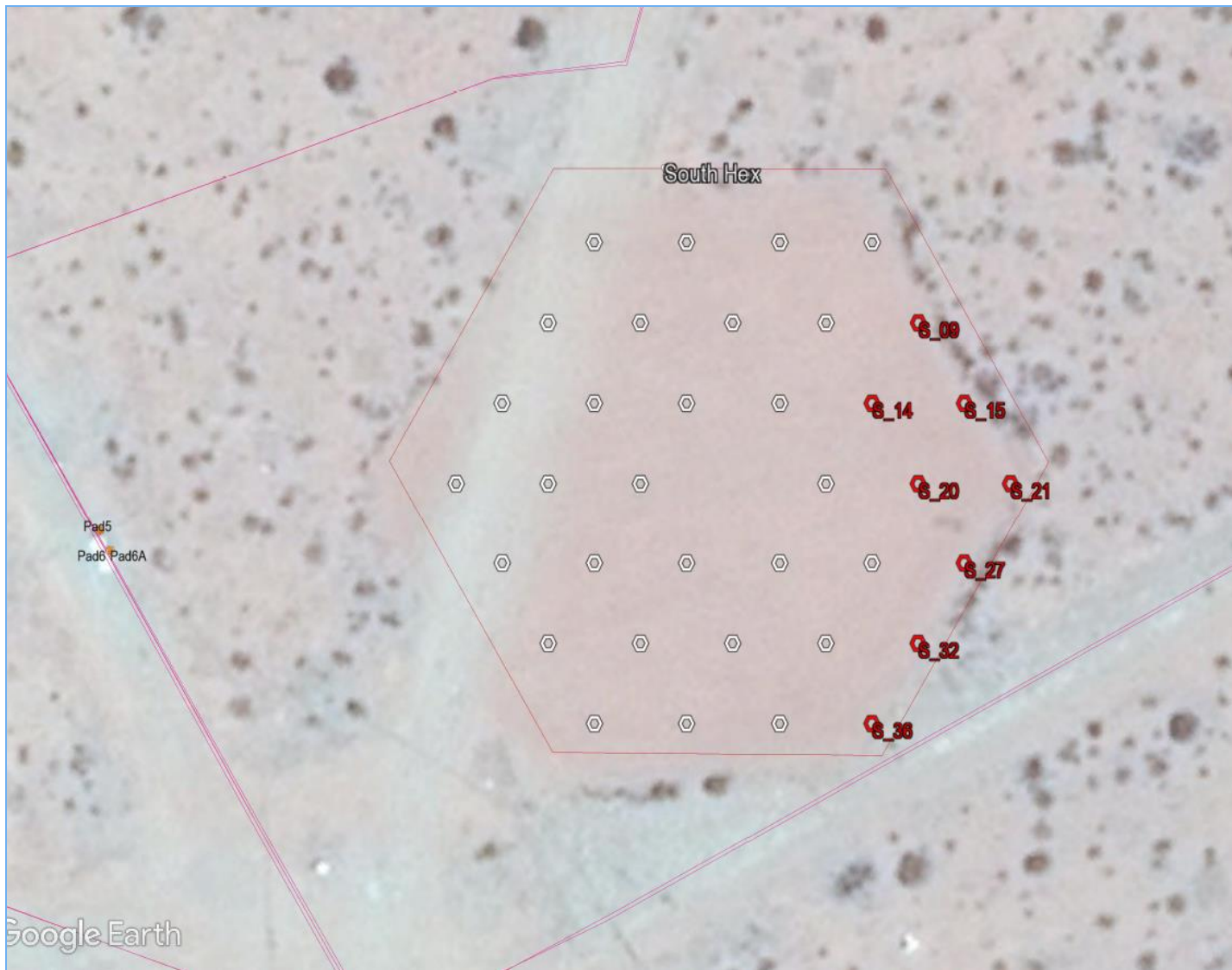
Additional Image(s): More images can be found at <https://photos.app.goo.gl/c5922ZsjS1Vkr7fK2>



Jan 2018: Long baseline Tile F4 is adjacent to a creek, and suffered mild damage.



April 2017: Land cleared for installing a dense array of MWA Tiles causes changes to the direction water flows and the locations that the water pools. The result of this caused damage to the equipment in the newly formed flood plain.



April 2017: A list of tiles presenting with BF/DoC card faults was compiled and mapped prior to field maintenance. Red tiles indicate those with BF-end and/or Rx-end faults, likely suffering water damage due to flooding.



April 2017: There was evidence of a higher water flood level on multiple beamformers in the Southern hex.



April 2017: Submerged cables exhibited signs of damage at the lightning arrester connectors due to a combination of water ingress and current transmission.



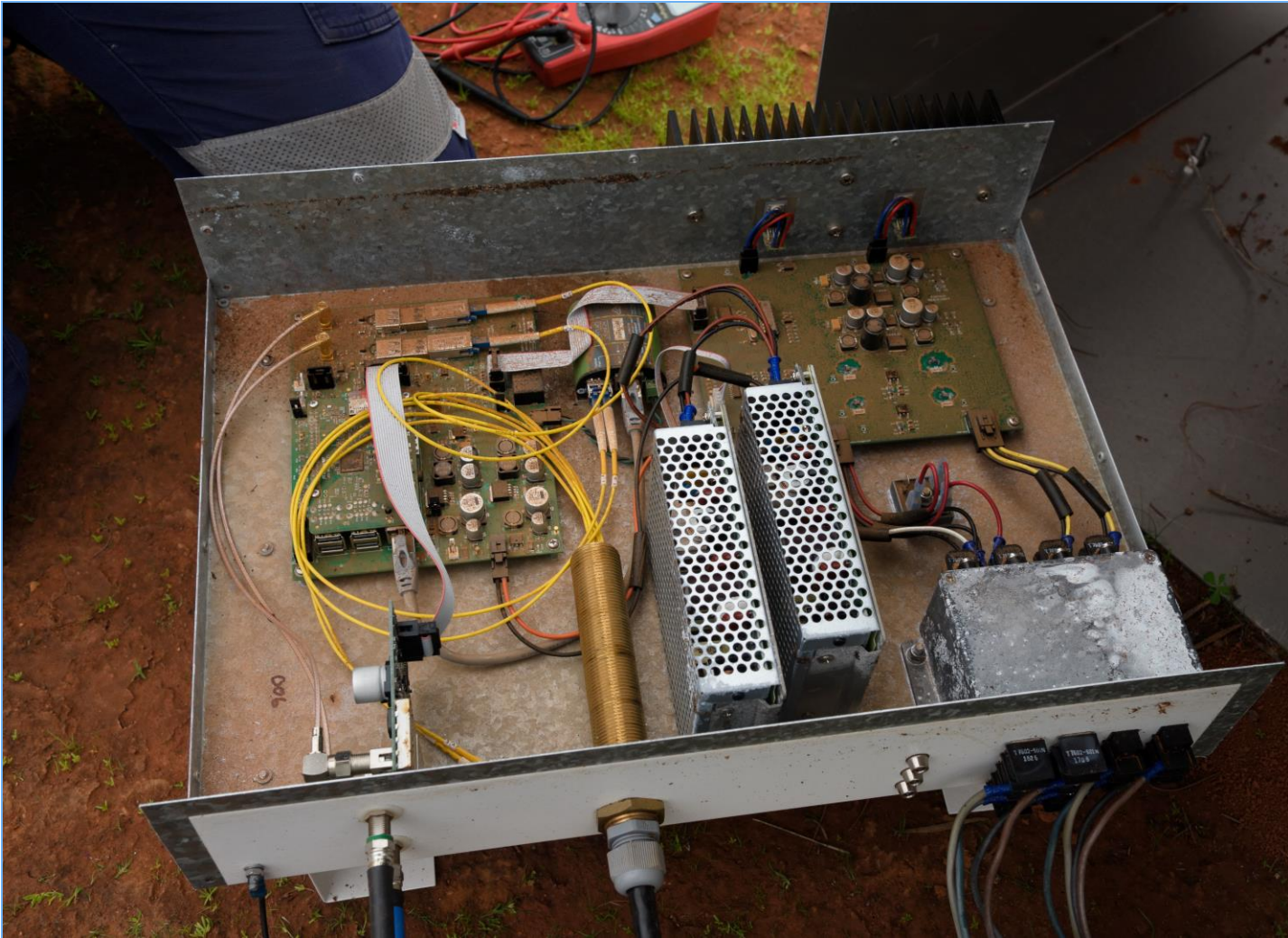
Jan 2018: Long baseline Tile F8 was downstream of a wide creek bed, and suffered substantial damage. Surrounding trees helped to block the tile from some of the debris.



Jan 2018: Tile F8's beamformer had been physically shifted by the water flow.



Jan 2018: Tile F8's batteries had been completely submerged. The height of these batteries is 240mm, indicating a flood level of at least 220mm.



Jan 2018: Tile F8's BFIF had been completely submerged.

