

Initiated by: Dave Emrich

Project Manager: Tom Booler

Proposed Priority: Fast Track Normal

Title: Plasti-dip coating of LNA boards

Affected item(s):

A small number of the 56 deployed BFIF boxes at the MRO on long baseline tiles.

Technical description of change:

Some LNA boards returned due to early or installation failures of the boards were discovered to have a plasti-dip coating that appeared to have metallic particles in it, when the coating was peeled off the boards. All plasti-dip colours are supposed to be electrically insulating, but it is not possible to conclusively guarantee that the particles would not affect the RF performance of the LNA. The Plasti-dip colour that was positively identified to have particles in the mix was "Anthracite Grey". The Blue colour used for EDA LNA, and the Matt Black normally used for MWA were seen to be entirely non-metallic. "Gunmetal Grey" was also examined, and found not to have metallic particles.

All future purchases of Plasti-dip should be either Matt Black or Blue to ensure no metallic particles exist.

Reason for change and expected benefits:

While we could not find any link between (apparently) metallic particles and either LNA board failure or RF band-shape issues, it is not worth the risk fielding boards coated in Anthracite Grey Plasti-dip

Effective Date:
(dd-mm-yyyy) 2018-01-01

Reason for given effective date: This issue was identified late 2017 and therefore this memo applies from then on.

Expected impact on cost (\$AUD): Nil, all Plasti-dip colours are the same cost per can.

Impact on schedule: Nil as long as the correct colours can be purchased when required.

Other impacts: Nil.

Attached Document(s):

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Signature:



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