

BAWINANGA RANGERS

DJELK IPA

BAWINANGA ABORIGINAL CORPORATION

MANINGRIDA



RADIO COMMUNICATION NETWORK

VHF & SATELLITE RADIO PROJECT

Djelk IPA





Background

- Bawinanga rangers manage the Djelk IPA on behalf of the Traditional Owners of the area. We undertake land, sea and cultural resource management within the Maningrida area and surrounding outstations.
- All outstations and areas travelled to outside of Maningrida are remote and not covered by mobile phone reception.

BAC Rangers have both land and sea areas of operation.

- Rangers are also often involved in search and rescue operations
- For BAC staff operating outside of Maningrida communication options are currently limited to satellite Radio- Phones and/or UHF CB radios. (UHF limited to line of sight)
- For the Sea Rangers boats are fitted with VHF marine radios, and for communications to onshore staff satellite radios/phones are carried.

Ranger work is considered high risk.

Ranger work includes activities such as fire fighting and Sea Patrols, good communication is a life saver.



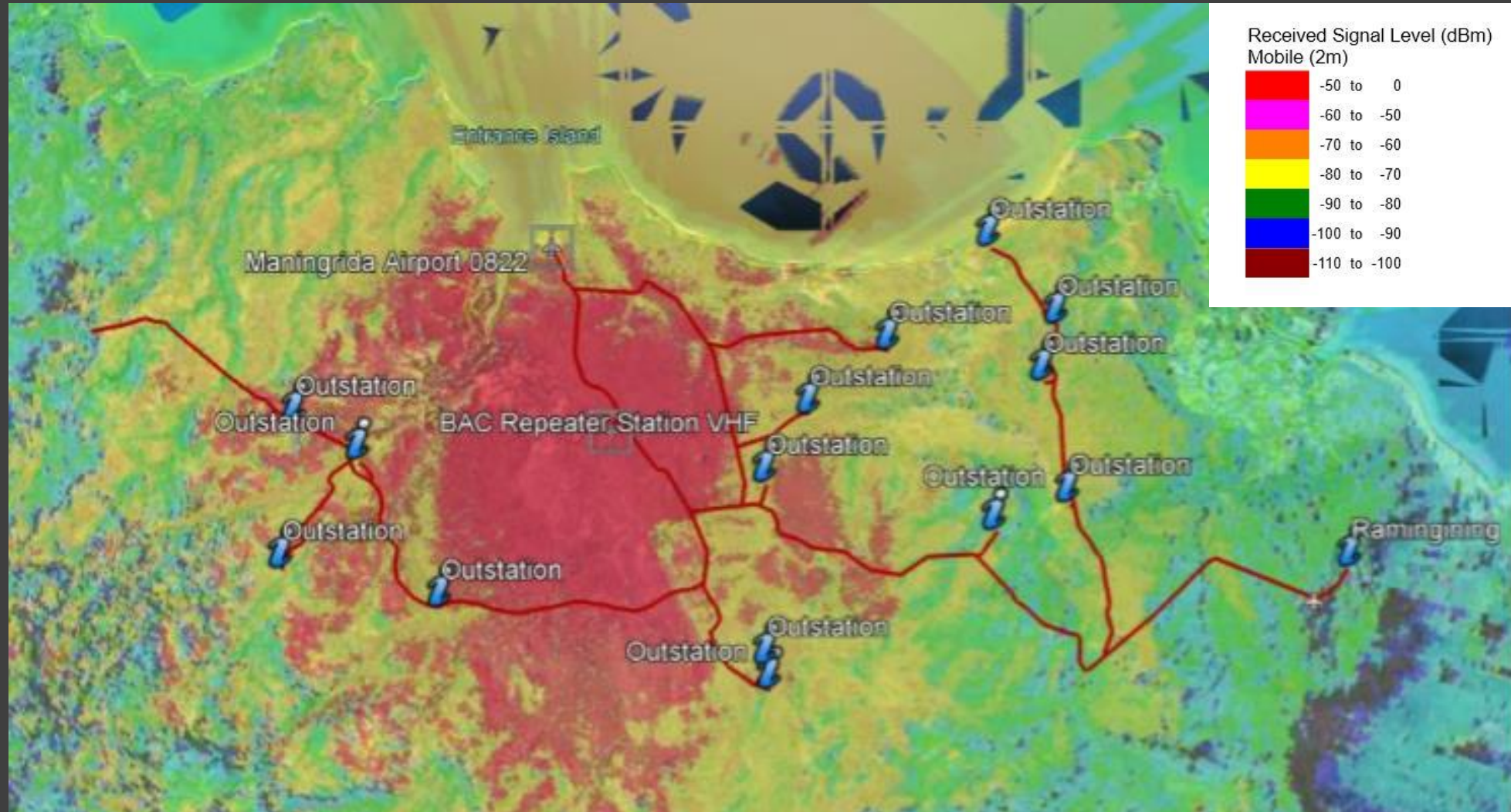
Aim of project:

To enable easy and reliable communication on land, sea and air between rangers and ranger base providing a safe reliable working net work.

Solution:

1. VHF land based repeater
2. Satellite radio communication interface

BAC Repeater Station VHF proposed to be installed at Djinkarr homeland



TP3

PORTABLE RADIOS

SMART DMR | DMR | ANALOG



Great value, easily personalized radio

MAY 2020 VERSION 1.19

Why VHF??

- UHF CB provides the cheapest option, but is limited by frequency and transmit power. This effects the maximum range possible.
- VHF provides the best option as it provides the best possible coverage via a single VHF repeater (proposed to be installed at Djinkarr) would provide a good coverage pattern to all the outstations BAC currently look after, as well as suitable coverage of the Sea Rangers areas.
- VHF can be interfaced with satellite radio systems

Benefits to other Indigenous Protected Areas

- Flow on benefits:
- instalment of other repeater towers to the West will increase coverage across multiple IPAs through to Cahills crossing
- Installation of a second channel for community use
- Every outstation to have VHF base station via the community use channel
- Every business (e.g medical, police, NGOs, aviation) in the area to have access to the second community use channel

Projected Budget & Delivery Costs 2021

Positives

- \$150,000 gst inc.
- 2 months supply time for the Tower and equipment.
- This project is a 3 month build from order date(Dry season)
- Board Approval is the next hurdle, Preliminary discussions are heading the right direction
- Funding is available.
- Repeater tower Location set.

Negatives

- Extended Wet Season.
- Board Rejection.
- COVID, the tower and manpower come from WA.