



# TULLY SUGAR LIMITED QUEENSLAND, AUSTRALIA

CASE STUDY



## Customer profile

Tully Sugar Limited, North Queensland sugar milling company.

## Applications

- GPS vehicle tracking

## Business benefits

- Reduced physical components
- Improved accessibility, efficiency and reliability
- Flexibility for future innovations
- Improved tracking of locomotives
- Easy to use

## Products used

- Tait TM8110 mobile radios

## THE CUSTOMER

Located about 150km south of Cairns, Tully Sugar Limited operates as one of Queensland's larger sugar milling companies. Crushing in excess of two million tonnes of sugar cane per year from over 24,000 hectares of land, Tully Sugar requires an advanced communications system to effectively manage their 17 locomotives.

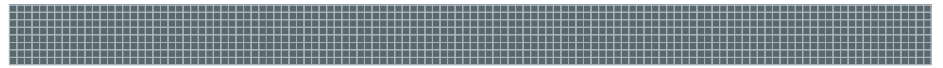
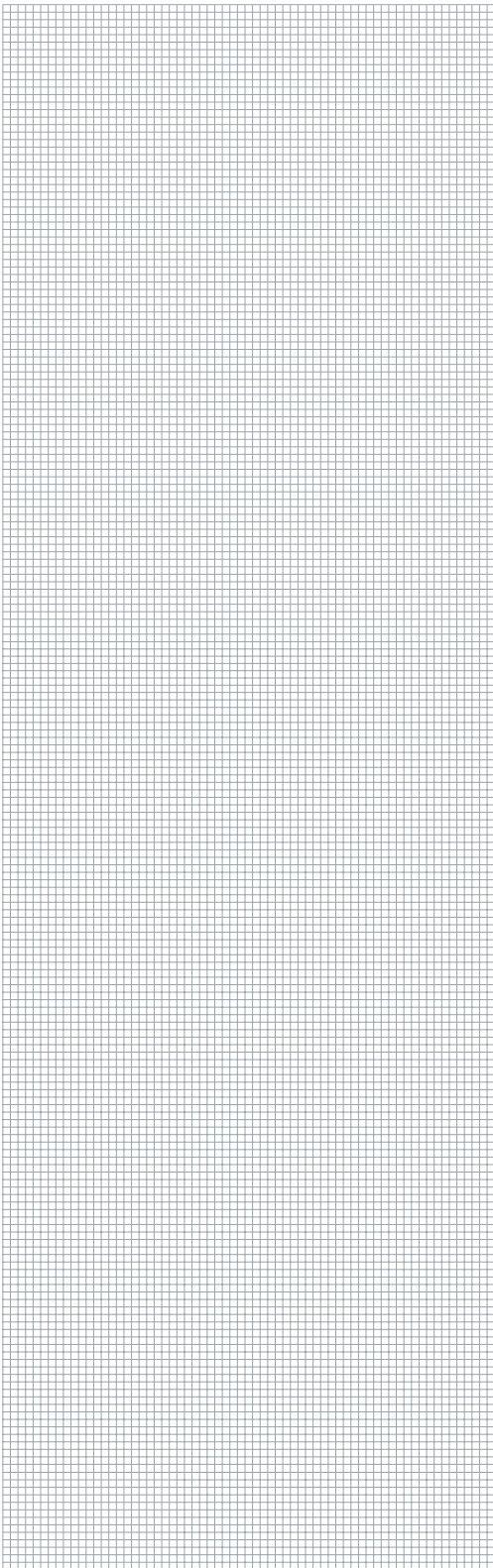
Being an innovative organisation, Tully Sugar is no stranger to utilising new technologies. In 1992 Tully Sugar became the first Australian sugar mill to adopt GPS tracking of its locomotive network, providing improved efficiency and safety in traffic control.

## THE CHALLENGE

The existing system was ageing and needed to be upgraded to continue to deliver the required level of performance. The new system also had to provide a more efficient and reliable solution whilst being flexible enough to support future upgrades.

The customer decided to trial new hardware and evaluate its performance before considering a replacement of the existing locomotive GPS system.

The Tait TM8110 mobile was selected for the trial because it offers features such as built-in GPS support, and because of the reliability of the Tait T2000 mobiles previously used Tully Sugar's voice network. Tully Sugar also has excellent support from Tait and its local dealer, Conole Electronics.



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## THE SOLUTION

By using the TM8110's built-in 1200 baud modem, the number of physical components in the trial locomotive was reduced from four to just two, with the transceiver and GPS receiver/aerial visible.

TM8000 mobiles also allow the option to upgrade to the Tait high speed internal modem and allow easy integration with embedded third party modems, enabling the future inclusion of telemetry reporting from the locomotives as well as the GPS data.

Tully Sugar Limited internally produced a new version of its tracking software, enabling the GPS data to be placed on the main server and providing operators with access to the tracking system from any computer on the mill network.

By running both the old and the new base modems in parallel, the computer polled for GPS data on each system sequentially. This data was then processed, integrated, and overlaid onto a map of the rail network.

By logging relative error rates, it became evident that the TM8110 set-up was superior, providing greater efficiency and reliability. This success combined with Tait's track record of reliability prompted Tully Sugar's board of directors to fast track the changeover of the entire Tully Sugar GPS fleet to the Tait TM8110 based system.

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## MORE INFORMATION

For news, product specifications, comprehensive technical information and contact details of your nearest Tait service facility, please visit [www.taitworld.com](http://www.taitworld.com).

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