

Technical Note TN-938

T2000-A37 Selcall Incompatibility with TM8100 Mobile Radio

21 October 2004

Applicability

This Technical Note applies to the TM8100 family of mobile radios, which includes the TM8105, TM8110 and TM8115.

1. Information

Description

Selcall testing between a TM8100 and a T2000 has shown the T2000-A37 Selcall board does not encode **20ms** Gaps and Status in the same way the TM8100 would expect to decode.

If TM8100 radios are to be introduced into an existing Selcall system where T2000-A37's are used in T2000 analog product, and two 20ms Gap Periods are used, some modification to the TM8100 timing is required.

For example, if 12345--6 was sent by a T2000-A37 with Tone Periods and Gap Periods at 20ms, the TM8100 would interpret the sequence as one gap of 40ms and therefore not recognise appended Status'.

The workaround is to modify the TM8100 Gap Period to a slightly longer value. For instance, this example was changed from 20ms to 25ms, ensuring the TM8100 would recognise there were two gaps being sent.

The solution for these issues needs to be resolved using workarounds in the TM8100, as the T2000-A37 Selcall modem is not capable of changing the gap burst periods.

NOTE:

This is only found to be an issue with Selcall systems using 20ms Tone and Gap Periods.

The older T2000-A36 Selcall board does not use the same modem for Selcall encode as the T2000-A37 and consequently the issue above does not occur.

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Compliance Issues None.

CSO Instruction Inform all Technical staff and dealers of suggested

workaround for Selcall users with existing T2000-A37 Selcall

boards.

2. Issuing Authority

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