Modifications for the Class II permissive change

re correspondence number 26122

The report shows that several digital RC4FSK digital modulation signals
generated by the Dataradio BDLC can be used with the equipment. The analog
low-pass filter is not used for the digital modulation, because the the
modulation source provides the necessary low-pass digital pulse shaping DSP
filtering (Raised Cosine with a=0.4) as showed in digital modulation
techniques description of the report (page 9). The modulation source used in
the set-up was Dataradio's BDLC(Base Data Link Controller) which has a
function to supply random data sequences mapped into 4-levels and pulse-shaped
filtered with RC alpha=0.4 through its DSP.

A brief description of the digital modulation input into the unit is available
in the 3-rd paragraph of Class II permissive Change Information chapter of
the report, at page 6. A more detailed one follows.

The input for digital modulation is the line supplied for CTCSS input (D-range
1(PL100) pin 8, see also user manual, initial tunning and adjustment,
modulator adjustment para. 3.9.2). This line has the IOPad P255 as a test
point for CTCSS.

In order to complete the digital modulation input a 0 ohm %R246 (POCI) must
be installed and the 0 ohm %R291 (output of the low pass filter) has to be
removed. These are all the modifications required to have a digital
modulation input.

The mark-ups on the internal picture (picture attached separatedly) show the
locations of %R246 (to be installed) and %R291 (to be removed).

The location of the items on PCB (in Schematics and PCB Layout attachment,
page C6.2.17, "T854 PCB Layout top side") and on schematics (in Schematics
and PCB Layout attachment, page C6.2.22,"Sheet 2- T854 Audio Processor") are
as follow:

item	PCB location	schematic location
P255	C4	L1
%R246	D9	R2
%R291	D9	P1

Both schematics and PCB layout were uploaded at the time of initial
certification but they are deemed confidential, so I cannot upload them at
this time.

Already stated in the report, the change depicted above involved the
modulation source only therefore a Class II permissive change was asked.

Regards,
Constantin Pintilei
 R&D Test Engineer
  Dataradio Inc