

Proposed amendment for ED-73 para 5.4.2.2 from WG49N11 pre-meeting (Paris – July 2007)
[updated at WG49 meeting 11 as below](#)

5.4.2.2 RF Peak Power Output

(Paragraph 3.3.3)

5.4.2.2.1 Test Equipment

- a. Transponder Test Set
- b. Wide Band Dual Channel Oscilloscope.

5.4.2.2.2 Test Procedure

Connect the equipment as shown in [Figure 5-3](#).

- a. STEP 1 - Mode A/C Power Output (Paragraph 3.3.3)
Set the transponder for a 14 pulse reply (Mode-A code 7777).
Interrogate the transponder with a Mode A interrogation and record the peak power level of the single reply pulse having the least RF power level.
While varying the interrogation rate from 100 interrogations per second to the maximum interrogation rate specified for the transponder, record the variation in peak power level of the single reply pulse having the least RF power level.
Repeat the procedure, recording the level and variation in peak power level of the single reply pulse having the highest RF power level.
- b. STEP 2 – Short Mode S Power Output (Paragraph 3.3.3)
Repeat STEP 1 with a Mode A/Mode S All-Call interrogation at standard rate only.
- c. STEP 3 – Long Mode S Power Output
For transponders with long reply capability (Level 2 or above) repeat STEP 1 ~~with repeat STEP 1 with a Mode S interrogation, sixteen Mode S interrogations per second~~ using any format and coding for which a long reply is required.
If the transponder is also Extended Squitter capable, configure the transponder verify as part of this step, so that the transponder is transmitting the extended squitters (or an equivalent number of long replies) in addition to the sixteen replies.
- d. STEP 4 – Extended Long Mode S Power Output
For transponders with extended reply capability (Level 4 or above) repeat STEP 3 stimulating the maximum rate of long replies for which the transponder is designed.