The 3rd Annual Report of the Radio Communication Examination
Standards Committee, March 2009

1. Introduction
This is the third annual report of the Radio Communication Examination (RCE) Standards Committee, set up the terms of the agreement between Ofcom and the Radio Communication Foundation (RCF) for the conduct of amateur radio examinations (the Radio Communication Examinations).

The annual reports of the Standards Committee are published on the RCF website, http://www.commsfoundation.org/rce/. Other documents relevant to the RCE are also available on this website, including the terms of reference of the Standards Committee and the agreement between Ofcom and RCF.

2. Membership
The membership of the Standards Committee is as follows:

Prof Simon Watts MBE FREng, G3XXH, Thales UK (Standards Committee Chairman)
Prof Hugh Griffiths FREng, G4CNV, Principal, Defence Academy of the United Kingdom
Dr Julian Gannaway, G3YGF, Roke Manor Research Ltd
Murray Niman BSc MIEE, G6JYB, BAE Systems ATC
Dave Powis BSc, G4HUP, College Lecturer

Paul Jarvis, MCMI, G8RMM Ofcom

Alan Betts BSc CEng MIEE, G0HIQ (Chairman of RCE Examination Committee)
Colin Richards, Chartered FCIPD, G3YCR , Consultant (RCE Quality Manager)

Anthony Vinters, G0WFG (RSGB, Training & Education and RCF Trustee)

3. Assessment of Overall Examination Performance
The committee received detailed reports from the RCE Examination Committee and the RCE Quality Manager on the management and performance of the examination processes. A report was also received from the RSGB Examination Department, who administer the RCE on behalf of the RCF. Their reports are summarised below.

The Standards Committee is satisfied that the current Foundation, Intermediate and Advanced examination syllabuses are suitable for the award of Amateur Radio licenses. Further, the examinations are compatible with the CEPT harmonised arrangements set out in Recommendations TR 61-01 and TR 61-02. The committee will continue to review the syllabuses and examinations to ensure compatibility with international and national regulations.

4. Syllabus Revisions
The new Intermediate Examination Specification will come into force in June 2009.

Revision of the syllabuses will occur from time to time. In all cases changes will be approved by the RCE Standards Committee and normally a notice period of at least 12 months will be given before they are implemented in examinations.
5. Review of the Examination Committee (EC) report.

Question Banks
Each of the examinations still has a pressing requirement for additional questions. The numbers of questions wanting are:
- Foundation: 13 (plus 13 more to give full flexibility)
- Intermediate: 19 (plus 50 more to give full flexibility)
- Advanced: 227

The EC had tried a wide range of initiatives over the year the try to attract the submission of further questions but this has had very limited success. If the questions pool falls too low, it will be necessary to restrict the frequency of examinations that can be held.

The Standards Committee instructed the EC to continue considering urgently how additional questions may be acquired and to put into effect actions to correct the shortfall.

Results for 2008
The table shows the number of examinations offered and the overall results for 2008. The 2007 and 2006 results (bottom) are shown in brackets.

<table>
<thead>
<tr>
<th></th>
<th>Foundation</th>
<th>Intermediate</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Exam. s</td>
<td>614 (616)</td>
<td>265 (206)</td>
<td>169 (95)</td>
</tr>
<tr>
<td></td>
<td>(640)</td>
<td>(230)</td>
<td>(154)</td>
</tr>
<tr>
<td>Number of Candidates</td>
<td>2003 (1965)</td>
<td>733 (646)</td>
<td>397 (289)</td>
</tr>
<tr>
<td></td>
<td>(2034)</td>
<td>(625)</td>
<td>(446)</td>
</tr>
<tr>
<td>Number of Passes</td>
<td>1678 (1605)</td>
<td>677 (526)</td>
<td>263 (161)</td>
</tr>
<tr>
<td></td>
<td>(1719)</td>
<td>(604)</td>
<td>(326)</td>
</tr>
<tr>
<td>Pass rate</td>
<td>83.8% (87.4%)</td>
<td>92.4% (93.4%)</td>
<td>66.2% (64.1%)</td>
</tr>
<tr>
<td></td>
<td>(84.5%)</td>
<td>(96.6%)</td>
<td>(73%)</td>
</tr>
</tbody>
</table>

The Foundation and Intermediate examinations were available at ‘short notice’ during 2008 and 169 Advanced examinations were held at pre-notified times with an average of 2-35 candidates per exam session and an average 28 centres active on each occasion. The SC was pleased to note the increase in numbers of candidates taking the Intermediate and Advanced Examinations.

The number of candidates for Foundation has increased slightly over 2007 and Intermediate shows the highest number recorded. Last year serious concern was expressed over the number of Advanced sessions and it is pleasing to note this year the numbers are well up. The average number per exam remains low, but it is recognised that can be a trade off between providing timely exams and waiting for more candidates. Clubs/exam centres are congratulated for the upturn.
The SC noted with concern an apparent anomaly in the marks for the Foundation examination, which was also observed in 2007. The number of candidates achieving 17 marks is consistently lower than those achieving 16 marks and there is then a much larger number of candidates achieving the pass mark of 18. The large number of candidates achieving the pass mark might be a function of the nature of the examination, with candidates being coached to achieve a minimum pass. However the lower number scoring 17 compared with 16 is suspicious. The SC noted that it may be necessary to terminate local marking of Foundation Examinations and the proposed introduction of optical marking would make this change practical. The advantages of a change to optical marking would include more detailed feedback of performance as well as giving greater credence to the propriety of the examination system.

Pass Marks
There were no changes to the pass marks set for all the examinations during 2007.

6. Review of the Quality Manager’s Report
In January 2009 Colin Richards resigned from his appointment as Quality Manager, due to pressure of other work. The Standards Committee wishes to express its gratitude for his significant contribution to creating and developing this new role. The RCF is working with the RSGB to appoint a new Quality Manager as soon as possible.

The work of the Quality manager has covered three main areas during 2008:
- The quality, consistency and relevance of the three exam syllabuses and exam questions.
- The exam procedures and administration.
- The conduct of examinations

Allied to this are the issues of quality control of documentation and QCA accreditation.

Examination Administration
More than 10 days’ notice is required for Intermediate and Foundation examinations. Less notice can cause considerable difficulties to the examination staff. During 2008 there were only three instances of late applications and these were accepted by the examination staff. This represents a considerable improvement over previous years.

Conduct of Examinations
Inspectors
The Quality Manager has been asked by the Steering Committee to set up a team of independent inspectors to undertake inspections of examinations. This is progressing slowly, whilst suitable persons are sought. During 2008 RSGB Regional Managers and members of RSGB staff undertook inspections, under the guidance of the Quality Manager.

Inspections
The Steering Committee had requested that between 30 and 40 exam venues during 2008. The number where an inspector attended was 39.

All three levels of exam were inspected. These break down to:
- Advanced 10
- Intermediate 16
- Foundation 17

At four centres both Intermediate and Foundation exams were monitored on the same date, hence the total number of exams observed was 43. Thirty four inspections were of centres that were
fully registered, that is, were able to hold Intermediate and Advanced exams. Four were Foundation only centres, but one of those inspections served a dual purpose as the centre registration since the centre wished to upgrade to full centre registration.

**Quality Manual**
As part of the development of a quality management process the Quality Manager has allocated responsibility for maintenance of documentation for syllabuses and their related guides and for inspection and registration documents. There is also a block of administrative documents which come under the remit of the RSGB examination manager. Much of this needs updating and the Quality Manager will continue to work with the RSGB on this.

**7. Review of the Report from RSGB HQ Examination Department**
This was the first annual report from the HQ Examination Department and it was very much welcomed by the Standards Committee.

The move to Abbey Court was completed successfully during 2008 with the examination administration off line for only five working days. Plenty of notice was given to examination Centre’s and instructors, so there was minimal disruption.

**Examination Software**
There have been a number of issues with the examination software which have had to be addressed, this has caused some problems but in the main these have been overcome. However, the RSGB has set aside funding in the financial year 2009 to replace the examination software and the Examination Department, working with the RCF Examination Committee, is currently outlining the specification requirement for the new software. This work is scheduled to be completed by the end of January 2009. It is expected that the new software will be set to work in July 2009 and be fully in commission by September 2009. This software will include the capability for optical marking of examination papers.

**Examination Fees**
The RSGB subsidises the cost of the RCE to a considerable extent. It is proposed to raise the fees charged for examinations. The Foundation Exam fee will rise from £20.00 to £22.50; the Intermediate Exam Fee will rise from £25.00 to £27.50; and the Advanced Examination Fee will rise from £30.00 to £32.50.

This will be the first rise in the fee since 2004 and the cost of examinations is still significantly lower than what was being charged by the City and Guilds when they ceased supporting the examinations. The Standards Committee fully supports this modest increase in fees.

**Examination Appeals**
There were four appeals received in 2008, only two of these relating to alleged irregular conduct of examinations. In the first case the club concerned was completely vindicated; the second case is still under investigation. The great majority of clubs and Examination Centres are absolutely beyond reproach, and for this reason claims of anomalous behaviour are rigorously investigated.

**8. Complaints Received by the RCE Examination Committee**
During the year, 11 questions were queried, together with one Advanced Examination, and all issues were resolved satisfactorily.

There were no formal complaints received by the EC during 2008. The appeals procedure is published on the RSF RCE website [http://www.commsfoundation.org/rce/pdf/appeals.pdf](http://www.commsfoundation.org/rce/pdf/appeals.pdf).
9. Recommendations
The RCE Standards Committee made the following recommendations for action during 2009:

- Continuing urgent consideration should be given by the Examination Committee to improving the supply of questions for the RCE question banks.
- The Quality manager should work with the Examination Committee to assure the quality of local marking of the Foundation Examinations. It may be necessary to revert to central marking.
- The Quality Manager should continue recruiting independent inspectors and in the interim may continue to appoint RSGB Regional Managers and RSGB HQ staff as inspectors.
- The Quality Manager will continue development of the quality process, including a quality manual for the administration of the RCE.
- Accreditation of the RCE by the QCA should continue to be actively pursued during 2009.