Revised Calculator Policy for the 2002 Exam

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As Vice Chair of the American Board of Health Physics last year, one of my duties was to review candidate requests for using calculators that do not appear on the approved list. A quick review of the list indicates that there have been many additions and few deletions over the years. There are two fundamental difficulties that the Vice Chair has when making a decision on a candidate’s request. The first is that the calculator in question and/or its instruction manual are not immediately available to the Vice Chair. Consequently, it is hard to be 100 percent certain that the calculator meets both the intent and the technical requirements of the “Approved Calculator” list. The second problem is that each brand of calculator can offer very different features. One of the more interesting questions arose when erasable-memory graphic calculators entered the market. The question that was consistently asked by each Vice Chair was whether this feature offers the candidate an advantage over those without it.

Proctors at each exam are supposed to assure that each candidate’s calculator is on the allowed list and that it has been zeroed prior to the start of the exam. Having proctored the last three exams, I can tell you that this is the hardest part of exam-day duties for proctors because inevitably at least one person arrives at the site with an “xls.4” when only an “xls.3” is on the approved list. Determining equivalency and how to zero it are difficult challenges to overcome in the 30 minutes prior to the start of the exam. The issue is most pronounced at the Health Physics Society annual meeting test site.

These issues were discussed at several Board meetings with no resolution until this past summer. At that time, a subcommittee was established to review the existing list and currently available calculators and develop a short list of calculators to ease check-in frustrations and assure that all candidates had calculators with the same basic features. This subcommittee developed a short list of five calculators that the Board has authorized for use on the 2002 exam. Calculators from this list are the only currently approved calculators for use by candidates sitting for the 2002 exam. The list, with a Web site address for specifications and ordering instructions, is provided below. Most of these calculators are easily available commercially.

1. Casio FX-280 Scientific Calculator
   http://www.casio-usa.com/calculators/product.cfm?section=25&display=10&cid=2316

   http://www.ti.com/calc/docs/25stat.htm

3. Hewlett Packard HP-6s Solar Scientific Calculator
   http://www.hp.com/calculators/scientific/6ssol_specs.html

   http://www.hp.com/calculators/scientific/32sii_info.html

5. Sharp Scientific Calculator
   http://www.buyonlinenow.com/shop/viewitem.asp?SKU=SHREL506RB

   Each of these calculators has similar basic operations and easy zeroing instructions and is relatively inexpensive. The first three are nonprogrammable algebraic scientific calculators. Their cost is between $10 and $20. The HP-32sii is a “reverse polish” programmable calculator (a necessary feature for those of us who are die-hard HP calculator folks). This is the most expensive calculator at about $60 and the most inexpensive “reverse polish” calculator offered by HP that we could find. Since there was one programmable calculator offered, we felt it necessary to allow one algebraic calculator. The Sharp is an algebraic programmable calculator at a cost of about $20.

   This list is not expected to be static. The Vice Chair has the responsibility to review the list annually and add/delete calculators as needed. The goal is to keep the list simple with around five calculators. Should you have suggestions on others that provide only the basic scientific functions, are easy to zero, are reasonably inexpensive, and are readily available, please submit your suggestion to the Secretariat. This year’s Vice Chair will review your recommendations and we will modify the “Approved List” as needed.