

American Academy of Health Physics American Board of Health Physics

## Corner

Address contributions for CHP News and "CHP Corner" to:

GARY KEPHART, CHP, CIH ILLINOIS POWER COMPANY BOX 678 ATTN: V-374C CLINTON IL 61727

work: 217-935-8881 x3888 fax: 800-377-1717

email: Gary Kephart@illinova.com

## From The President

Dear Fellow Academy Members:

At the midyear meeting in Mobile, I will officially assume the Presidency of the American Academy of Health Physics. I look forward to continuing the work of predecessors to strengthen and enhance the value, credibility, and meaning of the CHP credential and of our profession.

Specifically, I hope to continue our synergistic relationship with the Health Physics Society and to strengthen our interfaces with the National Registry of Radiation Protection Technologists. One planned area of joint activity with the HPS will be to explore the feasibility of accreditation of academic programs. I was gratified to learn on a recent visit to Clemson that the University will reimburse the examination fee to health physics students who successfully sit for Part I of our exam. This is laudable as an important recognition of the value of the CHP credential, and a possible step towards accreditation. In conjunction with the American Board of Health Physics, ably chaired by George Vargo, I will strive to maintain and enhance the integrity of the certification and re-certification processes, and to provide relevant continuing education and scientific programs for our members.

While I intend to communicate with you from time to time through the "CHP Corner," communication is a two-way street. I would like to hear from you. All ideas, comments, and criticisms are welcome. Please do not hesitate to write, email, fax, or telephone me (addresses and phone numbers given below) with your ideas and opinions so that we may work together to move the Academy forward into the 21st century.

Ron Kathren, CHP Washington State University 2710 University Way Richland, WA 99352 phone: 509-375-5643

fax: 509-375-1817

email: rkathren@tricity.WSU.edu

## From The Board

Roger C. Brown, CHP
ABHP Chair

The fall meeting of the American Board of Health Physics was held in McLean, Virginia, on 21-22 November 1997. The main items on the agenda were certification of the results from the 1997 Part I and Part II examinations. Congratulations to those candidates who passed either or both parts of the certification exam (as announced in last month's "CHP Corner").

The Part I examination was taken by 216 candidates. A total of 102 passed (47 percent) by scoring 91 or higher out of a total of 150 questions. Due to an uncertainty in the number of candidates who passed Part I at the time of the Board meeting, notification via the Web page was delayed until the exact number could be verified. Since Part I is machine graded, the Board did not have individual candidates' scores available at the time that the passing point cutoff was agreed upon. We apologize for the delay, but we felt that, in the interest of placing correct information on the Web page, a delay was preferable to providing incomplete information.

The results from the Part II exam were that 42 of the 143 candidates (29 percent) achieved a passing point of 469 or more points out of a total of 700 points. This low passing percentage was discussed. The consensus of the Board was that there was not enough evidence to suggest that the exam took too long to complete. The Board was unable to identify any other factors as potential contributors to this low passing percentage. As a result, the grades awarded to the candidates for Part II stood as earned.

Professor Ken Skrable of the University of Massachusetts at Lowell addressed the Board with some recommendations to improve the performance of the Part II exam. His comments related to the relevance and quality of questions on the Part II exam as well as the length of the exam questions. He noted that poor performance of past Part II exams is demonstrated by the wide variation in passing percentages, which have ranged from less than 20 percent to over 60 percent. His comments and recommendations are appreciated and will be taken under consideration by the Board. (Readers are well aware of Ken's long-standing support of the Academy as evidenced in part by his monthly ABHP exam question and answer column in the HPS Newsletter.)

HPS Newsletter February 1998

A parallel effort to improve the performance of the Part II exam is underway. A subcommittee of Board members reviewed the June 1997 report from the Assessment Resource Center (University of Missouri-Columbia). This report attempted to compare the performance of the 1995 and 1996 Part II exams, which had passing percentages of less than 20 percent in 1995 and over 60 percent in 1996. Among recommendations under consideration for incorporation into the Part II exam are the following: (1) development of a test specification, (2) elimination of a choice of four out of eight specialty questions, and (3) requiring candidates to turn in the Part II exam booklet at the conclusion of the exam.

A detailed test specification would provide assurance that Part II exams test exactly the same areas of health physics with the same weights from year to year. As a result of this test specification there would no longer be a choice of four out of eight in the specialty question section. As an item of interest, by allowing a choice of four out of eight questions, there are 70 different combinations possible. To argue that each of these combinations is of equal difficulty and weight is futile. To compensate for these test specification requirements there will probably be a greater number of questions with shorter answers.

These recommendations are under consideration, and if adopted, would eliminate many of the factors thought to be responsible for the wide year-to-year fluctuations in performance on the Part II exam. The Part I exam, which already incorporates these features, performs much more consistently on a year-to-year basis; for example, the passing percentage typically lies in the range of 40-60 percent.

In closing I would like to take this opportunity to thank the Board and Panel members for their support in the past five years. These individuals make the certification process work, and without their dedication and hard work the American Board of Health Physics would not enjoy the reputation that it does today.

## ABHP Part II Certification Exam Quality Assurance Procedures

Edward F. Maher, Sc.D., CHP Board Member, ABHP

During the Summer ABHP meeting in San Antonio, the Board received a letter from Ken Skrable asking about the quality assurance (QA) procedures used in preparing the Part II exam. In addition to inviting Ken to personally address the Board at its fall meeting (as noted in Roger's report above), the Board concluded that prospective candidates and Academy members should know more about these QA procedures and processes.

QA review of the Part II examination questions begins in the fall of the year preceding the exam year. Generally in mid-September, the Part II Exam Panel develops draft exam questions in 11 topic areas (four core topic areas and seven specialty topic areas). Each Part II panel member prepares one draft question for each of two different topic areas. Panel members are assigned to topical area "groups" consisting of four to six members. Each topical area group member performs a critical QA review on all other members' draft questions in that group—i.e., intra-group QA review.

The most intense period of QA review occurs during the midyear meeting, when the Part II Exam Panel meets to conduct the first draft question "culling." During this meeting, each topical area group exchanges its draft questions with another topical area group. The groups perform a detailed QA review of the other groups' draft questions—i.e., inter-group QA review. This process continues for two very exhausting days and ends with each topical area group selecting its three best draft questions. At least two of the three questions must be new, the third can be a recycled question from a previous exam year.

The next QA review cycle begins with the balloting of the three draft questions in all 11 topic areas and the polling of the Exam Panel and Board with the full slate of draft questions. The draft questions are ranked within their respective topic areas and specialty topic area questions are ranked a second time across all specialty topic areas. Each draft question is reviewed a third time during balloting. The Board and Panel Chairs select the final 14 draft questions that comprise the exam, based on the balloting results.

The fourth QA review occurs within the Board. The Board Chair selects a Board member or AAHP "trusted agent" to QA review each of the final 14 questions. The reviewers are asked to take complete "ownership" of the question. Final revisions are made at this point and the draft exam is returned to the Board and Panel Chairs for final approval.

The Board Chair performs one last review of the draft exam (with assistance of at least two other Board members).

The Board's exam QA procedures are extensive and rigorous, but not totally foolproof. Despite our best efforts, errors have occasionally shown up on the exam. The Board deeply regrets when this happens and takes great care to ensure that no candidate is penalized by the "flawed" question. This is done by adjusting the grading criteria on that question to nullify the effect of the error.

The Board solicits your comments and suggestions. Let's hear from you via email < emaher@ma.ultranet.com>.