American Board of Health Physics

OCTOBER 1988

LETTER FROM THE CHAIRMAN

Dear Colleagues,

This has been a very busy first 9 months of the year. I am continually amazed, and grateful, at the dedication and effort put forward by my fellow Board members, and the Examination Panel members and their Chair. They must really like the pay. In particular, thanks to Howard Dickson for his work on the membership questionnaire, Dale Denham for the development of the Panel Procedures Manual, Dick Bowers for extensive reviews of the Part I examination process and development of the new Part I Panel, and Roger Brown (1987 Comprehensive Panel Chair) for extensive reviews of the 1987 exam results.

I'm sorry to report the resignation of Board member Glenn Glasgow due to health reasons. His expertise in the medical aspects of Health Physics and knowledge in the credentialing process will be missed. Suggestions for a replacement have been requested from the AAPM and will be considered by the Academy Executive Committee.

The Board met for four days in Boston and plans to meet two days in October. The Board is not a secret group. All meetings are open to any members of the Academy, and to any other interested party. If you want anything discussed, submit it in advance and it will be placed on the agenda.

It is of special interest to note the emergence and identity of the Academy. Things have been slow the first few years due to delays in incorporation and the normal start-up problems. The major reason for the Academy was to give CHPs a mechanism to voice preferences and influence the policies of the Board. At the Academy general meeting in Boston, the Chairman summarized the Board's activities. One described the Board's decision about the knowledge level expected of Part I candidates, which was subsequently followed by what seemed like an endless number of members speaking against the policy. The members

present clearly wanted Part I to be an interim level toward full Certification, designed to be taken at an early stage in the health physics career. Demonstrating exemplary responsiveness, the Board met in a special session early the next morning, and after gaining support for this concept from our examination consultants, revised the earlier decision in time for the desired membership position to be implemented on the 1988 Part I exam!

I'm sure you have all noticed the recent flurry of HPS newsletter articles about the Certification process. The Board has a responsibility to make the process fair and equitable. We all have the responsibility to make it desirable for practicing health physicists to seek Certification. Each one of us should actively promote Certification where we can. This can be in individual discussions with coworkers, in preparation of position requirements for job openings, in letters to the HPS newsletter supporting certification, and by demonstrating your perceived value of certification by the use of CHP following your name in professional correspondence and reports, as is common with most other similar professional recognition.

Frazie L. Bronson, CHP



Chairman, ABHP

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ABHP Board Members and others discussing one of the many issues addressed at the 1988 ABHP meeting.

BOARD ACTIVITIES

The July meeting of the American Board of Health Physics consisted of four sessions on four different days and totalled 19 hours of meeting time. Needless to say, the Board covered many topics, a number of which are reported upon separately in this newsletter.

1987 Exam Review

Several unsuccessful 1987 candidates reviewed their exam results, and a few filed appeals. Generally the appeals were based upon a challenge to the denial of the applicants answer as correct. The Board has a formal appeal process for these matters. All of the Part I appeals were denied, as there were no incorrect answers discovered. The Part II appeals did result in some changes to the answers (additional correct answers were allowed). Whenever a change was allowed, the answers to all candidates answering that question were regraded, if it could potentially result in passing that candidate. Three candidates were successful and now have Comprehensive Certification. Please extend your congratulations to them.

DONALD MAYER WILLIAM STROM STANLEY ADDISON

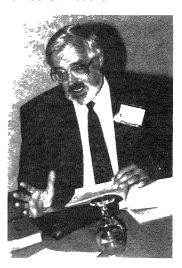
Extensive reviews of the 1987 Part I exam have been made. In 1987, the Part I Passing Point was determined in a manner different than in previous years. That year, the Passing Point was determined using a combination of two methods. In previous years, only one method (the Angoff method) had been used. The approach of using two methods was reanalyzed by the Board at the 1988 meeting. The analysis showed that the historical method used by the Board in setting.

the passing point should have been used to set the 1987 Part I passing point. The revised 1987 passing point resulted in 10 additional candidates passing Part I. They were all personally notified by the Chairman to explain the unusual circumstances.

The Angoff method of determining the Part I Passing Point was also used for the 1988 examination.

IRPA Workshop

Frazier Bronson and Howard Dickson participated in a workshop on certification at the Sydney, Australia, meeting. Presentations were also made by oth certification bodies either in existence or in the development stage. The ABHP is by far the oldest and largest. The workshop was conducted by John Lakey (currently IRPA President). John also attended a portion of the Boston ABHP Board meeting and explained the British Certification process and the ICRP membership's request to consider international recognition of Certification.



IRPA President, John Lakey, at 1988 ABHP Meeting

ABHP Financial Status

The Board has looked very carefully at the receipts and disbursements over the past year and has made certain adjustments in order to keep the operating expenses in line with income. For example, a change is being implemented in the examination testing service to provide an equivalent service at a lower cost. The budget for 1989, reflecting the testing services change, in round figures is.

Income

Exam Fees (\$200 x 270 examinees)	\$54,000 00
Maintenance Fees (\$25 x 640 CHPs)	16,000 00
Other Income	7,150.00
Total	\$77,150.00

Expenses

Professional Exam Service Fees	\$3,000.00
Exam Preparation Fees/Expenses	10,550.00
Operations (Management, Computer,	58,900 00
Travel, Telephone, Audits,	
Insurance & Bonds, AAHP expenses,	
printing, postage, etc.)	
Total	\$72,450.00

Effective August 31, 1988, all funds were transferred to the newly incorporated AAHP. Future newsletters will include the budget as an AAHP entry.

Part I Passing Point Determination

Since a larger-than-normal fraction of the Part I questions were changed for the 1988 examination, a Passing Point Workshop was held on July 7 in Boston to establish the passing point for the 1988 exam Dr. Jerry Rosen from Professional Examination Services conducted the workshop in which twelve CHPs who

have not had recent experience with the Part I exam preparation volunteered to assist with the passing point determination.

In response to the overwhelming desires of the Academy, as expressed at the General Meeting of the membership, the Board established an official policy regarding the Level of Part I. This exam tests fundamental knowledge in applied Health Physics. The expected level of knowledge is that of the well-prepared candidate minimally eligible to sit for that part of the examination.

In performing the Passing Point determination, each workshop participant individually estimates what fraction of the well-prepared, minimally qualified candidates will select the correct answer for each question. The Workshop participant's results are analyzed by PES and the result is the passing point to be used for that examination

The Board gratefully acknowledges the help of the following CHPs who spent nearly a day on this process:

Rowena Argall	Jerry Hiatt	Bill Barley
Ahren Jacobson	John Campisı	Peter Littlefield
Bob English	Mike Russell	Jerre Forbes
John Serabian, Jr.	Rodger Granlund	Gary Zeman

Board Creates Part I Panel

For many years, Part I of the examination was handled by the Part II Comprehensive Panel Chairman. Several years ago, to reduce the work load of the Part II Chairman, a Board member was appointed to be the Part I Coordinator to coordinate the Part I exam with professional examination services. This Part I Coordinator position has been competently handled for the past several years by Joe Sayeg. Joe has used an ad hoc group of people to assist him with the review





1988 Part I Panel Workshop members participating in the Part I Passing Point Determination meeting.

and preparation of each exam, and the technical review of new questions to go into the Part I bank. At the Boston meeting, the Board determined that it was now necessary to create a formal Part I panel to provide even better continuity on the Part I exam, to provide better analysis of exam results, and to allow for an orderly turnover of Part I from year to year.

A twelve member Part I Panel has been established with Dick Bowers (a Board member) appointed as Chairman. Members for the new panel were selected so that the following subject areas are covered by their combined expertise:

Theoretical	Accelerator	Dosimetry
Emergency Planning	Fuel Cycle	Medical
Reactor	Regulatory	University

In addition to selecting people who represent the knowledge base desired, those who had indicated on a recent AAHP questionnaire that they were interested in participating in Part I functions were considered for the positions. Three persons with extensive Part I experience were selected to provide continuity and to pass on their experience to the other panel members. The remaining nine members are relatively new to Part I activities, in keeping with the Board's desire to involve as many CHPs as possible in the examination preparation. The following people make up the current Part I Panel: (The year after each name shows the year the individual's term expires.)

Richard Bowers, Chairman (1990)

Robert English (1990)	Dale Gergely (1990)
Rodger Granlund (1991)	Jerry Hiatt (1992)
Gary Kephart (1989)	Peter Littlefield (1989)
Robert Quillin (1989)	John Serabian (1992)
Lester Slaback (1991)	Ronald Zelac (1992)
Gary 70man (1991)	

Gary Zeman (1991)

If other CHPs are interested in being considered as Part I Panel members to replace current members as they are rotated off the panel, please send a letter indicating your interest, and listing the technical areas of your expertise to the Part I Panel Chair, Dick Bowers. (These letters of interest will be kept on file to be used when replacements are recommended.)

EXAMINATIONS

1988 Examination Status

For the 1988 examination, the following indicates the number of applicants for this year's exam.

	Originally <u>Applied</u>	Actual <u>Scheduled</u>	<u>Examinees</u>
Part I	178	151	106
Part IIC	126	112	80
Part IIPR	26	21	9

Administration of the 1988 Examination

The Board wishes to gratefully acknowledge the following proctors who generously gave their time to administer the 1988 exam program. Without their help, the many regional exams would not be possible.

Site	Primary Proctor	<u>Alternate(s)</u>
Atlanta	Doug Collins	Jerry Troupe
Boston	Ken Skrable	George Chabot Clayton French Scott Murray Fred McWilliams Joe Ring (Pt. 1)
Chicago	Craig Yoder	Pete Jenson
College Station	John Simek	None
Gaithersburg	Les Slaback	Jack Bell
Livermore	Mike Trent	Tom Gibson
Oak Ridge	Bill Borden	Bobby Joe Davis
Richland	Judson Kenoyer	Tim Lynch Monte Sula

Power Reactor Exemptions

The following Comprehensive CHPs applied for the Power Reactor Certification via the Exemption process. Both applicants were approved and now have Dual Certification status. CONGRATULATIONS!

> David L. Smith James E. Tarpinian

Future Examination Sites

To provide more timely information to candidates for the ABHP Certification examination, the AAHP Exam Site Selection Committee has modified its procedures. Beginning in 1989, all exam site locations will be established by February 1 of the year of the exam. The Exam Site Selection Committee will idencore year a list tify each of

Any group or organization (i.e., local HPS Chapter) wishing to host a location not on the designated core list, must contact the Committee prior to February 1 with a specified location, names of proctors, and the estimated number of candidates. Additions to the exam site list will not be allowed after February 1.

The designated exam sites for 1989 are:

Chicago, Illinois Oak Ridge, Tennessee Lowell, Massachusetts Albuquerque, New Mexico* Washington, D.C. Richland, Washington Livermore, California

*Annual HPS Meeting Site

Individuals with questions or volunteering organizations should contact the Chairman of the AAHP Exam Site Selection Committee, Lee Booth, at (312) 310-8650.

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CERTIFICATION RENEWAL

General Renewal Information

In the Board's effort to resolve some of the confusion and frustration surrounding the process of renewing your certification, below is a summary of the <u>current</u> requirements involved in renewing. Beginning in this newsletter and appearing as a regular feature in every successive newsletter, a listing of the approved courses by the Continuing Education Panel will appear. This issue's listing includes courses approved for the years 1985 to the present. All future issues of the ABHP newsletter will include a listing of only those courses that have been approved since the publication of the previous newsletter. For specific questions about your membership status, contact the Secretariat office.

Certification Renewal Requirements

Certification renewal is granted for a four-year period and requires that a diplomate be currently active in the profession of health physics, complete 16 Continuing Education credits, and be current in the payment of the membership fee. A written notice, application for renewal, application for course approval by the Continuing Education Panel (CEP), and list of approved continuing education courses for the past four years are distributed each Spring to all Certified Health Physicists (CHPs) whose active status expires at the end of that year.

Certification Renewal Fee

The current fee is \$100.00 for a four-year period. This may be paid in full but preferably paid over a four-year period of \$25.00 per year. For convenience, the ABHP mails maintenance fee envelopes yearly. A member is not considered delinquent in payment unless the total of \$100.00 has not been paid at the time of a CHP's renewal.

Continuing Education Courses

The Continuing Education course approval list is comprised of those courses submitted and granted continuing education credits by the CEP. All courses listed by the CHP in the renewal application must be approved by the Panel in order to receive credit toward the renewal approval. If a course that a CHP has attended is not contained in this listing and the CHP feels that it may be awarded credit by the CEP, either the sponsor of the course or an individual CHP who has attended the course may submit an application for course approval. Please note that applications for course approval should be submitted preferably before, and no later than three months after, the date the course is offered. Applications for course approval are available from the Secretariat Office.

The list of approved continuing education courses is provided with each renewal notice and is available from the Executive Secretary upon request or at the ABHP booth at the Health Physics Society's Annual Meeting. In addition, a listing of the most recent courses approved will be contained in the ABHP newsletter that will include all courses that have been submitted and reviewed for approval since the last newsletter.

<u>Specific Meetings and Courses Receiving Generic</u> Approval

Credits are awarded for attendance at the annual and mid-year meetings of the Health Physics Society and the annual meetings of ANS, AAPM, NCRP, SNM, RRS, CRCPD, and RSNA at the rate of one credit per day of attendance up to a maximum of three credits per meeting. Credits may also be obtained at the annual meeting by attending the Continuing Education classes and Professional Enrichment Program with generally one credit per course being awarded for each of these courses. Credit is also granted for preparation and teaching of graduate or professional level courses in health physics at the

rate of one continuing education credit per eight classroom hours with, as a general rule, such credit being granted only once in any fouryear period for any specific course.

Emeritus Status

If you are retired, or are planning to retire in the near future, you may be eligible to become an Emeritus member of the ABHP. The Emeritus status is specifically for those CHPs who have retired because of age or health. Emeritus members enjoy all the privileges of an active member, which includes voting during Academy elections, receiving all publications and being listed in the HPS Handbook. Also, Emeritus members are not required to renew their certification and have a reduced maintenance fee (currently \$10.00 a year, or \$40.00 every four years).

If you are eligible or will be eligible by the end of 1988 and wish to apply for the Emeritus status, contact the Secretariat office at for an application.

CONTINUING EDUCATION

New Continuing Education Proposal

The AAHP Continuing Education Committee under the chairmanship of Bob Heublein reported that the proposal to streamline the Continuing Education Credit System would be modified in response to the preferences expressed by the majority of the CHPs following the January questionnaire. The following preferences were expressed:

- o scaling up 1 credit under the current system to 4 credits under the proposed system with a corresponding increase of continuing education credits required from 16 to 64
- o credits received prior to 1989 will be scaled to equal the number of credits under the new system (i.e., multiply the original number of credits by four)
- o no one item, such as the Health Physics Summer School can contribute more than 50% of the required credits
- o no credit will be given for non-technical activities such as serving as an officer or on a committee.
- o no credit will be given for community related health physics activities or for awards or professional recognition

Final action on the proposed changes will be taken following approval by the ABHP at its October meeting and by the AAHP at its December meeting. The results and complete details on the new program will be published in the January 1989 newsletter.

BOARD AND PANEL MEMBERS

Current Board Members for 1988 are:

Frazier Bronson Howard Dickson Robert Quillin Dale Denham Richard Bowers Joseph Sayeg Glenn Glasgow Chairman Vice Chairman Secretary Parlimentarian

The Board elected the following officers for 1989.

Frazier Bronson Howard Dickson

Lee Booth

Chairman (reappointment)
Vice Chairman (reappointment)

Lee Booth Secretary
Dale Denham Parliamentarian

The retiring Board members are Bob Quillin and Joe Sayeg. We would like to thank these two Board members for their enormous efforts and contributions to the Board's activities over the last five years.

The AAHP has appointed Carl Distenfeld and Thomas L. Pitchford to a 5-year term on the American Board of Health Physics, beginning in 1989.



The Board appointed the following new Panel of Examiners members and Officers for 1988, and wishes to thank the retiring members.

Comprehensive Panel of Examiners

Dean Broga, Chairman Elizabeth Donnelly, Vice-Chairman

New Members	Retiring Members
Stephen Butala	Joyce Davis
David Gooden	Victor Evdokimoff
Susan Langhorst	Nancy Kirner
Vern Rogers	Larry McKay
Steven Brown	Ronald Nimitz
	Lowell Thelin

Power Reactor Panel of Examiners

Scott Medling, Chairman Bruce Meyer, Vice Chairman

New Members	Retiring Members
Eric Bickel	Joseph Beer
Eric Golden	Blaine Murray
John Parry	Mike Russell

ANNOUNCEMENTS

ABHP Membership Report

The following is the CHP membership status as of September 1, 1988:

Comprehensive Certification Power Reactor Certification Dual Certification	592 47 45	
Total CHPs with current Certification	729	
Emeritus Status Inactive Status (by choice) Not Active (by failure to respond)	45 22 232	

Next Board Meeting

The Fall ABHP Board meeting is scheduled for October 13 and 14, 1988, in the Washington, D.C., area. Please send any items for the Board's consideration to the Chairman, Frazier Bronson.

New Address?

All CHPs are reminded that the ABHP retains its own address listing separate from the Health Physics Society. Please notify the ABHP, in addition to the HPS (if applicable) of any address change.

New ABHP Policies

Outdated Applications

The Board will no longer accept outdated applications and reference forms for the certification examination; so, please, toss any old applications and reference forms that you may have.

Failure of the Examination Twice

There has been a long-standing policy of requiring candidates who failed an examination for the second time to sit out a year and present evidence of additional preparation before retaking an exam. The Board has confidence in the exam process itself, and has removed these restrictions

Transcripts for the Examination

Following difficulties expressed by many applicants, the requirement for official transcripts has been eliminated. Now, only evidence (e.g., college transcripts) need be submitted to demonstrate fulfillment of the academic requirements. The Board may still request additional evidence in those few cases where it is necessary.

NEWS FROM THE AAHP

from John Horan, President, AAHP

Executive Committee Membership

John R. Horan	President
Otto Raabe	President-Elect
Mike Terpilak	Secretary
Joyce Davis	Treasurer
Paul Ziemer	Director
George Holeman	Director
Davis Myers	Director
Kenneth Skrable	Director
Robert Yoder	Director
Frazier Bronson	Ex Officio

Committee Chairs:

Richard Vetter	Appeals
Robert Heublein	Continuing Education
Lee Booth	Exam Site Selection
Joyce Davis	Finance
LaMar Johnson	Nominations
Charles Meinhold	Professional Standards and Ethics
Dianne Webber	Secretariat Rep

Nominations for AAHP Officers

Nominees for upcoming election (positions beginning January 1989) are:

President-Elect Milton McClain

Keith Schiager

Treasurer Thomas Crites

Nancy Kirner

Director Richard Fry

Arden Bicker

Official ballots and biographical information on the candidates will be distributed to Academy members this Fall.

Nominees for Next Year's Election

Early in 1989, the Nominations Committee will begin work to develop a slate of candidates for the Fall 1989 election. The positions to be filled will be President-Elect, Treasurer, and Director. Also there will be a vacancy on the American Board of Health Physics for which the committee will consider nominees. Academy members are invited to submit to the AAHP Nominating Committee the names of potential nominees. Submissions should be sent to the incoming President, Otto Raabe, and must be received by January 1, 1989, in order to be included in the deliberations of the Committee.

Notes from the AAHP General Meeting

Seventy-two individuals attended the 3rd General Meeting of the AAHP in Boston during the annual meeting of the HPS. While planned as a one-hour report by the officers and committee chairmen, audience interest and participation extended the exchange of ideas and information by an extra hour. It was clearly evident that the American Academy is performing a vital role as a communication between the Certified HP's and the ABHP.

The Executive Committee meeting was summarized as follows:

- o The AAHP was incorporated on July 1, 1988.
- o The Finance Committee has started its work by taking over responsibility for the Budget for 1989 with the target of keeping within its limited income.
- By ballot, the Executive Committee elected Lew Pitchford and Carl Distenfeld as the new members of the ABHP.

- o The decision was made that sites for the Certification exams should be identified earlier for the planning of the candidates. February 1st is the target date for 1989.
- o The Ad Hoc Committee on Professional Developmer' formed on August 9, 1987, under the chairmansh of Jerome B. Martin has been made a Standing Committee. Members are: Rodger W. Granlund, Paul S. Rohwer and R. Craig Yoder. Items being reviewed by this committee are:
 - problems with recertification
 - review of ABHP brochures
 - impediments to certification
 - Joint Commission on Accreditation of Hospitals (JCAH) recognition of CHP's as "Qualified Medical Physicists"
 - establishment of CHP's database
 - improved administration of Emeritus status

George J. Vargo proposed that there be more formal recognition and encouragement to those individuals who successfully complete Part I of the certification examination. One form of recognition would be to issue a temporary certificate to the successful candidates. Another approach would be to use the designation "Health Physicist In Training (HPIT) similar to the approach taken by the American Board of Industrial Hygiene. The whole intent is to motivate and recognize the young professionals. There is no intention to establish a second level of certific tion or to admit these individuals to the Academy until they have successfully completed Part II.

After extensive pro and con discussion, the Academy plans to take the matter under advisement for consideration at the next meeting of the Executive Committee. In the meantime, we would welcome your views which should be sent directly to George J. Vargo, 95 West River Road North, Fulton, New York 13069.

Another proposal, made by by Al L. Baietti, was that the Academy sponsor a separate session at each Annual Meeting of the Health Physics Society which would be of interest particularly for Certified Health Physicists, and which would address the needs of professionals in the field of Health Physics. Your officers welcome your ideas as well as potential topics which could be considered for the Albuquerque meeting in June 1989.

The Burton J. Moyer Memorial Graduate Fellowship Fund

This memorial fund was established by the Northern California Chapter of the HPS to encourage graduate studies in radiological protection. The annual fe

lowship honor the memory of Professor Burton J. Moyer, chairman of the Physics Department at the University of California at Berkeley who pioneered accelerator radiation protection before his death in 1973.

Up to the current year, three fellowships have been awarded to graduate students at University of California, Berkeley, Purdue University and Texas A&M University. The Northern California Chapter alone has contributed more than \$7,000 including the net proceeds of the 1987 Midyear meeting in Reno. As more funds become available its planned to permanently finance two annual fellowships. Another potential goal is to provide travel funds for graduate students from other countries or to allow students to participate in international meetings related to radiation protection.

The Executive Committee of the American Academy of Health Physics at its Boston meeting in July expressed its solidarity with the goals of the Moyer Fellowship Fund and suggests that individuals and industrial groups seriously consider making tax deductible contributions to support the fund. Providing an endowment fund that is self-sustaining is one of the finest practical ways we as Certified Health Physicists can encourage the development and growth of our profession. Contributions to the fund can also be made as a memorial to deceased members of our profession. Contributions to the Burton J. Moyer Memorial Fund can be sent in care of: Professor A. Carl Helmholz, Department of Physics, 374 Le Conte Hall, University of California, Berkeley, CA 94720.

Additional Results from the January Questionnaire

Out of 177 replies to the questionnaire that was sent to the members in January, 90 individuals indicated the desire to serve on AAHP Committees or Exam Panels or to be nominees for the ABHP. Equally impressive was the fact that 93 individuals volunteered to work on publications. A total of 138 areas of interest were identified of which the most popular were:

Nuclear Power - 18 Environmental Radiation - 15
Risk Assessment - 15 Public Information - 15
Radioactive Waste - 14 Medical Health Physics - 13

Equally encouraging was that 82 Certified Health Physicists volunteered to work on seminars. The expertise of the volunteers were:

Reactor HP - 37 Environmental HP - 21 Medical - 21 Dosimetry - 19

What a fantastic response! What a wonderful resource to be harnessed for the good of the profession!

Statistical Study of Distribution of CHPs by State:

California - 12% Tennessee - 6%

Maryland - 9% Washington - 6%

New York - 8% Massachusetts - 5%

Pennsylvania - 7%

Next AAHP Meeting

The Executive Committee of the American Academy of Health Physics will meet in San Antonio, Texas, on December 9, 1988, in connection with the Midyear Topical Meeting of the HPS. Academy members who have agenda items for the Executive Committee's consideration should submit them to the incoming President, Otto Raabe.

All American Board of Health Physics and/or American Academy of Health Physics requests, inquiries, and other correspondence can be made to the Secretariat Office at the address and telephone number below:

American Board of Health Physics
(or)

American Academy of Health Physics
8000 Westpark Drive, Suite 400
McLean, Virginia 22102
ATTENTION: DIANNE WEBBER
(703) 790-1745

1985
COURSES APPROVED BY THE CONTINUING FOUCATION PANEL

	COURSES APPROVED BY T	HE CONTINUING EDUCATION PANEL			NUMBER	TITLE	SPONSOR/ LOCATION	DATE	LEUS
NUMBER	TITLE	SPONSOR/LOCATION	DATE	CECs	85-29	HP Certification Exam Preparation	Columbia Chapter HPS	Mar 5-May 18, 1985	8
85–1	Internal Dose Assessment	Technical Management Serv /Atlanta & Houston	Feb 15-18, 1985 Mar 11-13, 1985	5	85–30	Safeguards Techniques Training Program —— Materials Accounting for Nuclear Safeguards	US DOE, Los Alamos		4
85–2	Principles of Epidemiology	Epidemiology Res Inc Houston, TX	May 1-3, 1985 Oct 7-9, 1985	2	85–31	ABHP Preparation Course Outline	Nucleon Lectern Assoc Bethesda, Maryland	May 6-10, 1985	3
85–3	Epidemiology Summer Program	Epidemiology Res Inc	Jul 28-Aug 16, 1985	2	85-32	Advanced Management of Radiation	Univ of New Mexico	Oct 3-5, 1985	3
85-4	Health Physics Injury Claim Litigation	San Onofre Nucl Gen Station, CA	Dec 12, 1984	2	05 22	Accidents	Albuquerque, NM	0 . 15 10 1004	_
05.5	Maximum Risks of High Energy Radiation for	Jefferson Med College	Mar 16, 1984	2	85-33	Personnel Rad Dosimetry Symp	Oak Ridge Nat'l Lab	Oct 15-18, 1984	5
85–5	Genetic Effects, Carcinogens and Congenital Malformations in Dev Embryos	Philadelphia, PA	110, 1504	•	85-34	Second DOE Workshop on Portable Instrumentation and Dosimeters	Oak Ridge Nat'l Lab	Apr 9-11, 1984	3
85-6	A Review of Whole Body Counting from the Beginning to the Present State of the Art	Helgeson Scientific Ser Pleasanton, CA	Jul 27, 1984	2	85-35	Compliance with RAM Shipping and Disposal Regulations	Duke Power Company Cornelius, NC	Several times yearly	2
85-7	1985 Annual Spring Symposium	Great Lakes Chapt HPS	Apr 24, 1985	2	85–36	1985 Winter Meeting	American Physical Soc Toronto, Canada	Jan 21-24, 1985	1
85-8	Respiratory Protection for the Nuclear Industry	Darell Bevis Assoc , Inc	several times yearly	3	85-37	Workshop on Dosimetry of High Energy Photon and Electron Beams	So Calif Chapter AAPM Burbank, California	Jan 18, 1985	1
85-9	The Proposed NCRP Screening Models for Determining Compliance with Environmental Standards	Central Rocky Mountain Chapt HPS	Jan 9, 1985	1	85-38	Spring Seminar	So Calif Chapter AAPM Las Vegas, Nevada	Apr 24-26, 1985	2
85-10	The Lower Limit of Detection Concepts, Assumptions & Applic	Central Rocky Mountain Chapt HPS	Jan 8, 1985	1	85-39	Tritium Technology in Fission, Fusion and Isotopic Applications	ANS, Dayton, Ohio	Apr 30-May 2, 1985	3
85-11	Management Workshop on Interpersonal Relations	NTL Institute Arlington, VA	Nov 3-9, 1984	0	85–40	Scientific Seminar on the Behavior of Technetium in the Environment	Comm of the European Communities/France	Oct 23-26, 1984	3
85-12	Surplus Facilities Mgmt Program Planning Conference	US DOE/Richland, WA	Oct 30-Nov 1, 1984	1	85–41	Comparison of Mechanisms of Carcinogenesis by Radiation and Chemical Agents	National Cancer Inst NBS, Gaithersburg, MD	Dec 6-7, 1983	1
85-13	Medical Aspects of Radiation Emergencies	Conn Chapt HPS	May 16, 1985	2	85-42	Waste Management '85	Univ of Arizona/Tucson	Mar 24-28, 1985	3
85-14	Low-Level Radioactive Waste Symp	Hershey Med Ctr , Penn State University	Mar 7-8, 1985	3	85-43	Annual Technical Meeting	Central Rocky Mountain Chapter, HPS/Colorado	Apr 30, 1985	1
85-15	Bloassay Workshop	New England Chapt HPS	Mar 26, 1985	2	85-44	Radioactive Material Transportation Orientation Seminar	DOE, Washington, DC	May 14, 1985	0
85-16	Internal Dosimetry Workshop	New England Chapt HPS	Mar 6, 1985	2	85-45	Credit for an Instructor of a		Fall 1983	0
85-17	Workshop on Annual Vs Committed Dose Limit	New England Chapt HPS	Jan 24, 1985	1		Class at San Jose State Univ			
85-18	Radio-Frequency Radiation Topics	Cascade Chapter HPS	Feb 22, 1985	1	85-46	Low-Level Nuclear Waste Disposal and Cleanup	Center for Energy & Env Mgmt /Nuclear Waste News Arlington, Virginia	May 16-17, 1985	3
85-19	Radiation Safety Principles & Procedures	NC State University	Dec 5-7, 1984 May 20-22, 1985	3	85-47	Health Physics Problems & Solutions	USNRC/Silver Spring, MD	Feb 20, 1985	1
85-20	Radioisotope Techniques	NC State University	Dec 10-14, 1984	3	03-47	Unique to TMI Recovery	OSINC/STIVET Spirity, No	reb 20, 1905	'
			May 13-17, 1985		85-48	Risico en Doelmatigheid in de Rontgendiagnostiek	Dutch Soc of Diag Rad	Mar 24, 1984	1
85-21	16th Annual Meeting	CRCPD	May 21-24, 1984	3	85-49		Netherlands Radiation	Mar 25-27, 1985	3
85-22	Radioactive Waste	NCRP	Apr 3-4, 1985	2	03-45	Seminar on Enhanced Natural Radiation and Its Regulatory Implications	Protection Society	1141 23-27, 1903	,
85–23	1985 Spring Meeting	N Central Chapt HPS	Apr 26, 1985	2	85-50	7th International Congress of Radiation Research	International Congress of Rad Res /Amsterdam	Jul 3-8, 1983	5
85-24	Symposium on Quality Assurance of Radiotherapy Equipment	AAPM and Univ of Kansas	Jun 4-5, 1982	*	85-51	Health Physics Rad Protection Course	US Army/Ft Belvoir, VA	Jul 22-Aug 2, 1985	3
85-25	Winter Meeting Technical Sessions	Alabama Chapter HPS	Feb 8, 1985	1	85-52	Radiation Litigation A Primer for the Health Physicist	USNRC/Bethesda, MD	Apr 8, 1985	3
85-26	Med Imaging & Instrumentation '85	Soc of Photographic	Apr 21-23, 1985	4					
		Scientists, Virginia			85-53	Risk vs Benefit in Diag Radiology The Biol Effects of Low Doses	RSNA/Oak Brook, IL	Nov 26, 1984	1
85–27 85–28	AAPM Spring Meeting Health Physics in Rad Accidents	Upstate NY Chapt AAPM Oak Ridge Assoc Univ	Apr 2, 1985 Jan 14-18, 1985	1 6	85-54	Radiation Accidents and Overexposure Real and Imagined	RSNA/Oak Brook, IL	Nov 28, 1984	1
00 20			Sep 23-27, 1985 Jan 13-17, 1986		85-55	Annual Conferences	CRCPD/Brookfield, WI	Gen App of 1 CEC per	_
			Sep 8-12, 1986		00-33	Aimua Com el ences	CACEDIDIONITEIG, WI	day up to 3 CECs	•

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85-	-56 HP Certification Course	Robt Ryan Consultants	Jan -May 1985 Nov 83-Jun 1984	2	85-82	Health Physics Certification Review	Balt —Wash Chapter HPS	Jan 3-May 23, 1985	5
85-	-57 Course #A02 Digital Radiography	RSNA/Oak Brook, IL	Nov 24, 1984	1	85-83	VII Int'l Conf on Medical Physics & XIV Int'l Conf on Med & Biol Engr	Int'l Org for Medical Espoo, Finland	Aug 11-16, 1985	1
85-	-58 Spring Meeting & Technical Sessions	Alabama Chapter HPS	May 3, 1985	1	85-84	Nuclear & Chemical Target Analysis	US Army Field Artillery		0
85-	-59 Indoor Radon Evaluation & Control	USEPA & FDA/Pennsylvania	Mar 20-21, 1985	2	05.05	Correspondence Course	School	H 05 20 1004	
85-	-60 Symposium on Basic Physics Imaging Performance Measurements	RSNA/Oak Brook, IL	Nov 12, 1983	*	85-85	Legal Aspects of Radiological Health	Gulf States Utilities	Nov 26-30, 1984	1
85~		Rensselaer/Troy, NY	Fall 1984 & Spr 1985	1	85–86	Tenth Biennial Campus Radiation Safety Officer's Conference	Cornell University	Jun 24-27, 1985	3
85-	-62 Annual Meetings	RSNA	Generic App of 1 CEC per day up to 3 CECs		85–87	Medical Uses of Radionuclides	Oak Ridge Assoc Univ	Jun 24-28, 1985, Mar 17-21, 1986, Sep 8-12, 1986	3
85-		HPS/Chicago	May 27-30, 1985 May 28, 1985	3	85-88	Personnel Radiation Dosimetry Symp	Oak Ridge Nat'l Lab	Oct 15-18, 1984	5
(a) (b) (c)) Broadscope Licensing) Prob of Causation Tables	4 4 8 4	May 28, 1985 May 29, 1985	1	85-89	7th Annual Meeting	Bioelectromagnetics Soc San Francisco, CA	Jun 16-20, 1985	2
(d)) How to Handle the Pregnant Tech	15 H	May 29, 1985 May 30, 1985	i	85-90	22nd Nuclear Accident Dosimetry Intercomparison Study	Oak Ridge Nat'l Lab	Aug 12-16, 1985	3
85~ (a)		HPS/New Orleans	Jun 3-7, 1984 Jun 5, 1984	3 1	85–91	HPS Summer School Emergency Planning and Response	HPS/Chicago, IL	Jun 3-7, 1985	15
(b) (c) (d) (e)) Physical & Early Chemical Reactions) Current Status of NVLAP & DOELAP	11 11 11 11 13 11 6 11	Jun 5, 1984 Jun 6, 1984 Jun 6, 1984 Jun 7, 1984]]]	85-92	11th Symposium of Fusion Engineering	IEEE/DOE/ANS/EPRI/Univ of Texas/Austin, TX	Nov 18-22, 1985	*
,	lation Revisions -65 5th DOE Environmental Protection	USDOE/Washington, DC	Nov 6-8, 1984	5	85-94	5th Topical Meeting on the Technology of Fusion Energy	ANS/Knoxville, TN	Apr 26-28, 1983	1
05-	Information Meeting	boote, washington, be	1107 0-0, 1904	,	85-95	Fall Meeting- TOREV Training	NC Chapt HPS/Boone, NC	Nov 2-3, 1984	2
85-	-66 12th IRPA Regional Conference	Comm of European Comm & Netherlands Rad Prot	Mar 25-27, 1985	1	85-96	Personal Computer Applications in HP	Tech Mgmt Serv , Inc	Nov 20-22, 1985	2
85-	-67 Inverness 82 Third Int'l Symposium	Soc for Rad Protection	Jun 7-11, 1982	2	85-97	Designing Effective ALARA Programs	Tech Mgmt Serv , Inc	Oct 28-29, 1985	3
	Rad ProtAdv in Theory & Practice	•••		_	85-98	Neutron Dosimetry	Tech Mgmt Serv , Inc	Oct 7-10, 1985	3
85-	-68 Methods for the Estimation of Indoor Radon Daughter Concentrations	Tech Msmts Center Grand Junction, CO	Jul 27-28, 1983	1	85-99	Air Sampling	Tech Mgmt Serv , Inc	Sep 23-26, 1985	3
85-	-69 Topical Meetings	NE New York Chapter HPS	1984-1985	2	85-100	Calibration of Nuclear Instruments	Tech Mgmt Serv , Inc	Sep 16-18, 1985	3
85-	-70 Mammography	RSNA/Oak Brook, IL	Dec 3, 1982	1	85-101	Impact of Prop Changes to 10CFR20	Tech Mgmt Serv , Inc	Nov 4-5, 1985	2
85-	-71 Unifying Principles	RSNA/Oak Brook, IL	Dec 2, 1982	1	85-102	Radwaste Reduction & 10CFR20 Comp1	Tech Mgmt Serv , Inc	Nov 13-15, 1985	3
85-	-72 Radiation Immunology	RSNA/Oak Brook, IL	Dec 1, 1982	1	85-103	Internal Dose Assessment	Tech Mgmt Serv , Inc	Dec 2-5, 1985	5
85-	-73 Symposium on Basic Physics	RSNA/Oak Brook, IL	Nov 27, 1982	1	85-104	DOE-Contractor HP Meeting	U S DOE/Washington, DC	May 11-14, 1982	5
	Computers in Diagnostic Imaging			_	85-106	DOE Hazardous Material Pkg Workshop	U S DOE/Washington, DC	Dec 4-6, 1984	2
85-	-74 Radioactive Waste Management for Nuclear Power Facilities	Tech Seminars, Inc	Oct 4-7, 1982	3	85-107	DOT Type A Spec 7A Certification Program	Monsanto Res Corp Las Vegas, NV	Mar 7, 1985	1
85-	-75 2nd Annual Meeting	SE Regional HPS Chapters Myrtle Beach, SC	Apr 11-13, 1985	2	85-108	Incineration of Low Level Radioactive Wastes 1985	Univ of California Irvine, CA	Mar 21-22, 1985	3
85-	-76 Joint HPS-ANS Meeting	NC Chapt HPS/Garner, NC	Jan 31, 1985	0	85-109	Radioactive Materials Training Course	U S DOE/Washington, DC	May 6-9, 1985	3
85-	i-77 Meeting & Tour of Process Technology of NC, Inc	NC Chapt HPS Haw River, NC	Mar 1, 1985	1	85-110	Training for Nucl Criticality Safety	Los Alamos Nat'l Lab	Jul 16-17, 1985	2
85-	-78 Scenario Development for Emergency Preparedness Exercises	Battelle PNL Richland, WA	Mar 25-27, 1985	3	85-111	Radiation Risk Estimates & Their Use in Calculating Prob of Causation	USNRC/Silver Spring, MD		2
85-	-79 Emergency Preparedness Plans and Programs	Battelle PNL Richland, WA	Mar 18-22, 1985	2	85-112	Panasonic TLD System Operation	Gulf States Utilities	Jun 1, 1984	0
85_	-80 ACR Report	RSNA/Oak Brook, IL	Nov 29, 1982	0	85-113	3rd Annual TLD Symposium	Panasonic Industrial Co	May 20-25, 1984	2 N
	-81 Radiological Hazards Assoc with	Battelle PNL	Mar 18-22, 1985	3	85-114	General Systems	Gulf States Utilities	Jul 8-26, 1985	·
	Depleted Uranium Munitions	Richland, WA	10 22, 1303	•	85-115	Waste Management '83 Conference	Univ of Arizona/Tucson	Feb 27-Mar 3, 1983	3
					85-116	NE 162 Course Radiation Protection & Control	Univ of CA - Berkeley	Jan 24-May 11, 1984	2

NUMBER	TITLE	SPONSOR/LOCATION	DATE	CECs	NUMBER	TITLE	SPONSOR/LOCATION	<u>DATE</u>	CECs
85-117	8th Annual Meeting	Australian Rad Prot Soc /Adelaide, Australia	Aug 13-17, 1983	4	85-147	Inspection of Nuclear Transportation	U S NRC Arlington, TX Walnut Creek, CA	May 15-16, 1985 Jun 4-5, 1985	2
85-118	PWR Rad Control Seminar	EPRI/Palo Alto, CA	Sep 27-29, 1983	4			King of Prussia, PA Glen Ellyn, IL	Jun 18-19, 1985 Oct 9-10, 1985	
85-119	Nuclear Criticality Safety Curriculum	Los Alamos Nat'l Lab	Aug 3-4, 1982	2			Atlanta, GA	Oct 30-31, 1985	
85-120	Neutron Dosimetry/Technology	DOE/Los Alamos National	Sep 14-16, 1982	3	85-148	WATTec 11th Annual Energy Conference	East TN Chapt , HPS	Feb 23, 1984	1
	Transfer Workshop	Laboratory	Oct 26, 1984	2	85-149	Radiation Science Seminar	Georgetown University	Sep 18-Dec 4, 1985	1
85-121	Fall Technical Meeting	Rio Grande Chapter HPS	•		85-151	Health Effects Models & Reactor Accident Consequence Models	U S NRC	Oct 10, 1985	1
85-122	Spent Nuclear Fuel Transportation	US DOT and US NRC	Jul 31-Aug 2, 1985	2	85-152	Radiological Health Physics	University of Lowell	May 13-25, 1984	4
85-123	APHA — 113th Annual Meeting Radiological Health Section	M S Hershey Med Center Hershey, PA	Nov 19, 1985	2	05 150	State of the San Red Clare and Comment	U	Jun 2-14, 1985	*
85-124	Conf on Radiation Hormesis	No Calif Chapter HPS	Aug 14-16, 1985	3	85-153	Statistics for Radiological Sciences and Protection	University of Lowell	Dec 9-14, 1984	•
85-125	Indoor Radon Course	EPA Regions II & III and FDA/Philadelphia, PA	Mar 20-21, 1985	2	85-154	Internal Radiation Dosimetry	University of Lowell	Jan 15-20, 1984 Jan 13-18, 1985	*
85-126	Non-Ionizing Radiation Workshop	FDA Region II & III Brooklyn, NY	Oct 31-Nov 1, 1984	2				Jun 17-22, 1984 Jun 16-21, 1985	
85-127	A Primer on Theory & Operation of Linear Accelerators	FDA/Brooklyn, NY	Apr 1, 1982	2	85-155	Certification Review for Health Physicists	University of Lowell	Apr 1-6, 1984 Mar 17-22, 1985	6
85-128	3rd Annual Conference	Bioelectromagnetics Soc	Aug 9-12, 1981	1	85-156	Professional Enrichment Program	Health Physics Society Chicago, IL	May 31, 1985	1 ea
85-129	In-Place Filter Testing Workshop	Harvard School of Public Health/Boston, MA	Jun 10-14, 1985, Aug 19-23, 1985	6	85-157	Medical Effects of Nuclear Weapons	AFRRI	Sep 30-Oct 2, 1985	2
85-130	Planning for Nuclear Emergencies	Harvard School of Public Health/Boston, MA	Jun 10-14, 1985	6	85-158	Radioactive Waste Management for Nuclear Power Plants & Other Utilities	ASME	May 2-6, 1983	2
85-131	Radiation Protection Instrumentation	Harvard School of Public	Apr 15-19, 1985,	6	85-159	Annual Meeting	New England Chapt , HPS	May 9, 1985	1
		Health/Boston, MA	Apr 1986		85-160	The Law and The Health Physicist	N Carolina Chapt , HPS	Oct 18-19, 1985	1
85-132	Occupational & Environmental Radiation Protection	Harvard School of Public Health/Boston, MA	Mar 25-29, 1985, Aug 19-23, 1985	6	85-161	Radiol Emerg Response Training for State & Local Gov't Emergency Preparedness Personnel	Reynolds Elec & Eng Co	Feb 8-17, 1984	1
85-133	Biological Effects of Ionizing Radiation	Harvard School of Public Health/Boston, MA	Oct 30-Nov 1, 1984, Jun 17-19, 1986	3	85-162	Beta Dosimetry Workshop for Southern	Porter Consultants	Nov 18-19, 1985	3
85-134	Control of Occupational Exposures	Harvard School of Public	May 13-17, 1985	6	05-102	California Edison	101001 00110011001		
00 ,0 .	ın Nuclear Power Plants	Health/Boston, MA	• ,		85-163	Practical Communication Skills for Health Physicists	Communications Research Institute	Nov 12-15, 1984 Nov 14-16, 1985	2
85-135	Environmental Radiation Surveillance	Harvard School of Public Health/Boston, MA	Jul 15-19, 1985	6	85-164	Ultrasensitive Techniques for	U S NRC	Dec 3, 1985	1
85-136	Environmental Safety & Health	EG&G Idaho, Inc	Feb 1-5, 1982	1		Measurement of Uranium			
	Appraisal Workshop				85-165	Nephrotoxicity of Uranium	U S NRC	Dec 4, 1985	1
85–137	Large Irradiator Rad Safety Workshop	USNRC/Washington, DC	Sep 4-6, 1985	2	85-166	Radon Symposium	NJ Chapter HPS	Mar 22, 1986	1
85-139	Air Monitoring Sampling	IEEE, Nuclear Plasma & Science Soc /San Francisco	Oct 23-25, 1985	1	85-167	Radiation Detection & Measurement	Eberline	Several times a year	0
85-140	Radiopharmaceutical Dosimetry Symp	Oak Ridge Assoc Univ	Nov 5-8, 1985	4	85-168	Perception & Communication of Radiation Risks	Greater NY Chapt , HPS	Oct 11, 1985	2
85-141	ICRU Report 39	USNRC	Aug 20, 1985	2	85-169	Symposium on Thermoluminescent	National Bureau of Stds	Sep 28, 1985	1
85-142	Mobile Robotic Surveillance Equip-	USNRC	Aug 20, 1985	1		Dosimeters Theory & Application			_
	ment for HP Applications	HCNDC	Nov 26, 1985	1	85-170	The Mexican Accident	East TN Chapter HPS	Oct 24, 1985	1
85-143	Federal Radiation Protection Guidance	USNRC		1	85-171	The Nuclear Winter	East TN Chapter HPS	Nov 22, 1985	0
85-144	Profession on Trial	East TN Chapt , HPS U S DOE	Apr 24, 1985 Apr 9, 1985	2	85–172	Radiological Emergency Response	Reynolds Elec & Engr FEMA	Several times in 1986	0
85-145	Workshop on Radiobiological Effectiveness of Neutrons	0 3 000	טפו ,כ ואָה	4	85-173	Nuclear Power Plant Emergency Planning	Rensselaer Institute	Dec 10-11, 1985	0
85-146	Beta Dosimetry Workshop for N E Utilities	Porter Consultants	Sep 25-27, 1985 Oct 9-11, 1985	3	85-174	Workshop on Radiobiological Effectiveness of Neutrons	DOE, Germantown, MD	Apr 9, 1985	*

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	85-175	Computational Methods in Reactor Analysis	University of Tennessee	Sep 9-13, 1985	*	86-12	Governor's Conference on Indoor Radon	NY State Dept of Health	Mar 4-5, 1986	2
	85-176	Morse CGA Workshops	Oak Ridge National Lab	Jun 17-20, 1985	*	86-13	Building Our Nuclear Future	AIF Annual Conference	Nov 10-13, 1985	2
	85-177	Quality Assurance of Chemical Msmts	National Bureau of Stds	Oct 29-30, 1985	0	86-14	Criticality Accident Dosimetry	ORNL	Aug 4-8, 1986	5
	85~178	Non-Ionizing & Ionizing Radiation	No Carolina Chapter HPS	Dec 10-13, 1985	1	86-15	Overview of DOE's Remedial Action Projects	E Tennessee Chapter HPS	Feb 4, 1986	1
	85-179	Uses in the Healing Arts Health Issues of NonIonizing Radiation	New England Rad Health	Oct 29-30, 1985	1	86-16	Quality Assurance & Quality Control During Decontamination and Decommissioning	E Tennessee Chapter HPS	Feb 3, 1986	1
1	00 .,,	for State Radiation Control Programs	Committee	000 25 00, 1500		86-17	Internal Dosimetry for Fixed Nuclear Facilities	Oak Ridge Assoc Univ	Mar 31-Apr 4, 1986	7
	85-180	Radiation Safety Issues in Laboratory and Clinical Research Institutions	Nat'l Inst of Health	Dec 16-17, 1985	×	86-18	In Place Filter Testing Workshop	Harvard Sch of Pub Health	Jun 9-13, 1986 Oct 20-24, 1986	6
	85-181	An Update in Physics of Nucl Medicine	AAPM Summer School	Jul 25-29, 1983	*	86-19	Biological Effects of Ionizing Radiation	Harvard Sch of Pub Health	Jun 17-19, 1986	3
	85-182	Management's Responsibilities in Radiation Safety Programs	Technical Mgmt Services	Apr 22-23, 1985	*	86-20	Occupational & Envir Radiation Protection	Harvard Sch of Pub Health	Mar 24-28, 1986, Aug 11-15, 1986	6
4	85-183	EEI Health Physics Committee Meeting	Edison Electric Inst	Apr 16-19, 1985	3	86-21	Planning for Nuclear Emergencies	Harvard Sch of Pub Health	Jun 9-13, 1986	6
	85-184	Control of Occupational Exposures in Nuclear Power Plants	Harvard School of Public Health	May 13-17, 1985	6	86-22	Environmental Radiation Surveillance	Harvard Sch of Pub Health	Apr 14-18, 1986	6
, à	85-185	5th International Workshop on Bone & Soft	University of Pennsylvania	0-4 14 19 1005	3	86-23	Radiation Protection Instrumentation	Harvard Sch of Pub Health	May 12-16, 1986	6
	05-105	Tissue Densitometry Using Computed Tomography	oniversity of remisgramia	000 14-10, 1903	3	86-24	Advanced Course on Nuclear Emergency Planning	Harvard Sch of Pub Health	Jul 14-18, 1986	6
,	85–186 85–187	Patient Dose in Diagnostic Radiology 2nd International Workshop on Lung Dosimetry	RAMPS	Apr 11, 1985	1	86-25	Non-Ionizing Radiation Sources, Biological Effects & Control	Harvard and New England Chapter HPS	Feb 27, 1986	1
	03-107	Zild International workshop on Lung Dosimetry	British Occupational Hygiene Society	Sep 4-6, 1985		86-26	Spring Symposium	Great Lakes Chapter HPS Dearborn, MI	Apr 8, 1986	2
		* * * * * * *	******			86-27	Radon & Radon Daughters Sources,	Air Pollution Control Assn /	,	1
		1986 COURSES APPROVED BY THE CONTINUING EDUCATION PANEL					Properties, Behavior & Measurement Methods & Techniques	Philadelphia Philadelphia Minneapolis	Feb 24, 1986 Mar 10, 1986 Jun 22, 1986	
	NUMBER	TITLE	SPONSOR/LOCATION	DATE	CECs	86-28	1986 Spring Meeting	No Central Chapter HPS	Apr 25, 1986	2
	86-1	Probability of Causation	New England Chapter-HPS	Nov 21, 1985	1	86-29a-r	Professional Enrichment Program	HPS/P1ttsburgh	Jun 29, 1986	1 ea
	86-2	The Health Physics of Non-Ionizing Radiation	University of Lowell	Mar 9-14, 1986	3		(a) Inhaled Radionuclides (b) Personnel Neutron Dosimetry			
	86-3	Internal Radiation Dosimetry	University of Lowell	Jan 12-17, 1986 Jun 15-20, 1986	6		(c) Radiation Fields from Extended Sources (d) Biopositive Effects of Ionizing Radiation (e) Probability of Causation			
	86-4	Certification Review for Health Physicists	University of Lowell	Mar 16-21, 1986	6		(f) Fundamentals of Radiobiology (g) Reactor HP for Non—Power Reactor HPs			
	86-5	Basic Radiological Health Physics	University of Lowell	Jun 1-6, 1986	0		(ĥ) Off-Site Dose Assessment (i) Use & Misuse of the ALARA Concept			
	86-6	Advanced Radiological Health Physics	University of Lowell	Jun 8-13, 1986	0		(j) Radiation Dosimetry & Protection in Diagnost Radiology	.10		
	86-7	1985 Fall Technical Meeting	R10 Grande Chapter HPS	Oct 25, 1985	1		(k) What Every HP Should Know About Radiation & Pregnancy			
	86-8	Conference on Incineration of Low-Level Radioactive and Mixed Wastes	Univ of Calif -Irvine	Apr 22-25, 1986	*		(1) Medical Aspects of Radiation Injury (m) HP Lessons History Has Taught Us (n) Pitfalls in Radiation Protection Management			
	86-9	Monte Carlo	Los Alamos Nat'l Lab	Oct 1982-May 1983	3		(o) The Advantages & Simplifications of SI Units in HP			
	86-10a-e	RSNA Refresher Courses (a) Course 117 - Protection Design for Diagnostic and Therapeutic Fac		Nov 17, 1985	1		 (p) Hazard Analysis of Laser Installations (q) Approaches to Understanding Radiation Risks (r) Health Physics Measurement Quality Assurance 	<u> </u>		
		(b) Course 216 - Unifying Principles of Medical Imaging		Nov 18, 1985	1	86-30	Nuclear Emergency Search Team Training	DOE/E G & G	May 1-2, 1985	0
		(c) Course 416 - High Energy Beam Calibration in Rad Therapy		Nov 19, 1985	1	86-31	Training Course on Prevention of	DOE/Argonne/Oakland	Jan 14-17, 1985	1
		(d) Course 514 - Radiation Accidents and Over- exposure Real & Imagined		Nov 20, 1985	0		Significant Nuclear Events	Knoxville Idaho Falls	Mar 25-28, 1985 Jun 3-6, 1985	
		(e) Course 616 - Risk vs Benefit in Diagnostic Radiology		Nov 21, 1985	1	86-32	Int'l Workshop on ALARA at Nuclear Power Plants	Brookhaven National Lab	May 29-Jun 1, 1984	3
	86-11	Image Quality & Radiation Risks In Medical	Soc of Photographic	Jan 22, 1986	1	86-33	19th DOE/NRC Nuclear Air Cleaning Conference	Harvard/DOE/NRC, Seattle	Aug 17-21, 1986	2
	80-11	Imaging	Scientists & Engineers	22, 7500	•	86-34	Internal Radiation & Control	Univ of Lowell	Jun 25, 1985	1

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86-35	1986 Summer School/Ext Dosimetry	HPS/Penn State Univ	Jun 23-27, 1986	16	86-65	1985 Pacific Occupational Safety	San Jose, CA	Sep 26-28, 1985	1
86-36	The Shippingport Decontam & Decommiss Proj	E Tennessee Chapter HPS	Feb 5, 1986	*		and Health Conference			
86-37	Medical Radiation Health Physics	Academic Council for HP Recert /Georgetown Univ	Jun 4, 1986	2	86-65a	POSHC Workshop — Juarez Mexico — A Case Study in Radioactive Contamination		Sep 26, 1985	1
86-38	Health Physics Certification Review	Balt -Washington Chp HPS	Jan 8-May 28, 1986	6	86-66	114th Annual Meeting	APHA/Las Vegas	Sep 29-30, 1986	3
86-39	Internal Dose Assessment	Technical Mgmt Service		5	86-67	HP Training/Refresher Course	DVSRS Chapter HPS	Jan 13-Jun 9, 1986	6 5
		San Francisco Boston	May 19-22, 1986 Nov 2-6, 1986		86-68	Risk Analysis in Environmental Health	Harvard	Sep 3-5, 1986	3
86–40	Medical Uses of Radioisotopes (USNRC Course H-304)	Univ of Texas Health Science Center	periodical	3	86–69	Biological Effects and Risks from Radiation in the Nuclear Power Industry	Porter Consultants	Aug 25-27, 1986, Sep 8-10, 1986	3
86-41	Occup Health in the Nuclear Indus -Update 86	Univ of PA School of Med	Aug 20-22, 1986	2	86–70	Nuclear Power Conference	ASME/ANS	Jul 20-23, 1986	2
86-42	The Application of Risk to Radiation Standards	Greater NY Chapter HPS	Apr 7, 1986	2	86-71	Meeting-Current Practices in Low-Level Waste Management	Savannah River Chapt HPS	Sep 14, 1986	1
86-43	Air Sampling	Oak Ridge Assoc Univ	Jun 9-13, 1986	2	86-72	Meeting-CT Acceptance Testing	Savannah River Chapt HPS	Nov 14, 1985	1
86-44	3rd Annual Meeting	SE Reg HPS Chp Myrtle Bch	Apr 10-12, 1986	2	86-73	Current Issues Risk Based Stds , Internal &	University of Michigan	Nov 2-6, 1987,	4
86-45	Spring 1986 Meeting	Mid-America Chapter HPS	Apr 4-5, 1986	1		External Dosimetry, 10CFR20 Revisions, and Radiation Risk		Nov 7-11, 1988, Nov 6-Oct 89	
86-46	Waste Management 86	Univ of Arizona	Mar 2-6, 1986	3	86-74	Management of Radiation Accidents	Univ of NM Med School	Oct 2-4, 1986	2
86-47	1986 Spring Meeting	(Same as 86-28)	Apr 25, 1986	2	86-75	Radon in Bldgs -Measurements, Evaluation	Harvard	Jan 29, 1987	1
86-48	Health Physics	Wilford Hall USAF Med Ctr	Apr 7-10, 1986	2		and Control			
86-49	Radioactive Material Shipping, Reg Awareness Course	Chem Nuclear	Apr 28-May 2, 1986	1	86-76	13th Water Reactor Safety Research Information Meeting	National Bureau of Stds	Oct 22-25, 1985	1
86-50	8th Annual Meeting	Bioelectromagnetics Soc	Jun 1-5, 1986	1	86–77	Radiation Biophysics Alumni Symp and Fall Meeting	Univ of Kansas and the Mid-American Chapter HPS	Sep 30-Oct 1, 198	3 2
86-51a-f	(a) Accelerator Radiation Fields	HPS Annual Meeting Pittsburgh	Jul 1, 1986 Jul 1, 1986	l ea	86-78	Radiation Exposure Management (REM) Seminar	Westinghouse Electric Corp	Oct 9-12, 1983, Sep 29-Oct 2, 198	3 5
	(b) Radon Measurement Methods (c) Hazards of Airborne Radioactivity (d) A Monte Carlo Primer for HPs	Jul 2, 1986	Jul 2, 1986		86-79	Conference on Nuclear Industry Radiation Issues — 1986 and Beyond	AIF	Oct 5-8, 1986	3
	(e) Health Physics of Industrial Radiography (f) Human LD _{CD} 's Reviewed	Jul 3, 1986	Jul 3, 1986		86-80	Radon Workshop & Subsequent Developments	USEPA. Region I	Jan 21-23, 1986	2
86-52	Spring Scientific Meeting	Upstate NY Chapter HPS	Jun 10, 1986	1	86-81	Fed Rad Emergency Response Capabilities Conf	USNRC-Willow Groves, PA	Oct 28-29, 1986	1
86-53	Medical Radiation Health Physics	(see 86-37)	Jun 4, 1986	2	86-82	Early Emergency Responders Workshop	USNRC-Willow Groves, PA	Oct 30-31, 1986	1
	Annual Meeting	New England Chapter HPS	May 29, 1986	1		3rd Annual Radiological Lab Workshop	Winchester Engineering	May 6-7, 1986	*
86-54	·	Panasonic Industrial Co	Jun 9-13, 1986	2	86-83	ard Annual Radiological Lab Workshop	Analytical Center	May 0-7, 1900	
86-55	5th Annual TLD Symposium	USNRC	Oct 8-10, 1985	2	86-84	Reactor Safety Course I	MIT	Jul 11-15, 1983	1
86-56	All Agreement States Meeting		ř	1	86-85	Reactor Safety Course II	MIT	Jul 18-22, 1983	1
86-57	LLRW Policy Act Amendment of 1985	USNRC	Jun 24-25, 1986	3	86-86	Symposium on Low Level Waste	Greater NY Chapter HPS/	Oct 20, 1986	2
86-58	Envir Monitoring Around Nuclear Facilities	Yankee Atomic Elec Co	Mar 10-14, 1986	-			Northeast NY Chapter HPS	0 . 17 10 1006	
86-59	Neutron Personnel Dosimetry	Oak Ridge National Lab	Nov 17-20, 1986	3	86–87	Chapter Meeting - Respiratory Protection	NC Chapter HPS, Boone, NC	Oct 17-18, 1986	1
86-60	Conference on Bioassay, Analytical and Environmental Chemistry	Yankee Atomic Elec Co	Oct 13-14, 1982, Oct 12-13, 1983,	5	8688	Fall Scientific Meeting	Upstate NY Chapter AAPM	Nov 10, 1986	1
			Oct 10-12, 1984, Oct 8-10, 1985, 10, 1986		86-89	Reducing Cobalt in Nuclear Plant Materials to Control Radiation Fields	Electric Power Research Institute/Seattle, WA	May 13-14, 1986	3
86-61	BWR Technology Course	USNRC	Jul 21-25, 1986	2	86-90	Operation of Panasonic TLD Readers	Phillip Plato, Inc	Feb 24-28, 1986	3
86-62	PWR Technology Course	USNRC	Jun 27, 1986	2	86-91	Operation of a Panasonic TLD Program	Phillip Plato, Inc	Mar 10-14, 1986	2
86-63	BWR/PWR Radwaste	USNRC	1986	2	86-92	#417-Physiologic Basis of Contrast in MR Imaging	RSNA-AAPM	Dec 2, 1986	1
86-64	Management & Control of High Level	Science Applications Int'l	Jul 23, 1986	1	86-93	Optimization of Radiation Protection	Brookhaven National Lab	May 18-22, 1987	4
	Nuclear Wastes				86-94	Radiological Protection Manager's	Institute of Nuclear Power Operations (INPO)	Dec 8-10, 1986	2
						Workshop	TOWER OPERACIONS (INTO)		

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	IBER	TITLE	SPONSOR/LOCATION	DATE	CECs	NUMBER	TITLE	SPONSOR/LOCATION	DATE	CECs
86-	-95	Beta Dosimetry Workshop	Porter Consults /Arizona Minnesota Pennsylvania	Oct 20-24, 1986, Dec 3-4, 1986, Nov 11-12, 1986,	3	87-12	Radon Risks, Implications and Technology	Susquehanna Valley Health Physics Association	Apr 3-4, 1987	2
			·	Nov 24-25, 1986, Dec 15-16, 1986, Dec 17-18, 1986,		87-13	Symposium on Natural Rad and Technologically Enhanced Natural Radiation in Florida	Florida Chapter HPS	May 6-8, 1987	2
				Jan 6-7, 1987, Jan 22-23, 1987		87-14	1987 Spring Symposium — The Perception of Radiation	Great Lakes Chapter HPS	Apr 8, 1987	1
86-	-96	Quality Control Workshop	ASG Assoc , Inc Rockville, MD	Nov 17-19, 1986, May 13-16, 1986,	2	87-15a-b a	20th Midyear Meeting — Continuing Ed Courses Properties of the Electromagnetic Cascade A	Health Physics Society	Feb 10, 1987	1
				May 20-23, 1986, 1987 Dates		b	Tutorial Utilizing High Resolution 3D Graphics Protecting Against Neutrons from Radiation— Producing Machines		Feb 11, 1987	1
86-	-97	Summer School — Health Physics Aspects of Nuclear Attack	HPS Hammond, LA	May 27-Jun 1, 1984	16	87-16	Chapter Meeting	North Carolina Chapt HPS	Mar 13-14, 1987	2
86-	-98	Uranium Health Protection Seminar	DOE/Rockville, MD	Nov 5-7, 1985	2	87-17	International Decommissioning Symposium	USDOE/IAEA	Oct 4-8, 1987	3
86-	-99	Meeting - Chernobyl	Great Lakes Chapter HPS	Sep 13, 1986	1	87-18	Waste Management '87	Univ of Arizona	Mar 1-5, 1987	3
, 86-	-100	Topical Meeting "Operability of Nuclear Power Systems In Normal and Adverse Environments	ANS/ENS	Sep 29-Oct 3, 1986	0	87-19	Factors Influencing the Selection of a Treatment Planning Computer	Radiological & Medical Physics Society of NY	Apr 17, 1987	1
86-	-101	32nd Annual Conference on Broassay, Analytical and Environmental Radrochemistry	National Bureau of Standards	Oct 21-23, 1986	4	87-20	Fall Meeting	No Central Chapter HPS Rochester, MN	Oct 10, 1986	2
⁴ 86-	-102(a)	Personal Computer Applications in Health Physics	Tech Management Services	Mar 24-26, 1986	2	87-21	Spring Meeting	No Central Chapter HPS	Apr 24, 1987	2
•		Impact of Proposed Changes to 10CFR20 Radwaste Reduction Techniques	Tech Management Services Tech Management Services	Feb 17-18, 1986 May 5-7, 1986	3 2	87~22	Topical Conference on Theory and Practices in	Univ of WI American Nuclear Society	Apr 22-24, 1987	4
86-	-103	Categorical Course Summary on Chest Radiology	Amer Roentgen Ray Society	Apr 13-18, 1986	3		Radiation Shielding and Protection			
86-	-104	MRI 1986 National Symposium	University of South Florida	May 5-9, 1986	3	87-23a-h a	Annual Meeting Continuing Education Courses Practical Aspects of Calibration Procedures for	HPS - Salt Lake City	Jul 6, 1987	1
86-	-105	3rd Annual Meeting	ACMP	Aug 8-10, 1986	0	b	Airborne Radioactivity Monitors Ventilation System Design for Health Physics —		Jul 6, 1987	1
86-	-106	Annual Meeting	American Chemical Society	Sep 7-12, 1986	3	С	The Fumed Hood Recent Developments in Radiation Litigation		Jul 7, 1987	1
86-	-107	Environmental Regulation	Executive Enterprises	Nov 19-21, 1986	1	d e	Interpretation of Bioassay Measurements Federal Response in Large Rad Emergencies		Jul 7, 1987 Jul 8, 1987	1
86-	-108	NRC Licensing Process	U S Department of Energy	Aug 26, 1986	1	f g	Problems of Radiation Exposure Measurements in Confined Atmospheres A Review of Basic & Current Transportation		Jul 8, 1987 Jul 9, 1987	1
		* * * * * * * *	* * * * * * * * * * *			h	Regulations Mixed Waste (Chemical, Radiological, Biological) Who's Baq?		Jul 9, 1987	1
		COURSES APPROVED BY TI	1987 HE CONTINUING EDUCATION PANEL			87-24a-x	Professional Enrichment Program	HPS - Salt Lake City		1 ea
NUM	1BER	TITLE	SPONSOR/LOCATION	DATE	CECs	a	Principles and Problems of Site Planning for Non-Ionizing Imaging Devices	•	Jul 5, 1987	
87-	-1	Certification Preparation Course	Nucleon Lectern Assoc	Jun 1-5, 1987	4	b	Safety Aspects and New Developments of Lasers, Including Fiber Optic Telecomm Systems		Jul 5, 1987	
87-	-2	Physicians Seminar on Radiation Effects on Man	M S Hershey Med Center	Nov 14-16, 1986	3	c d	Basics and Hazards of Ultraviolet Radiation What Every Health Physicist Should Know About		Jul 5, 1987	
87-	-3	32nd Annual Conference on Bioassay, Analytical and Environmental Radiochemistry	National Bureau of Stds	Oct 21-23, 1986	4	e f	Radiation and Pregnancy Advantages & Simplification of SI Units in HP Health Physics Lessons History Has Taught Us		Jul 5, 1987 Jul 5, 1987 Jul 5, 1987	
87-	-4	Ventilation and Filtration	San Onofre Nucl Gen Sta	Feb 3, 1987	1	g	Essentials of Internal Dosimetry - How To Do More With Less		Jul 5, 1987	
87-	-5	Health Physics Course	USAF, Brooks, AFB, TX	Apr 6-9, 1987	2	h	Interpretations & Practical Appl of Internal Dose Recomm , Incl Mis-Interpretations		Jul 5, 1987	
87-	-6	23rd Nuclear Accident Dosimetry Intercomparison Study	Oak Ridge National Lab	Aug 10-14, 1987	5	ı J k	Personnel Neutron Dosimetry Preparation for Radiation Related Litigation HP for a Broad License Academic Program		Jul 5, 1987 Jul 5, 1987 Jul 5, 1987	
87-	-7	25th Hanford Life Sciences Symposium Radiation Protection - A Look to the Future	Battelle Pacific NW Lab	Oct 21-23, 1986	4	n n	Health Physics Concerns in Nuclear Medicine Changes in the Field of Respiratory Protection Fundamentals and Current Directions of Solid		Jul 5, 1987 Jul 5, 1987 Jul 5, 1987	
87-	-8	Basic Project Management Planning, Scheduling and Control	American Management Assoc	Mar 30-Apr 2, 1987	*	0 P	State Dosimetry Recent Developments in Decontamination Tech Principles of Whole Body Counting		Jul 5, 1987 Jul 5, 1987	
87-	-9	Radon Measurement & Control	Rutgers University	Feb 6, 1987	1	q	Power Reactor ALARA Program Principles of Plutonium Handling		Jul 5, 1987	
87-	-10	Bridging the Gap - Public Communication in Health Physics	Columbia Chapter HPS	Mar 19-20, 1987	1	s t	The Correct Use of Field Instruments— Problems & Pitfalls Use of Computer Programs for Typical HP Problems		Jul 5, 1987 Jul 5, 1987 Jul 5, 1987	
87-	-11	Radon, Radium and Environmental Radioactivity	IL Dept of Nucl Safety	Mar 10-11, 1987	2	и У Ж х	Atmospheric Modeling Problems and Pitfalls Review of the Fundamentals of X-Ray Machines Review of the Fundamentals of Counting Stats Review of the Fundamentals of Dosimetry		Jul 5, 1987 Jul 6, 1987 Jul 7, 1987 Jul 8, 1987	

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87-25	Army Medical Dept Physics in Mil Med Course	US Army Envir Hygiene Agen	Oct 20-24, 1986	3	87-56	Fourth Annual Meeting of the Southeastern Regional HPS Chapters	Virginia Chapter, HPS	May 7-9, 1987	2
87–26	Incineration of Low Level & Mixed Wastes, 1986	Univ of Calif -Irvine	Apr 22-25, 1986	3	87-57	HPS Annual Meeting	New England Chptr HPS	Jun 2, 1987	2
87-26a	Incineration Basics Mini Course	Univ of Calif -Irvine	Apr 22, 1986	1	87–58	A Practical Personal Computer Course for HPs	Nucleon Lectern Associates	Sep 15-16, 1987	3
87-27	Development of Risk Factors and Their Application to Radiation Protection Standards	San Onofre Nucl Gen Sta	Feb 18, 1987	1	87-59a	Basic Radiological Health	University of Michigan	May 2-13, 1987,	*
87–28	Winter Meeting	Upstate NY Chapter AAPM	Mar 30, 1987	1	87–59b	Environmental Assessment & Emergency Planning	oniversity of michigan	May 3-14, 1988, May 1-Dec 89	
87–29	Occupational & Environ Radiation Protection	Harvard Sch of Pub Health	Aug 10-14, 1987,	6	87-60	Developing Low-Level Radioactive Waste Disposal Options at the Oak Ridge Facilities	East Tenn HPS Chapter	Mar 24, 1987	1
			Mar 28-Apr 1, 1988, Aug 15-19, 1988		87-61	Campus Radiation Safety Officers 11th Biennial Conference	McGill University	Jun 8-11, 1987	3
87-30	Nuclear Power Plant Control Room Habitability	Harvard Sch of Pub Health	Apr 27-May 1, 1987	2	87-62	Early Physical & Chemical Events in	East Tenn HPS Chapter	May 26, 1987	2
87-31	Control of Occupational Exposures in Nuclear Power Plants	Harvard Sch of Pub Health	May 11-15, 1987	6		Irradiated Water			
87-32	In-Place Filter Testing Workshop	Harvard Sch of Pub Health	Jun 15-19, 1987, Oct 5-9, 1987, Jun 13-17, 1988,	б	87–63	Practical Radiation Shielding	Shonka Research Associates	Sep 14, 1987 and at various dates through Sep 1989	4
			Fall 1988		87-64	Radon — A Potential Radiation Hazard in the Home	San Onofre Nuclear Gen Stn	May 13, 1987	1
87–33	Planning for Nuclear Emergencies	Harvard Sch of Pub Health	Jun 15-19, 1987, Jun 13-17, 1988	6	87-65	Health Physics Symposium	USAF Medical and HPs	Apr 6-9, 1987	3
87-34	Advanced Workshop on Occupational & Environmental Radiation Protection	Harvard Sch of Pub Health	Jul 13-17, 1987	6	87-66	Nuclear Radiation & Public Health Practices and Policies in the Post-Chernobyl World	Georgetown University	Sep 18-19, 1987	3
87-35	Radiation Protection Instrumentation	Harvard Sch of Pub Health	Apr 18-22, 1988	6	87-67	32nd Annual Meeting Evaluation of	HPS Annual Meeting	Jul 9-Jul 10, 1987	1
87-36	Environmental Radiation Surveillance	Harvard Sch of Pub Health	May 16-20, 1988	6	87-68	9th Annual Meeting	Bioelectromagnetics Society	Jun 21-25, 1987	2
87-37	Advanced Course on Nuclear Emergency	Harvard Sch of Pub Health	Jul 11-15, 1988	6	87-69	The Effects of Nuclear Reactor Accident	Greater NY HPS Chapter	Apr 3, 1987	2
87-38	Evaluation and Control of Radon and Progeny	University of Lowell	Feb 16-20, 1987	3		at Chernobyl		3 3 5 1007	
87-39	Certification Review for HPS	University of Lowell	Mar 15-20, 1987	6	87–70	1987 Nuclear Criticality Safety Short Course	Dept of Chemical & Nuclear Engineering, Univ of NM	Jun 1-5, 1987	4
87-40	Fundamentals of Rad Health Physics (Basic)	University of Lowell	May 31-Jun 5, 1987	0	87-71	New Dosimetry at Hiroshima and Nagasaki and	NCRP	Apr 8-9, 1987	3
87-41	Advanced Radiological Health Physics	University of Lowell	Jun 7-12, 1987	3	07.70	Its Implications for Risk Estimates	Central Rocky Mountain HPS	Apr. 16 1007	2
87-42	Internal Radiation Dosimetry	University of Lowell	Jun 14-19, 1987	6	87–72	Annual Technical Meeting	Chapter	Apr 16, 1987	2
87-43	Beta Dosimetry Workshop	Porter Consultants, Inc	Mar 16-19, 1987, Apr 7-8, 1987	3	87-73	Bloassay Workshop	East TN HPS Chapter	Sep 19, 1987	1
87-44	Gamma Spectroscopy & Whole Body Counting	Tech Management Services	Mar 16-19, 1987	3	87-74	ABACOS II Body Burden System Operation	Canberra Industries, Inc	Aug 24-28, 1987	2
87-45	New vs Old 10CFR20	New England Chapter HPS	Apr 22, 1987	1	87-75	Hanford Health Effects Panel	Centers for Disease Control	Sep 21-27, 1986	0
87-46	Public Health Hazards of Radon	University of Pittsburgh	Mar 20, 1986	1	87–76	Respiratory Protection at Nuclear Power Plants	Radiation Safety Associates Central Connecticut State	Jul 28-31, 1987 Oct 5-9, 1987	2
87-47	Rad Material Transportation Advanced Workshop	U.S. Department of Energy	Apr 13-17, 1987	3			central connecticat state	Oct 19-22, 1987	
87-48	Neutron Personnel Dosimetry	Oak Ridge National Lab	Nov 9-12, 1987	3	87–77	Seminar on the Management of Victims of Radiation Incidents and Accidents	Radiation Emergency Assistance Center/Training	Jul 8-17, 1987	6
87-49	Mngt of Rad Accident and Emer Preparedness	Battelle, Pacific Northwest		4		Red terror increases and Accidences	Site (REAC/TS)		
87-50	Radiation Dosimetry and Measurement	Battelle, Pacific Northwest		4	87-78	International Non-Ionizing Radiation Workshop	Int'l Rad Protection Assn	Apr 5-8, 1988	4
87-51	Rad Hazards Associated with Depleted Uranium	Battelle, Pacific Northwest		3	87–79	Electron and X-Ray Therapy Machines	Univ of Texas System Cancer Center	Feb 2-6, 1987	4
87-52	Radiation Biology/Acute and Delayed Effects	E TN Chapter HPS	Apr 7, 1987	2	87-80	Magnetic Resonance Imaging in Medical Practice	Mount Sinai Medical Center	Mar 10-14, 1985	2
87-53	Annual Meeting	Canadian Radiation	May 5-7, 1986	1	87-81	SIGNA MR Physicist Course	GE Medical Systems Group	Jan 20-22, 1987	2
J. 20	-	Protection Association			87-82	#128 Categorical Course in Radiation Therapy	Radiological Society of	Nov 17-22, 1986	2
87–54	Rad Emergency Response Training for State and Local Government, Emergency Preparedness Personnel	Reynolds Electric & Eng and U S Dept of Energy	Apr 16-25, 1986	3	87-83	#316 The Role of the Physicist in Radiology Radiology Oncology Physics	North America Miami University (AAPM	Jul 27-Aug 1, 1986	5
87-55	Laser/Microwave Hazard Workshop	U S Army Envir Hygiene Ag	Apr 27-May 1, 1987	3	07-03	Radiology officings rigsics	Summer School)	001 E7-Aug 1, 1900	J
07-00	Laser/Histowave Hazard Mornshop	Hygrene Agency	27	-	87-84	Health Physics	Ontario Hydro	Nov 9-13, 1987	3

	NUMBER	TITLE	SPONSOR/LOCATION	DATE	<u>CECs</u>	NUMBER	TITLE	SPONSOR/LOCATION	DATE	<u>Ē</u>	CECs
	87~85	9th Annual Low Level Waste Management Conf	U S Department of Energy	Aug 25-27, 1987	2	87-112	Fall Meeting	HPS - North Central Chapter	0ct	9, 1987	2
	87-86	Environmental Monitoring for Radioactivity	Oak Ridge Associated Univ	Aug 31-Sep 4, 1987	2	87-113	Edison Electric Institute Annual Meeting	Edison Electric Institute			
	87~87	Technical Session	South Texas Chapter HPS	Oct 24, 1987	1		17th Annual Meeting 18th Annual Meeting	Portland, OR Boston, MA	Sep		3 3
	87~88	Operational Measurements	HPS 1987 Summer School	Jul 12-17, 1987	16		20th Annual Meeting 21st Annual Meeting	Minneapolis, MN Dallas, TX	Apr	7-9, 1987	3 3
	87~89	Environmental Audits A Means to Avoid Chemical and Waste Related Litigation	Rocky Mountain Assoc of Environmental Professiona's	Oct 1-2, 1987	1		22nd Annual Meeting	Rye Brook, NY		22-25, 1987	3
	87~90	Monte Carlo Analysis		Con 14 10 1007	4	(b)) 72nd RSNA Scientific Assembly, Course 518) 72nd RSNA Scientific Assembly, Course 217	RNSA-AAPM	Nov		*
	87~91	Radiation Hormesis	Univ of TN, Coll of Engr	Sep 14-18, 1987	·	(c) (d)	72nd RSNA Scientific Assembly, Course 120 72nd RSNA Scientific Assembly			29, 1987 29-Dec 2, 1987	*
		Radiation Detection and Measurement/Course I	Baltimore-Washington HPS TMA/Eberline	Nov 19, 1987	1	87-115	Respiratory Protection Regulatory Awareness	Detriot Edison		8-9, 1987	1
	01~92(a)	Radiation Detection and measurement/Course 1	INA/EDETITRE	Nov 2-6, 1987, Feb 1-5, 1988,	U	87-116	Radon, Radium and Environmental Radioactivity	IL Dept of Nuclear Safety	Mar	10-11, 1987	2
				May 2-6, 1988, Oct 3-7, 1988		87-117	Radon and Its Associated Health Hazards	Great Lakes Chapter, HPS		26, 1987	1
	87~92(b)	Radiation Detection and Measurement/Course II	TMA/Eberline	Nov 9-13, 1987,	0	87-118	Changing Regulations and Their Impact	Greater NY Chapter, HPS		19, 1987	1
				Feb 8-12, 1988, May 9-13, 1988,		87-119	Fall Meeting	AAPM Upstate NY Chapter		12, 1987	*
				Oct 10-14, 1988		87-120	Accelerator Applications and Health Physics	Great Lakes Chapter, HPS		12, 1987	1
· "	87~93	Health Physics in Radiation Accidents	Oak Ridge Associated Univ	Jan 12-16, 1987, Sep 14-18, 1987,	6	87-121	Applied Gamma Spectroscopy	Tech Management Services		14-18, 1987	3
				Jan 11-15, 1988, Sep 12-16, 1988		87-122	Internal Dose Assessment	Tech Management Services		27-30, 1987	4
	87~94	Transportation of Hazardous Materials and	Gov't Services Institute	Jun 8-12, 1987	2	87-123	Beta Skin Dose Calculations	Tech Management Services	•	18-20, 1987	3
		Dangerous Goods							Nov		J
	87~95	USDOE Radioactive Material Transportation Wkshp	Science Applications Int'l	Apr 1-4, 1985	1	87-124	Radiological Response Characteristics of	Northeastern NY Chapter, HPS			*
	87~96	1984 Plutonium/Uranium Chemical Recovery Operations Conference	Y-12 Plant	Oct 16-18, 1984	*	·	GM Tubes Commonly Used in Radiation Monitoring Instruments	nor theustern it chapter, in s	DEC	3, 1307	
	87~97	1987 Annual Meeting Conference	Inst of Nuc Materials	Jul 12-15, 1987	2	87-125	Internal Dosimetry Calculations (ICRP-30) Using a Personal Computer	Northeastern NY Chapter, HPS	Sep	14, 1987	*
	87~98	Bias in Nondestructive Assay for Nuclear Materials Accountability	Inst of Nuc Materials	Mar 30-Apr 2, 1987	3	87-126	Radon Studies in New York State	Northeastern NY Chapter, HPS	May	12, 1987	*
	87~99	1985 Annual Meeting Conference	Inst of Nuc Materials	Jul 22-24, 1985	2	87-127	FUSRAP Sites in New York	Northeastern NY Chapter, HPS	Feb	19, 1987	*
	87~100	Calorimetric Assay Training School	Monsanto Research Corp	Apr 16-19, 1985	2	87-128	NVLAP/DOE	Tech Manafement Services	Nov	19-20, 1987	2
	87~101	1985 Plutonium/Uranium Chemical Recovery Operations Conference	Rockwell International	Aug 20-22, 1985	*	87-129	ACMP Annual Meeting	ACMP	Jul	23-26, 1987	3
	87~102	Radon	East TN Chap HPS	Oct 29, 1987	1	87-130	6th Int'l Workshop on Bone & Soft Tissue Densitometry	University of Manchester	Sep	22-25, 1987	3
	87-103	Radiation and Hormesis	San Onofre Nuclear Gen Sta	Oct 20, 1987	1	87-131	Inspection of Nuclear Transportation	U S NRC	Dec	8-9, 1987	2
	87~104	Radioactive Waste	American Society of Mech Engineers	May 19-23, 1986	3		,,		Nov Sep	9-10, 1987 9-10, 1987	-
	87-105	Environmental Monitoring	Oak Ridge Assoc Univ	Aug 31-Sep 4, 1987	3	87-132	MORT A/I (Accident Investigation)	System Safety Development		13-24, 1987	7
	87~106	East TN Chap HPS ABHP Prep Course	East TN Chap HPS	Apr 7-Jun 9, 1987	3		• ,	Center, EG&G Idaho			·
	87-107	8th Annual DOE Low-Level Waste Management Forum Low-Level Waste Management Challenges & Directions 1987-1993	Idaho National Engineering Lab	Sep 23-25, 1987	3	87–133	26th Hanford Life Sciences Symposium Modeling for Scaling to Man Biology, Dosimetry, and Response	U S DOE and Battelle Northwest Laboratories	0ct	20-23, 1987	*
	87-108	Ninth Annual DOE Low-Level Waste Management Forum	Idaho National Engineering Lab	Aug 25-27, 1987	3		* * * * * * * *	*******			
	87~109	Incineration of Low-Level Radioactive	Univ of CA in Cooperation	Apr 4-6, 1987	2		COURSES APPROVED BY TH	1988 HE CONTINUING EDUCATION PANEL			
		Wastes 1984	with the US DOE, Univ of MD, and CA Chapters of the			NUMBER	TITLE	SPONSOR/LOCATION	DATE	:	CECe
			HPS			88-01(a)	Health Physics Society 1988 Annual Meeting				<u>CECs</u> 1 per
	87-110	TMI2 A Learning Experience	ANS	Oct 13-16, 1985	2		Health Physics Society 1988 Mid-Year Meeting	San Antonio, Texas			day to
	87-111	New Developments In Lung Models Part I — New Techniques & Biological Information, Part II — Impact of New Inform on Models & Respir Protection	Harvard School of Public Health	Jan 28, 1988	1	(6)		our miturity, 1848s	Jec		a max of 3

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NUMBER	TITLE	SPONSOR/LOCATION	DATE	CECs	NUMBER	TITLE	SPONSOR/LOCATION	DATE	<u>CECs</u>
88-01 (c	ontinued)				88-22	Compliance with the New 10CFR20	Tech Management Services	Feb 15-17, 1988 several times in 1989	*
88-01(c) (d)	eting of American Nuclear Society (ANS) American Association of Physicists in Medicine (AAPM)			l per day to a max of 3	88-23	Laser Hazard Assessment (LHA)	USAF School of Aerospace Medicine	Jan 4-8, 1988 Sep 12-16, 1988 twice in 1989	3
(e) (f) (g)	National Council for Radiation Protection and Measurement (NCRP) Society for Nuclear Medicine (SNM) Radiation Research Society (RRS)	,			88-24	Management of Hazardous Waste	Institute for Regulatory Science	Mar 15-17, 1988	2
(h)					88-25	Hot Particles	East Tenn HPS Chapter	Apr 19, 1988	1
(1) (J)	Radiological Society of North America (RSNA) Int'l Radiation Protection Association (IRPA)				88-26	Emergency Response Planning, Technologies & Implementation	American Nuclear Society Savannah River Section	Sep 26-28, 1988	3
88-02	HPS Continuing Education Courses Air Sampling and Air Monitoring Standards	HPS 1988 Annual Meeting		l ea	88-27	Is Radon A Serious Problem	Baltimore-Washington HPS	Feb 16, 1988	1
(a) (b)	and Methodology National Measurement Quality Assurance Programs				88-28	Weapons Test Experience	GNYCHPS-RAMPS	Jan 27, 1988	1
(c)	Establishing a Secondary Standards Calibration Laboratory				88-29	Summary of Recent NCRP Recommendations on Dose Limits	RAMPS	Feb 16, 1988	1
(e)	Current Issues in the Regulation of Radio- isotopes in Medicine				88-30	Radiation Accidents	Univ of Alabama/Birmingham	May 6-7, 1988	2
(f) (g) (h)	Alpha Emitters at Nuclear Power Plants A Review of Nuclear Spectroscopy Quality Factors for Neutrons				88-31	U S EPA - Region VI, Federal Facilities Pollution Control Conference and Workshop	U.S. Environmental Protection Agency	May 3-6, 1988	1
88-03	HPS Professional Enrichment Program	HPS 1988 Annual Meeting		1 ea	88-32	Waste Generator Information Meeting	U S Dept of Energy	Mar 24, 1988	1
88-04	Health Physics Society, 1988 Summer School	Yale University	Jul 11-15, 1988	*	88-33	Internal Dose Assessment	Nıagara Mohawk	Jun 13-17, 1988	4
88-05	Respiratory Protection at Nuclear Power Plants	Radiation Safety Assoc	Apr 11-14, 1988	3	88-34	1988 Spring Meeting	North Central Chapter, HPS	May 13, 1988	1
00 03	Respirately Francisco at National Foliation		Apr 25-28, 1988 Oct 17-20, 1988	3	88-35	23rd Meeting of the EEI Health Physics Comm	Edison Electric Institute	Apr 5-8, 1988	3
88-06	Medical Effects of Nuclear Weapons	Armed Forces Radiobiology Institute	Jan 25-28, 1988 May 16-19, 1988	3	88-36	20th DOE/NRC Nuclear Air Cleaning Conference	Harvard School of Public Health	Aug 22-25, 1988	3
88-07	Dada Janaa Dustastas Managan Hawkahaa	INPO	Aug 29-Sep 1, 88	3	88-37	Health Risk of Radon and Other Internal Deposited Alpha-Emitters	New England Chapter, HPS	Mar 22, 1988	1
88-08	Radiological Protection Managers Workshop ANS Topical Meeting on Emergency Planning	ANS	Sep 1988	*	88-38	Health Physics Certification Exam Prep Course	Columbia Chapter, HPS	Mar 29-Jun 9, 1988	6
	TBA	AIIS	3ep 1300		88-39	Technical Papers	South Texas Chapter	May 14, 1988	1
88-09 88-10(a)		Tech Management Services	Oct 26-28, 1987 May 16-20, 1988	2	88-40	Alternative Conceptual Models of the Groundwater System at Yucca Mountain	U S Dept of Energy	Apr 11-14, 1988	*
(b)	Internal Dose Assessment-Advanced Techniques	Tech Management Services	Nov 1988 Oct 26-28, 1987	2	88-41	Hot Particle Training	Porter Consultants	Jun 6-8, 1988	×
88-11	Air Sampling	Tech Management Services	Feb 18-19, 1988 Mar 1989 Oct 1989	2	88-42	Beta Dosımetry Workshop	Porter Consultants	August 1986, April 1987 through March 1989	*
88-12	Counting Statistics for Health Physicists	Tech Management Services	Jun 6-8, 1988	2	88-43	Irradiator Workshop	U S NRC	May 24-25, 1988	*
88-13	Waste Management '88	University of Arizona	Mar 1989 Feb 28- Mar 3,88	3	88-44	Advanced Communication Skills for Radiation Professionals	Communication Sciences Institute	Apr 28-29, 1988	×
88-14	ALARA Training Program	General Dynamics Services	Aug 15, 1988 Sep 26, 1988	3	88-45	Inspection Procedures	U S NRC	Jun 6-10, 1988	*
88-15	Professional Hot Particle Workshop	San Diego Chapter, HPS	Mar 28-30, 1988	3	88-46	OKLO Natural Prehistoric Reactor	NE New York Chapter, HPS	Apr 18, 1988	*
88-16	TMI-2 Accident Topical Meeting	ANS/HPS et al	Oct 31-Nov 4, 88	3	88-47	Root Cause Analysis Program	Quality Services Int'l, Inc	Jun 23, 1988	*
88-17	30th Navy Occupational Health and Preventive Medicine Workshop	Navy Envir Health Center	Feb 27-Mar 3, 1988	1	88–48	Respiratory Protection and Chemical Protective Clothing	Harvard School of Public Health	Aug 14-19, 1988	*
88-18	Health Physics Aspects of Emergency Preparedness	Great Lakes Chapter, HPS	Mar 30, 1988	×	88–49	Ionizing Radiation Risks, Biological Effects and Policy Implications	Harvard School of Public Health	Jun 1-3, 1988	*
88-19	RCRA Interface Working Group Meeting	Dept of Energy	Jan 20-21, 1988	*	88-50	Radon in Buildings Sources, Biological Effects, Monitoring & Control	Harvard School of Public	Dec 19-20, 1988	*
88-20	DOE & DOE Contractors Health & Safety Conf	Dept of Energy	Jan 26-28, 1988	*	88-51	Internal Dosimetry for Fixed Nuclear Facilities	Oak Ridge Associated Univ	Jun 27-Jul 1, 1988	*
88-21	Technical Session	South Texas Chapter, HPS	Feb 20, 1988	1				May 8-12, 1989	

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	NUMBER	TITLE	SPONSOR/LOCATION	DATE	<u>CECs</u>
	88-52	Advanced Radiological Health Physics	University of Lowell	May 22-27, 1988	×
	88-53	1988 Radwaste Management Seminar	EPRI	Jul 21-22, 1988	*
	88-54	Hot Particles	Baltimore-Washington HPS	Mar 28, 1988	*
	88-55	Indoor Radon Seminar	TMA/Eberline	Jun 1-3, 1988	*
	88-56	Radiological Protection Manager's Workshop	Institute of Nuclear Power Operations (INPO)	Jun 6-8, 1988	2
	88-57	Managing Major Radiaction Accidents	Idaho Falls Medical Society	Jun 3, 1988	n
	88-58	The Technology of MRI	Duke University	Jun 11-16, 1988	*
	88-59	5th Annual Meeting	American College of Medical Physics	Jun 9-12, 1988	*
	88-60	Technical Factors Contributing to the Low Man-Rem Per Year of Scandanavian Plants	Detroit Edison	Jun 10, 1988	*
	88-61	Federal Radiological Emergency Response Plan Workshop	Federal Emergency Management Agency	Apr 19-22, 1988	*
	88-62	Health Physics Certification Review Course	Baltimore-Washington HPS	Jan 7-May 26, 1988	×
i	88-63	Current Topics in Dosimetry	Greater NY HPS Chapter	Apr 22, 1988	×
	88-64	Radon Workshop	NY State Energy Office	Feb 1-3, 1988	*
	88-65	AAPM Chapter Meeting	Upstate NY Chapter AAPM	Jun 15, 1988	*
	8866	HPS Continuing Education Courses	HPS Mid-Year Meeting 1987	Dec 13-17, 1988	×

^{*} Courses with an asterisk under the <u>number of credits</u> is currently under review