



Health Physics News

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The Official Newsletter of the Health Physics Society

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**Look for
50 Years, 50 Presidents
Moving the Society
Forward, Part II
in the May
Health Physics News**

The Birth of the HPS: A Look Back

50 Years, 50 Presidents

Moving the Society Forward, Part I

Mary Walchuk

The task of the leader is to get his people from where they are to where they have not been.
— Henry Kissinger

This month and next we feature the still-living past presidents of the Health Physics Society (HPS). These men and women have built upon the foundation set in place by the earlier presidents and have been instrumental in moving the Society forward year by year.

1971-1972 Dade W. Moeller, CHP



What is your current job title?

Chairman of the Board of Dade Moeller & Associates, Inc.

What schooling or training led to your work in health physics?

My introduction into the field was in response to a suggestion from my college faculty advisor who said that "radiation" was an exciting field and encouraged me to become involved. At the time (1948), I had no training, whatsoever, in the field. Soon after becoming a commissioned officer in the US Public Health Service (USPHS), and having expressed an interest in "radiation," I was assigned to the Johns Hopkins University to participate in a study of the uptake of radionuclides by biological organisms. Recognizing my need for training in the field, they sent me to Oak Ridge to take a four-week course on the laboratory uses of radioactive materials. Although the course was presented through the Oak Ridge Institute of Nuclear Studies, it was more commonly known locally as the "Oak Ridge College of Nuclear Knowledge." Thereafter, I received additional "on the job" training during a 2½-year assignment at Los Alamos National Laboratory (LANL) (1949-1952) and a one-year assignment in the research laboratories of the Analytical Chemistry Division at Oak Ridge National Laboratory (ORNL) (1956-1957). My

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50 Years, 50 Presidents

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first formal academic introduction to the field was gained through attending night-school courses at the George Washington University when I was assigned to the headquarters office of the Radiological Health Program, USPHS, in Washington, DC (1952-1954). I subsequently took courses in atomic and nuclear physics in conjunction with my studies for a PhD in nuclear engineering at North Carolina State University (1954-1956).

How have you been involved in the health physics field over the years?

In multiple ways, beginning during the 18 years (1948-1966) that I served in the USPHS. This included working on radioactive waste management at LANL, participating in the atmospheric weapons tests at the Nevada Test Site (1949-1952), conducting medical x-ray surveys of the USPHS hospitals during my assignment in Washington, DC (1952-1954), directing the USPHS radiological health training program at its Environmental Engineering Center in Cincinnati, Ohio (1957-1961), and serving as director of the Northeastern Radiological Health Laboratory in Winchester, Massachusetts (1961-1966).

In addition, I was privileged to participate in the activities of the BEIR I and BEIR III committees (1968-1980); as a member of the National Council on Radiation Protection and Measurements (NCRP) (1967-1997), during which I chaired the Scientific Committees that prepared Reports No. 56, 95, and 103; as a member of Committee 4, International Commission on Radiological Protection (ICRP) (1978-1985), during which I served as a member of the Task Group that prepared ICRP Publication 40; and as a participant in the radiological health academic program and as director of the radiation protection continuing education training program at Harvard University (1966-1993). Concurrently, I served as a member of the Advisory Committee on Reactor Safeguards, US Nuclear Regulatory Commission (NRC) (1973-1988), during which I chaired its subcommittees on radiation protection, nuclear waste management, and emergency planning; as a member and chair of the Advisory Committee on Nuclear Waste (1988-1993); as a participant in the research program of the Harvard Air Cleaning Laboratory and the biennial Nuclear Air Cleaning Conferences of the US Department of Energy (DOE) (1966-1993); and more recently

(1993-2006) in the conduct of a series of in-depth reviews of the potential environmental impacts of the proposed Yucca Mountain high-level radioactive waste repository.

How have you been involved in the Health Physics Society over the years?

As a member and chair of the American Board of Health Physics (ABHP) Examination Panel and of the Board itself, president of the New England Chapter, president-elect and president of the HPS, associate editor of *Health Physics News*, and guest speaker at meetings of local chapters and in attending the annual HPS meetings and writing and publishing articles in the *Health Physics Journal*.



What was your biggest challenge while HPS president, president-elect, and immediate past president?

When I assumed office as president-elect, the annual meeting was held at the Waldorf Astoria Hotel in New York City. My wife and I stayed in the Presidential Suite. The event that I remember most vividly was that Isaac Asimov, who was to be the featured speaker at the annual banquet (in those days, we had a featured speaker), came rushing into the room at the last minute. Claire Palmiter, who was president at the time, later learned that no one had remembered to remind Dr. Asimov when and where the banquet was being held! A year later, when I assumed the presidency during the annual meeting at the Stardust Hotel in Las Vegas, my wife and I were assigned the Sammy Davis, Jr., Suite. At that time, the Society was in dire financial straits. One of my first actions was to suggest that the annual dues be increased by 50 percent. In moving the adoption of this suggestion, Herbert Parker (who was a member of the Board of Directors at the time), mistakenly called for a doubling of the dues—and it passed, raising the fee from \$10 to \$20! As immediate past president, the primary change was that my telephone stopped ringing! The primary challenge was to encourage the submission of nominations for the various awards and to join in selecting the “winners.”

What was the best part of being HPS president, president-elect, and immediate past president?

The opportunity provided, as president-elect, to visit the chapters, to interact with the outstanding people who work at the local level, and to be brought back into the realm of the “real world!” The opportunity, as president, of frequent interchanges with members of the Board of Directors and

then later with our wonderful executive secretary, Richard Burk, Jr. As immediate past president, the opportunity to once again be introduced to my family!

What advice would you give others considering running for HPS president?

Rather than giving advice to those who are running for this office, I believe the advice should be directed to our Board of Directors. Unless a candidate is a member of the

faculty at an academic institution or an employee of some organization, such as a governmental agency, that is willing to cooperate, he/she will suffer considerable time away from work and an accompanying loss of income, during both the year as president-elect and as president. Serious consideration should be given to the development of a mechanism to underwrite the time lost from work for those who will suffer financial losses in meeting the demands of these two positions.

1973-1974 Niel Wald

Current job title:

Emeritus Professor of Environmental and Occupational Health in the Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh.

If retired, most recent job title:

Professor of Environmental and Occupational Health at Pitt.

Schooling or training:

I completed my pre-med AB at Columbia in 1946 and MD at New York University in 1948; then spent the next four years in internship and residency training in Internal Medicine and Hematology at New York City hospitals. I joined the USAF Medical Corps Reserve during the Korean War in 1950 and attended a short Reserve Medical Officer training course at Walter Reed Army Medical Center on Medical Aspects of Nuclear Weapons in 1951. Then, in 1952, the Radiobiology Department of the USAF School of Aviation Medicine, Randolph Air Force Base, Texas, requisitioned a hematologist. A Pentagon computer found me and sent me there in 1952 on a two-year tour of active duty as a captain and flight surgeon.

The work involved collaborative research on radiation injury production, prevention, and treatment at M.D. Anderson Hospital in Houston, Texas, the H4 Division at LANL, the Health Physics Division of ORNL, and the Nevada Nuclear Weapons test site.

Involvement in the health physics field:

After a USAF discharge in 1954, I spent three years running hematological research at the Atomic Bomb Casualty Commission in Hiroshima and then returned to the Health Physics Division at ORNL in 1957 to help in the A-Bomb survivors dosimetry program. In 1958, I was recruited from there to direct a graduate teaching and research program on



the health aspects of nuclear technology at the University of Pittsburgh's Graduate School of Public Health in its Department of Occupational Health.

Involvement in the Health Physics Society:

I joined in 1957 while in K.Z. Morgan's division at ORNL. I became an organizer and charter member of the Pittsburgh (now Western Pennsylvania) Chapter and, later, president of that chapter. I was elected to the HPS Board of Directors (1967-1969) and president (1973-1974). My proudest presidential achievement was hiring Dick Burk as executive secretary of the Society. After leaving the Board in 1976, I served on various committees, including currently as consultant to the Emergency Preparedness Committee.

Biggest challenge:

Compensating for my drastically different education and training in medicine while working with my presidential predecessor, Robley Evans, one of the leading physicists in the country, and his professional peers.

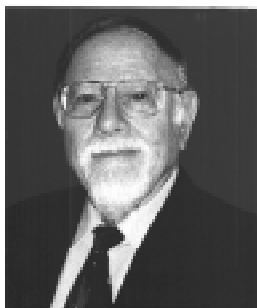
On an operational level, a big challenge was to help Paul Ziemer, the next president-elect, deal with the leadership gap created by the untimely death of Jim Hart, my presidential successor, soon after his term began.

Best part:

The chance to mix with the HPS members, especially on chapter visits, and to learn about the real-world issues in the field of radiation protection beyond the scope of academia.

Advice to others considering presidency:

If you can afford the time and effort, the presidency is a great learning experience professionally and an opportunity to experience the responsibilities and satisfactions that go with leadership.



Paul Ziemer was elected for a term beginning June 1975, but the death of President Jim Hart in November 1974 caused him to begin his duties eight months early.

Current job title:

I retired in 2001 as professor and head of the School of Health Sciences at Purdue University. I now hold the title of Professor Emeritus. In addition, I am currently a “special government employee” as chair of the Advisory Board on Radiation and Worker Health, a position appointed by President George W. Bush in connection with the Energy Employees Occupational Illness Compensation Program Act.

Schooling or training:

My college major (Wheaton College, Illinois) was physics with a minor in math. I then applied for and was awarded an Atomic Energy Commission (AEC) Radiological Physics Fellowship and attended Vanderbilt University with a summer practicum at ORNL. My mentors during that time were Elda Anderson, K.Z. Morgan, Walter Snyder, and Myron Fair. I completed my Vanderbilt MS research in the Health Physics Division at ORNL.

Involvement in the health physics field:

Upon completion of my MS program, I worked in the reactor health physics group at ORNL for about six months and then accepted a position as radiological control officer at Purdue University. I served in that capacity for 24 years (1959-1983). During the early years at Purdue I was able to complete the PhD degree under Professor John Christian in what was then the Bionucleonics Department of the School of Pharmacy. This led to a regular faculty appointment at Purdue as assistant professor of health physics. From 1960 through my retirement I taught a variety of health physics courses and mentored many MS and PhD students in the health physics curriculum at Purdue.

In 1990 I took a leave of absence from Purdue to accept an appointment by President George H.W. Bush as Assistant Secretary of Energy for Environment, Safety, and Health. In this position I was able to lead efforts to fund the DOE Applied Health Physics Fellowships, the DOE Industrial Hygiene Fellowships, and the DOE Health Physics Faculty Research Grants program.

Involvement in the Health Physics Society:

My early involvement was with the Midwest Chapter where I was chairman of the Society’s first midyear topical symposium held in Chicago



in January 1967. I also began my term as president of the Midwest Chapter in 1967. In 1970 I was elected to the Board of Directors and served under Presidents Claire Palmiter, Dade Moeller, Robley Evans, Niel Wald, and Jim Hart. I was privileged to have been selected as the Elda Anderson Award winner in 1973. In 1974 I became president-elect.

My involvement in the HPS and related activities includes membership on the *Health Physics* Journal editorial board, the American Academy of Health Physics (AAHP) Board of Directors (president in 1987), and the ABHP. I have been a member of many committees for groups such as the HPS, National Academy of Sciences (NAS), and AAHP.

Biggest challenge:

There were several significant challenges that the Society faced in the mid-1970s. First was the transition from having a part-time to a full-time executive secretary. This change occurred in 1975 and involved Presidents Niel Wald and Jim Hart. Dick Burk was just getting underway as executive secretary when I picked up the reins following Jim Hart’s death. Dick helped the Society get on a firm financial basis, particularly with regards to the operations of the *Health Physics* Journal.

An important challenge in 1975 was that of convincing the HPS to become the Secretariat for the American National Standards Institute’s (ANSI) Committee N-13 on “Radiation Protection.” For many years the Atomic Industrial Forum had served in that capacity but felt the need to discontinue its role. The HPS Board approved this change at the Buffalo meeting in 1975.

In the early 1970s, as antinuclear groups began to gain momentum, pressure was building on state and federal legislators to enact legislation designed to ban, delay, or defer nuclear power. In one of its earliest public pronouncements, the HPS Board of Directors passed a resolution in July 1975 opposing such legislation and encouraging public education and information regarding the safety and environmental impacts of nuclear power.

One important challenge that we faced at that time was the controversy surrounding permitting presentations by Ernest Sternglass at our meetings. Many members wished to either censor him or prevent him from speaking at HPS meetings even though he was, at that time, a member. I took the position that members should be allowed to present their views, even though unpopular.



At the 20th Anniversary meeting in July 1975, the “hot topic” at the plenary session was “Linearity vs. Non-Linearity of Dose Response.” Has anything changed in the last three decades?

Best part:

The opportunity for interactions with other HPs from around the country and around the world is probably the best part of the job. Not only do you develop a network of professional colleagues whose wisdom can be of current and future value, but you also develop lifelong friendships

that might not otherwise have occurred. As a side benefit, your horizons are expanded as you develop an appreciation for many facets of the profession beyond your own.

Advice to others considering presidency:

The time commitment is substantial, but if you are able to do it (either through an agreement with your employer or else on your own), you will find it to be both challenging and rewarding. It provides an opportunity to have a significant impact on the profession and opens the doors to future opportunities.

1976-1977 John C. Villforth, CHP

Current job title:

I am retired.

If retired, most recent job title:

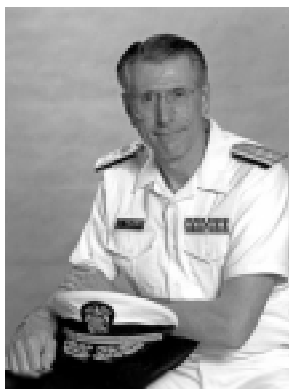
From 1990 to 2001, I was the president of the Food and Drug Law Institute, a 501(c)3, nonprofit association in Washington, DC. From 1961 to 1990, I was a commissioned officer in the USPHS with various positions in the radiological health program. I was the director of the Bureau of Radiological Health from 1969 to 1982 and from 1982 to 1990 I was the director of the Food and Drug Administration’s (FDA) Center for Devices and Radiological Health (CDRH).

Schooling or training:

I was in the USAF from 1954 to 1961 and the USAF sent me to school at Vanderbilt University and to ORNL as a part of the AEC Health Physics Fellowship Program (1956-1958). I received an MS in physics from Vanderbilt University in 1958 as a part of this Fellowship.

Involvement in the health physics field:

I was involved in basic health physics in the USAF when I was a sanitary and industrial hygiene engineer at a Strategic Air Command base in Maine. I dealt with health physics problems associated with decontaminated aircraft used in weapons testing, disposal of electron tubes containing radioactive materials, and teaching radiological defense courses for airbase personnel. After completing the AEC Fellowship program I went to the Command Headquarters at Wright Patterson Air Force Base where I was the director of the radiological health laboratory that provided personal dosimetry and bioassay services for all USAF personnel working with radiation. The lab also provided health physics consulting to other Air Force bases. I resigned my USAF commission and



was recommissioned in the USPHS where I continued working in such areas as fallout monitoring, medical x-ray programs, and collaborating with the state radiological health programs in such areas as the management of radium and other non-AEC licensed materials. In 1969, when I was appointed director of the Bureau of Radiological Health, I became more involved with the administration and management of the program and less involved with the actual practice of health physics, although during the Three Mile Island accident I was appointed by the Secretary of the Department (now Health and Human Services) to coordinate the Department’s response to that accident. When the FDA combined the Bureau of Medical Devices and the Bureau of Radiological Health into the CDRH, I became less involved in health physics activities.

Involvement in the Health Physics Society:

I served on the HPS Board of Directors and various committees such as the Local Arrangement Committee for the International Radiation Protection Association (IRPA) meeting in Washington, DC. I was president of the Baltimore-Washington Chapter and on its Board. Since my retirement I have not been active on any committees, but I do try to attend local meetings.

Biggest challenge:

That was 30 years ago! I think there was a certain tension between what was called “health physics” and what we in public health called “radiological health” and I was interested in bringing together the different philosophies of these two areas even though the basic science underlying these areas was the same. The state radiological health personnel were organized into the Conference of Radiation Control Program Directors seven years earlier and there was a need to bring this group into the HPS so that all could take advantage of the technology

and science that HPS provided its members. Another challenge was trying to bring recognition that the area of nonionizing radiation was an important part of health physics and that more attention needed to be placed on presenting and publishing articles in this area.

Best part:

Obviously the best part of that responsibility was the opportunity it provided me to visit most of the chapters and to talk to health physicists around the country about their respective experiences. This was an incredibly valuable learning process for me and it also helped me share my perspective with the members.

Advice to others considering presidency:

Listen and learn! New problems such as homeland security and the threat of terrorists using radiological devices will demand the

HPS take a leadership role at the national and local (first responder) level. HPS will need to consider how members can partner to help in training and monitoring exercises. As the nation reconsiders the importance of nuclear power there will be increased demand for trained professionals and that demands federal support for grants and academic training programs. It is going to require the HPS to encourage the federal agencies and the Congress to support these efforts, and future presidents have to point HPS in this direction. Along with this need is the concern that the public still is afraid of “nuclear,” and HPS—and its future presidents—may be in a position to influence programs to help the public become more knowledgeable, and therefore more trusting, on radiation matters. It is an incredibly uphill battle, but HPS has the enthusiastic and committed members who just might be in a position to make a change.



1977-1978 John Auxier, CHP

Current job title:

President, Auxier & Associates, Inc.

If retired, most recent job title:

I have retired several times but it won't take.

Schooling or training:

BA from Berea College in 1951. AEC Radiological Physics Fellowship at Vanderbilt University and ORNL, MS in 1952 and PhD in 1972 from Georgia Institute of Technology.

Involvement in the health physics field:

I have been for several years an applied health physicist and facility designer at the University of Texas, then, at ORNL, many years as a researcher in dosimetry, radiation shielding and transport, particularly in an “air over ground” geometry, and health physics administration. Since my last retirement, 13 years ago, I have been in the health physics consulting business.

Involvement in the Health Physics Society:

I was a founding member, starting at the 1955 Ohio State Meeting, was an editor of *Health Physics* from 1958 to 1977, served on the Board of Directors, was president, and served on numerous committees.

Biggest challenge:

As president-elect the biggest challenge was the chapter visits and trying to remember all



the names of the wonderful people I met. As president, the big challenge was to prevent the division of the Society into a nuclear power and nonnuclear power split. We managed to negotiate the special nuclear power certification which ended the differences. Happily, the special certification was not warranted except to make peace in the family and it was, years later, abandoned as no longer necessary. I have always been happy that we worked this out, though most present members of the Society have never known about it or been directly involved. As immediate past president, the problem was keeping harmony in the awards and research activities.

Best part:

Getting to know so many HPs and working with the Burk empire.

Advice to others considering presidency:

Unless you have a large share of your time to devote to the job, don't run. The job has changed over the years until now the president needs to be a manager and politician for whom lots of writing, accounting, and politicking is a pleasure. Given that these conditions are met and your employer will support you, go for it. If you have a rather high and favorable profile with the membership, the nominating committee will find you and you will end up on the ballot. Be prepared to become wholly immersed in the job if you get it.



1979-1980 Melvin W. Carter

Current job title:

Neely Professor Emeritus of Nuclear Engineering and Health Physics, Georgia Institute of Technology.

If retired, most recent job title:

Neely Professor of Nuclear Engineering and Health Physics.

Schooling or training:

A course at the MS level at the Oak Ridge Institute of Nuclear Studies and work at the University of Florida leading to a PhD.

Involvement in the health physics field:

I worked 24 years for the USPHS, 16 years for the Environmental Protection Agency, and 12 years consulting. I was director of the Southeast Radiological Health Laboratory in Montgomery, Alabama, and I was director of the Southwest Radiological Health Laboratory in Las Vegas, Nevada. I have been inducted in the Georgia Tech Hall of Fame and have been elected as a member of the



National Academy of Engineering.

Involvement in the Health Physics Society:

On the Board of Directors, as Program Committee director, as chairman of various committees, and as president of IRPA.

Biggest challenge:

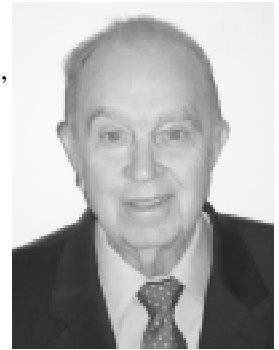
Setting standards regarding health physics as a separate and necessary work recognized by the profession and related organizations.

Best part:

Working to broaden interest in the HPS and its accomplishments, and the education and development of its diverse members.

Advice to others considering presidency:

Be active and involved with the technical and “personal” parts of the Society.



1980-1981 William C. Reinig, CHP

Current job title:

Retired.

If retired, most recent job title:

Consulting Scientist.

Schooling or training:

None. I had a bachelor of mechanical engineering degree. When I was hired in New York City by General Electric (GE) in August 1946, I was told that I would be assigned to the Hanford Works. The GE people in New York said they didn't know much about Hanford, except that it was huge and made plutonium. When I got there in early September, I expected to join an engineering group. Instead, I was told that my assignment was in the Medical Department. I knew there was some mistake, until I spoke to C.M. Patterson. Pat explained I was to be a health physics engineer assigned to the reactor areas. After about three weeks of on-the-job training, I began my career as a health physicist. During night shifts, John



Howard Andrews (left) and Bill Reinig, taken about 1964 when Andrews was HPS President and Reinig was HPS Secretary.

Hoffman, a technician, and I were the entire health physics force covering the two operating production reactors at Hanford. We were part of Bill McAdams group of 15 people who constituted the health physics group at the Hanford reactors.

Involvement in the health physics field:

After a few years at Hanford, I became the leader of the health physics group at the Research

Graphite Reactor at Brookhaven National Laboratory during its startup and early operations. Thereafter, I joined DuPont as the leader of the team that conducted the preoperational environmental survey of the Savannah River Site. During 43 years at the Site, I held various technical and management positions until I retired in 1994, including superintendent of the Health Physics Department.

During these years, I was active in the ABHP as Examination Panel chairman, secretary-treasurer for

seven years, and then Board chairman. In addition, I was a director of the AAHP. In 1991, I was a cofounder of Citizens for Nuclear Technology Awareness, which has since become the largest grassroots organization in the United States that supports the beneficial uses of nuclear energy. One of our continuing efforts is to give the public a realistic perspective about radiation.

Involvement in the Health Physics Society:

I was one of the charter members of the Savannah River Chapter and the HPS. I was on several HPS committees before being elected secretary in 1964. In 1969, I was again elected to the Board and then in 1980 I was elected president of the Society.

Biggest challenge:

Developing Society activities that would

break through the fog of misinformation and misunderstanding about radiation and its risks.

Best part:

Visiting the chapters.

Advice to others considering presidency:

Don't run unless you can take time away from work to visit most of the chapters. You will meet a large number of dedicated health physicists who rarely, if ever, get to a national meeting. And as president or the future or past president, you essentially bring the national organization to their turf. This gives chapter members an opportunity to complain, make suggestions, and ask questions about what's happening at the national level. Besides, you will meet a lot of nice people.



1981-1982 Charles B. Meinhold, CHP

Current job title:

President Emeritus of the NCRP and Guest Scientist at Brookhaven National Laboratory.

If retired, most recent job title:

President, National Council on Radiation Protection and Measurements.



Society, I was treasurer (1975-1977); delegate to the Third, Fourth, Fifth, Sixth, and Seventh IRPA Congress; chairman of Health Physics Related Research Needs (1990-1993); member of the Annual Meeting Place Committee (1969-1971), Education and Training Committee (1973-1975), Finance Committee (1975-1978), Local Arrangements Committee (1971), Membership Committee (1965-1968), and Scientific and Public Issues Committee (1982-1984); and a charter member of the Greater New York Chapter, serving as secretary-treasurer (1961-1962) and president (1963).

Schooling or training:

BS in physics from Providence College and an AEC Fellowship in radiological physics at the University of Rochester.

Involvement in the health physics field:

All phases of radiation and protection at the Brookhaven National Laboratory for 43 years; activities with the NCRP from 1975 to 2002, the last 10 years as president; and working with the ICRP from 1967 to 2002, the last 24 years on the Main Commission and participating as a member of the US Delegation to UNSCEAR under the US Representative, Dr. Fred Mettler. In addition to HPS activities, I served on the IRPA Executive Council from 1984 to 1996, the last four years as president.

Involvement in the Health Physics Society:

In addition to the activities associated with being president-elect, president, and past president of the

Biggest challenge:

The only difficulty I had was juggling my job with the demands of the president-elect to visit the chapters. The visits however were rewarding and enlightening.

Best part:

The greatest enjoyment was representing the members of a truly outstanding collection of individuals. A close second was working with a remarkable set of people on the Board of Directors, the committee chairmen, and the Secretariat.



Advice to others considering presidency:

Perhaps the most important advice is to volunteer for as many committee assignments as you can handle with efficiency and excellence.



Current job title:

Retired in 1992.

If retired, most recent job title:

Senior Scientist at ORAU.

Schooling or training:

I received an AEC Radiological Physics (Health Physics) Fellowship in 1956 to attend the University of Rochester where I received

an MS degree.

Involvement in the health physics field:

With over 30 years of health physics experience, I worked on many different projects. In the late 1950s, I worked for the Westinghouse Commercial Atomic Power Division on projects related to the construction of the Rowe Nuclear Power Plant and on a thorium breeder reactor. After taking employment with the Oak Ridge Institute of Nuclear Studies in Oak Ridge, Tennessee (now called Oak Ridge Associated Universities), I became involved in nuclear medicine research and taught health physics to individuals from throughout the United States and the world. This activity led to periodic assignments to Central and South America as part of the AEC's Atoms for Action program. Later my participation in the development of new nuclear medicine procedures led to the creation of the Radiopharmaceutical Internal Dosimetry Center.

When AEC became the Department of Energy, I became involved with health issues related to fossil fuels.

Later DOE and NRC asked ORAU to establish a radiological survey program to verify the adequacy of the decontamination performed at formerly used radiological sites throughout the United States. Along the way, I assisted the DOE/ORAU Radiation Emergency Assistance Center/Training Site (REAC/TS) with health physics issues related to radiation accidents that injured individuals.

My career as a health physicist permitted me to participate

in a wide range of activities related to the protection of humans from all kinds of hazards.

Involvement in the Health Physics Society:

After serving on several HPS committees, I was elected HPS treasurer in 1971 and later as president-elect in 1981 and automatically became president in 1982.

Biggest challenge:

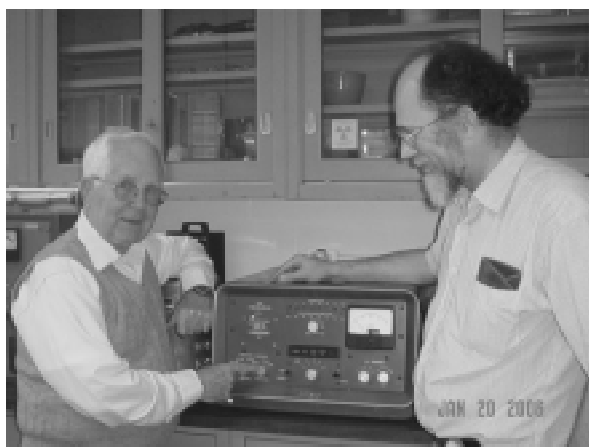
The HPS includes individuals who perform many different radiation protection tasks. These include regulation, research, monitoring, reactor operation, nuclear medicine, education, etc. During my tenure as president-elect, President Meinhold and I worked to bring these various groups together. This effort continued when I became president and Bryce Rich was elected president-elect.

This joint effort was successful because reactor health physicists, who earlier had gone a separate way, formed an HPS section and essentially "rejoined" the HPS. Similar encouragement of nuclear medicine health physicists also resulted in the formation of a nuclear medicine section.

Involving HPS members in the decisions of the Society was, and still is, the most difficult challenge of any HPS officer.

Best part:

Being able to work with a great group of individuals who have the same mission as yours. Today's description of the role of the HPS, found at the front of the *Membership Handbook*, states it well: "Society members are involved in understanding, evaluating, and controlling the potential risks from radiation relative to the benefits." The underlining was added by me.



Cloutier on left, and Paul Frame, curator of the Health Physics Historical Collection at ORAU, examine a binary scaler used during Cloutier's early HP days.

Advice to others considering presidency:

When asked to serve consider it an honor and a duty. Yes, it will interrupt your other activities but the rewards will more than exceed the "imaginary" losses you may incur. Sharpen up your listening abilities for you will now lead a wide variety of health physicists, each of whom deserves to be heard. And when your term is up, fully turn over the duties to your successor.

Current job title:

Radiation safety consultant and partner and vice president of Radiation Safety Services Company.

If retired, most recent job title:

Retired 10 years ago from Idaho National Engineering and Environmental Laboratory (INEEL), but have never really “retired.”

Schooling or training:

Upon graduating with a BS degree in math/physics in 1953 (and without a clue how I was going to use it) I learned of a job in “health physics” (sounded like physics to me at the time) at the Idaho Chemical Processing Plant, which was just starting operation. Thus a career discovered me, which was a perfect fit for my interests, talents, and capabilities. After a year of working in the field, I recognized the need for graduate education and was accepted as an AEC Fellow at Vanderbilt University/Oak Ridge under the instruction and direction of K.Z. Morgan, Elda Anderson, and Myron Fair.

Involvement in the health physics field:

My career has been that of an applied health physicist. My work involved designing and administering comprehensive radiation protection programs at INEEL, Lawrence Livermore National Laboratory, and other government agencies in the following areas: chemical processing of spent enriched fuel, hot cells, high-level waste management, low-level waste management, analytical radiological laboratories, spent-fuel storage, decontamination/decommissioning, high-flux test reactors, nuclear weapons testing, accelerators, plutonium/transuranics—processing/handling, analyses, and control, tritium processing and control, uranium—mining/milling and control, in research and development, NRC site analyses, commercial power reactor programs, and consulting—radiation safety program evaluation, development, control technology, specific issue investigation.

Involvement in the Health Physics Society:

I was a charter member and attended the formation



meeting in Columbus as an AEC Fellowship student in 1955; passed one of the first CHP exams (Las Vegas, 1961); served on ABHP panel of examiners (12 years) and on the board for four years (secretary for one year and president for two years); was president-elect (1982-1983), president (1983-1984), and past president (1984-1985), plus the subsequent traditional committee chair positions; was US delegation lead to the IRPA meeting in Berlin (1984); served on the HPS board as the HPS liaison on the National Registry of Radiation Protection Technologists formation committee; was president pro tem of the AAHP (1986); was chair of the HPS/ANSI Standards Committee; and have served on several other committees for both HPS and AAHP.

Biggest challenge:

Time! The work of the Society was vigorous and growing. With the wise and competent support of the Secretariat, the work of the Society moved forward and allowed my full-time occupation to be maintained at the same time.

Best part:

Health physics as an occupation has been rewarding and exciting. The Society has been an equal reflection of that satisfaction for me. However, the best part has been the association with the members of the Society (which includes all the staff members of the Secretariat)—the practitioners of radiation protection. I have such gratitude for the privilege of meeting and interacting with HPs throughout the world. To me the pure pleasure of working with and growing together with some of the finest people I could imagine has been the greatest reward—the “best part” for me.

Advice to others considering presidency:

Plan on a large commitment of time for both you and your family—but approach the prospect as an opportunity to serve as a leader and representative of a profession which has a substantive contribution to make in assuring the safety of a needed societal scientific resource.



1984-1985 William J. Bair

Current job title:

Retired.

If retired, most recent job title:

Manager of the Life Sciences Center, Battelle's Pacific Northwest National Laboratory (PNNL).

Schooling or training:

AEC/NAS Radiological Physics (Health Physics) Fellowship at the University of Rochester School of Medicine and Dentistry (1949-1950) and PhD in radiation biology in 1954 (first in the world!).

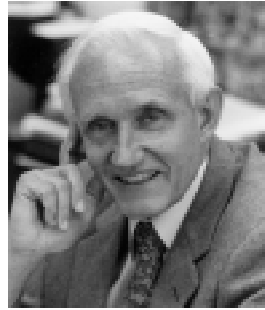
Involvement in the health physics field:

My involvement in the field has included research on health effects of radionuclides, in particular airborne plutonium, radiostrontium, radioiodine, and radoruthenium (over 100 open literature publications and numerous other documents); organizing and teaching the first classes in radiation biology at what is now Washington State University Tri-Cities; membership on the President's Commission on the Accident at Three Mile Island; membership and/or chairmanship of numerous committees for NAS, ICRP, and NCRP; and membership on many other government agency advisory committees.

In addition to encouraging my son Bill (an HPS member who works at the Nevada Test Site) to enter the field, my most significant contribution was probably leading the preparation of ICRP 66, Human Respiratory Tract Model for Radiation Protection.

Involvement in the Health Physics Society:

Member of the Columbia Chapter Board of Directors, member of the Program Committee for five national meetings and chaired one, member of the Nominating Committee, member of the Board of Directors (two terms), chairman of the Scientific and Societal Issues Committee, and chairman of the Awards Committee.



Biggest challenge:

Finding the time to fulfill my responsibilities as president-elect and president to my satisfaction was very difficult because I had a very demanding position at PNNL.

Best part:

The best part was the opportunity to meet and work with the truly remarkable Society membership, and after 20 years many remain good friends and colleagues. I have heard others make similar comments. The members of the Health Physics Society, and I include the Secretariat, are truly first-class professionals and human beings. Any significant contributions I might have made to the Society as president occurred because of the contributions and cooperation of the other officers, board members, committees, editors, Secretariat staff, and general membership.

Advice to others considering presidency:

It helps to have recent experience as a member of the Board of Directors so you will be reasonably current with respect to Society business, issues, chapters, and committees as you begin your year as president-elect.

Consider the possibility of an arrangement with your employer that will lessen the impact of taking on the major commitment as HPS president. The HPS presidency is a good job for a recent retiree.

The HPS presidency is a tremendous honor and a very satisfying experience, well worth undertaking even in addition to a demanding professional position. It also has benefits for spouses and children and, of course, to your employer.



Bill Bair (far right) with granddaughter Heather and son Bill Bair III

1985-1986 James E. Watson, Jr.

Current job title:

Professor Emeritus at the University of North Carolina (UNC).

If retired, most recent job title:

Professor at UNC.

Schooling or training:

BS in nuclear engineering and MS in physics



from North Carolina State University and a PhD in environmental sciences and engineering, with concentration in health physics, from UNC.

Involvement in the health physics field:

My interest in health physics developed while working on a reactor project and assigned to ORNL's DOSAR facility, where I learned

reactor operation from John Poston. The DOSAR facility was managed by John Auxier, who assisted me in obtaining my first health physics position in ORNL's Health Physics Division. I returned to graduate school to study health physics at UNC and after graduating I worked in and became chief of the Tennessee Valley Authority's Radiological Hygiene Branch. I left TVA to join the faculty of UNC, and for 27 years I directed the graduate program in radiological hygiene (health physics). My involvement in health physics also included service on a number of state and national committees.

Involvement in the Health Physics Society:

HPS committees, then the Board of Directors, followed by president-elect, etc.

Biggest challenge:

I emphasized that the Society's objective was the development of scientific knowledge and practical means for radiation protection (as worded then). The Society's mission remains similar today: "excellence in the science and practice of radiation safety." A challenge was to maintain a focus on this objective/mission and to continue to facilitate excellence in

radiation safety. My president-elect's message suggested that opportunities remained for reducing exposures in the areas of medical radiation and natural radioactivity.

Best part:

There were many good things associated with serving the HPS. What I think of first was the positive interaction with other health physicists. I thoroughly enjoyed and learned from my association with Society officers who preceded me and those with whom I served. Likewise the great interaction with so many health physicists during my visits to chapters as president-elect was very rewarding.

Advice to others considering presidency:

Go for it! It is a great experience. Be prepared to commit the necessary effort to the task.



1986-1987 John W. Poston, Sr.

Current job title:

I am a professor in the Department of Nuclear Engineering at Texas A&M University.

Schooling or training:

I worked as a part-time technician with the Babcock & Wilcox Co. while completing a degree in mathematics (with lots of physics courses) at the local college. After graduation, I took a full-time position with Babcock & Wilcox as an experimental reactor physicist. One of the folks I worked closely with was John W. Cure, III, the facility health physicist. He always impressed me with his broad knowledge and his very friendly but firm approach to radiation safety. In addition, one of my classmates from Lynchburg College, Fred Haywood, went to Vanderbilt University and later to ORNL as a health physicist. When the Health Physics Research Reactor was established at ORNL, Fred called me about a position at ORNL—basically serving as the liaison between the health physics researchers and the reactor operating crew. This provided me lots of insight into the research being done in the Health Physics Division as well as the



Biology Division and others. After working at ORNL for three years, it was clear that I wanted to be more involved in health physics. So, I requested a leave of absence and enrolled at the Georgia Institute of Technology and over about four years completed MS and PhD degrees. Sorry for the long answer but not everyone knows what they want to be when they grow up!

Involvement in the health physics field:

At first I worked at the Health Physics Research Reactor at ORNL doing mixed field, external dosimetry; later I became assistant to Walter Snyder working in internal dosimetry and, when he retired, I replaced him as the leader of the Medical Physics and Internal Dosimetry Section. I renamed and expanded the research of the section when I took it over. Later, I went back to Georgia Tech as an associate professor and finally to Texas A&M University where I have been a professor for the last 21 years. During my time here I served 10 years as head of the department. For me this is significant because I was an HP and most of the professors were nuclear engineers.

Involvement in the Health Physics Society:

Besides being president, I served a term early in my career as secretary. I was fortunate enough to work with two great presidents, James C. Hart (who died in office) and Paul L. Ziemer. In addition, I have served on committees too numerous to list and have been involved in many of the HPS summer schools.

Biggest challenge:

It may sound strange but a year is a very short time. Thus, it is difficult for a president to make an impact on the Society and its direction—even in the three-year period actually served. It is also very difficult because the members of the Society have such diverse backgrounds that establishing consensus about almost anything is very difficult. I remember the controversy over annual versus committed dose and, when the members voted, it was essentially 50% on each side of the issue. So, even though the new president might have an agenda, it is not always easy to lead the Society in the direction in which the president wants it to go.

Best part:

Even though it is a tough year, the president-elect year gave me an opportunity to visit the chapters and to learn how varied are the opinions of the members. I learned a great deal

that year. In addition, the opportunity to meet so many great HPs was a huge reward. By “great” I do not mean pioneers or famous scientists; I mean folks who are in the “front lines” so to speak, trying to deal with changing regulations, pressures of management, changing science and technology, etc., while still remaining interested and dedicated to their jobs and wanting to do the very best they could on a daily basis to protect their workforce. When I go to the HPS meetings I still see many of these folks and, although we have aged slightly, it is good to renew friendships established long ago during my chapter visits.

Advice to others considering presidency:

I had to laugh when I read this question because Dr. Newell Stannard provided the simplest advice (advice I never expected to hear from him) and I am sure it was not an original statement. He said, “Never pass up an opportunity for a meal or to use the toilet; it may be your last chance.” Seriously, my advice is, if it is at all possible for you to run for the office, please do so. The commitment is large and the pay is really terrible but the rewards you personally will reap will stay with you for the rest of your career. Service to your profession is important and rewarding. Just do it!

**1987-1988 David A. Waite, CHP****Current job title:**

I am newly retired.

If retired, most recent job title:

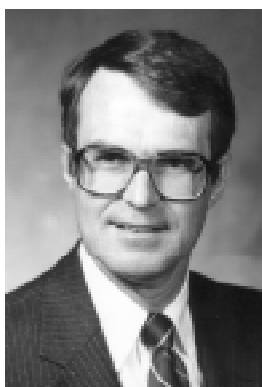
I was vice president and global director of Health, Safety, Environmental Protection and Quality for CH2M HILL.

Schooling or training:

BA in physics from Emporia State University in Kansas in 1963, MS in radiological physics from Vanderbilt University in 1965, and a PhD in general engineering from Oklahoma State University in 1972. The Oak Ridge Mobile Radioisotopes Laboratory visited Emporia State University my junior year and I was hooked after working with its equipment for a week, so I applied for the AEC Fellowship the next year and ended up in the Vanderbilt University physics program.

Involvement in the health physics field:

I started out my career as head of the Radiation and



Nuclear Technology Department in the Oklahoma State University College of Engineering where I really learned the material that I had covered in my student days. After finishing my doctorate research with the United Kingdom Atomic Energy Authority at its Winfrith facility, I was very interested in the biokinetics of plutonium and had the chance to join an outstanding group of health physicists at Battelle's PNNL as a research scientist in its Occupational and Environmental Protection Department to pursue this interest. When Battelle got the contract for pursuing a high-level nuclear waste repository in salt, I was transferred to Battelle's Office of Nuclear Waste Isolation in Columbus, Ohio, where I was manager of preclosure safety analysis. When that program was terminated, I went to Ebasco in its Seattle office as manager of Radiological and Nuclear Waste Programs. When Ebasco Environmental was sold, I moved on to CH2M HILL, from which I recently retired.

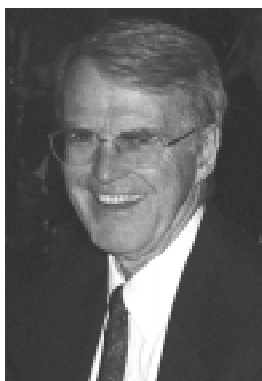
Involvement in the Health Physics Society:

I started my involvement with the HPS as the editor of the Cascade Chapter newsletter and held most of the offices through chapter president during my time at Hanford. While in Columbus, I was elected president of the Buckeye Chapter. Shortly thereafter, I was appointed the first chair of the Society's Long Range Planning Committee. I was then elected to the Board of Directors, then national president.

Biggest challenge:

I was worried at first about being able to satisfy the demands of the position and the

demands of my employment, but I found that I became more efficient with my time and many others stepped in to help meet both sets of commitments.

**Best part:**

I can't imagine an opportunity greater than being national Society president to network with so many great people in so many places. This aspect of the position has been both the personal and professional highlight of my career.

Advice to others considering presidency:

Go for it. There is no greater reward as a health physicist.

1988-1989 Robert E. Alexander, CHP

Current job title:

Self-styled novelist.

If retired, most recent job title:

I called myself president of The Alexander Corporation.

Schooling or training:

I somehow stumbled into the field while in graduate school (1954). I needed a nighttime job, and Convair-Fort Worth (Frank Pascal) was willing to train me as an HP technician.



Society to younger, brighter people trying to make their own mark.

Biggest challenge:

The biggest challenge (self-assigned) was to attempt a leadership role in drawing governmental attention to the uncertainty and lack of scientific verification for the overly influential linear-nonthreshold hypothesis. However, I learned the hard way that the people willing to listen were those already in the choir.

Best part:

Being elected the HPS president, by the membership, turned out to be a persuasive credential for me during my consulting years.

Advice to others considering presidency:

This is the first time I've seen or heard the words "running for HPS president." I thought interested candidates patiently waited and hoped to be nominated. However, I do have a suggestion for young Society members who already want to be nominated someday—earn the nomination. Health physics is a multidisciplinary field. Seek expertise in as many of those subdisciplines as you can. Keep up with the pertinent literature and be as good at your job as you are able; people will hear about you. Let a lot of members of the chapter and Society leadership know that you want to make a contribution—to work for the Society. Contribute often to the newsletter. Attend local, national, and international meetings to the extent you can. When you are ready, maybe it's a good idea (these days) to let the Nominating Committee members know you are qualified and would like to be considered.

Involvement in the health physics field:

Since the time I was president I have worked as an independent health physics consultant. Before that, chief of Radiation Protection and Health Effects Branch in the Office of Research at NRC. Even before, NASA, UN-IAEA Health Physics Expert, Atomics International, and Convair-Fort Worth. I seem to be a 51-year veteran.

Involvement in the Health Physics Society:

I was a charter member, committee chairman, regular contributor to the *Health Physics Society Newsletter*, one of the *Health Physics Journal* editors, founder of the Government Section, on the HPS Board of Directors, Southern California Chapter president, Baltimore-Washington Chapter president, and HPS president. After all that I decided to leave the work of the



Current job title:

Professor Emeritus at Washington State University.

If retired, most recent job title:

Professor and director, US Transuranium and Uranium Registries.

Schooling or training:

I took some classes as an undergraduate that included lectures on health physics, but began my career as an industrial hygienist. Radiation safety was part and parcel of industrial hygiene in those days, and it was most enjoyable so I ended up following that career option via a job with the Navy and graduate school, ultimately ending up at Washington State University.

Involvement in the health physics field:

In many ways—as an educator, as a mentor, through public outreach (see below), through service on numerous standards committees, and of course through my employment. As a CHP, I have been active in the Academy, serving as president a few years back, and was a member of the ABHP and the Panel of Examiners before the Academy was created. I have tried to encourage professionalism and ethical behavior within the profession and to gain visibility for the health physics profession in the public sector as well as among other professionals (for example, physicians and engineers).

Involvement in the Health Physics Society:

Let me count the ways . . . No, can't do it—don't have enough fingers and toes! I have been active on both the chapter and national level in numerous capacities.

One of my great interests and loves is the historical aspects of the profession, and I take great satisfaction in being the first HPS historian and History Committee chair and in getting the Society Archives organized and started at the University of Tennessee.

Another has been public information and education; although this sounds incredible, I have



presented more than 1,000 public lectures and talks to schools and clubs of all types and have made several video tapes for our local library. To that end I am still active as one of the topic editors for the HPS Ask the Experts program.

A third has been mentoring and informally working with younger members of the Society; I love to help them and to work behind the scenes to get things done.

Biggest challenge:

The time commitment, and the brevity of a one-year term as president. There is so much to do, and so little time to do it all. During my term as president, I was plagued with a number of unanticipated problems that required more diplomacy and tact than I probably was able to give them, and took a lot of time and a toll of emotional currency. These would best be left unmentioned but I thank my president-elect, Gen Roessler, for working with me and for her sage advice and counsel. Being president can be a lonely place, and it is important to work with your predecessor and with your successor to ensure a smooth transition and continuity. But what was perhaps my biggest challenge was to carry out the responsibilities of the office to the best of my ability and to the benefit of the Society and its members, and in such a manner as to provide the best result for the Society, which I dearly love. Hopefully I was at least partially successful.

Best part:

The people who are our members; you meet a lot of wonderful folks, especially during the chapter visits of the president-elect year, and it is these ordinary rank-and-file members who are the heart, soul, and backbone of health physics. And, they have great ideas! This continues on through the presidential year.

As past president, it is nice to sit back and assume the role of an elder statesman as it were; you don't need to prove anything to anyone and can kick back your heels and do what is best for the Society.

I don't know what other professions are like, but health



Ron, left, with Glenn Seaborg, the discoverer of plutonium, during their collaboration on Seaborg's *The Plutonium Story*.

physics is loaded with the wonderful people—folks you enjoy being with, can trust and learn from, work with, and who are good friends as well as colleagues. Makes one proud to be one of them. I formed many good, and in some cases close, friendships as a result of my presidential years.

Advice to others considering presidency:

Follow your inclinations and run. You will have the opportunity to lead and effect change where change is indicated, and you will be rewarded amply by the satisfaction of knowing that you have made a positive difference to the profession.

1990-1991 Genevieve S. Roessler

Current job title:

HPS newsletter and Web site editor.

If retired, most recent job title:

Associate professor in the Nuclear Engineering Sciences Department at the University of Florida.

Schooling or training:

I became interested in journalism when I was in high school. In my early college years, my part-time job was as a writer and then as acting editor of a weekly newspaper. The college I attended did not have a journalism major so I started out in elementary education and very soon switched to a math major when I realized that my interest was in math and science. I met my first health physicist-to-be in an organic chemistry class and later accepted his marriage proposal. I took a break from college, but after the arrival of our third child (now a journalist) I continued my math education and after our fifth child (who is now a CHP) I finished a BA in mathematics. Then because of the influence of the above-mentioned health physicist, I pursued an MS in radiation biophysics and, after the arrival of our seventh child, a PhD in health physics.

Involvement in the health physics field:

I've never actually been out in the "real world" of health physics. I went from my PhD to become a professor of health physics/medical physics in the Department of Nuclear Engineering Sciences at the University of Florida. When I retired from that position in 1993 I was already editor of *Health Physics News* and then later became editor of the Society for Risk Analysis newsletter and editor of the Health Physics Society Web site.



Involvement in the Health Physics Society:

I joined the HPS when I was a graduate student. Later I became active in the Public Information Committee, I was an associate editor of *Health Physics*, and from 1982 to 1986 I was editor of *Health Physics*. I was secretary of the Society in 1978-1980 and then president in 1991-1992. I liked being involved with the Society so much that in 1991 when I saw my opportunity to come full

circle with a return to journalism, I applied for the editorship of the *Health Physics Society Newsletter*, now *Health Physics News*.

Biggest challenge:

Being away from my home and family so much.

Best part:

The best part was getting to know the people in the profession better. The experience of leading a Society with so many members was mind boggling. I have found though that the title "HPS Past President" has opened many doors for me, especially in advisory positions for a number of government agencies. This experience is no doubt the closest I have come to being in the real world of health physics.

Advice to others considering presidency:

Be sure you understand how the Society operates, be willing to work very hard, and then do your best. The rewards come back 100-fold. HPS members and our support group, the HPS Secretariat, are the best bunch of people to work with and to know. We are making a positive difference in the world.



Gen shows her family the University of Florida whole-body counter.

Notes

Mario W. Overhoff—1928-2005

Morgan Cox, CHP

The world of radiation detection instrumentation and instrumentation standards lost an expert, colleague, and friend when Mario Overhoff passed away on 23 December 2005. He died unexpectedly in Cincinnati following a brief illness.

Mario was born in Vienna, Austria, on 12 November 1928 and grew up in England and Canada, during and following World War II. He received his bachelor's degree from McGill University and his master's and doctorate magna cum laude in science and electrical engineering at Laval University. During college he began his lifelong love of flying by becoming a Canadian champion sailglider. He recently merged his skills in engineering and interest in flying by designing and building his own airplane. He had instrument and multiengine ratings for private aircraft. He had many thousands of hours piloting twin-engine aircraft.

After his college years and while visiting Vienna, he met and married the love of his life, Isabel, Baroness von Buol-Wischenau, and settled in Canada. Within two years he accepted a position as technical director of a company in Columbus, Ohio. Four years later he and his family moved to Cincinnati where, in the true American tradition, he founded Overhoff and Associates in the basement of his home.

His company is now named Overhoff Technology Corporation and is recognized worldwide as a manufacturer of high-quality radiation detection instrumentation.

One of the most exciting periods



of his long career was in the late 1960s when he was chief electrical and electronics engineer for the Space Research Institute in Highwater, Quebec. The main project, titled "Harp," was engaged in space research using intercontinental gun-launched vehicles. Mario reported directly to Dr. Gerry V. Bull, famous for gun-launched ballistic missiles. Because of lack of funding and political differences between the Canadian and US governments this project was closed. Bull was later mysteriously assassinated while developing the "super-gun" made famous in a recent movie.

Mario's career spanned some 50-plus years devoted to research, development, and manufacturing of electronic instrumentation for measurement and process control. His technical expertise extended into radar telemetry, guidance for intercontinental ballistic missiles, pseudo random-coded sonar systems for submarine detection, chemical sensor technology, beta gauging, infrared, and microwave gauging for process control of paper and plastic products and aircraft instrumentation.

During the last 35 years Mario

launched an independent company that has designed, manufactured, marketed, and serviced numerous health physics instruments. These include tritium monitors of various types, monitors for radioactive noble gases, monitors for airborne plutonium, and portable alpha, beta, gamma, and neutron detectors. He has served with distinction on several American National Standards Institute (ANSI) N42 standards committees, including ANSI N42.33 for portable radiation detectors for Homeland Security Department (DHS) applications and ANSI N42.47 being developed for dosimeters for the DHS.

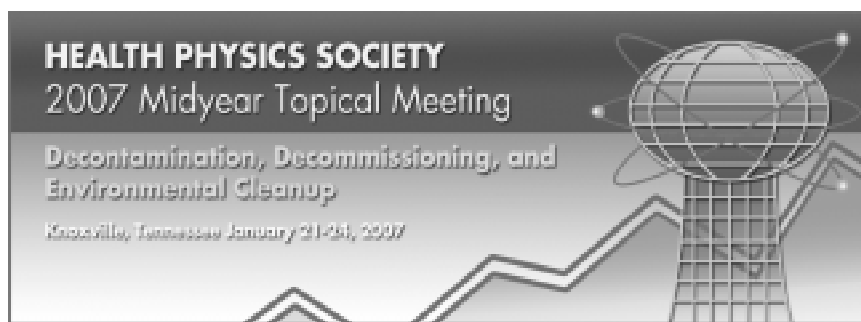
He was an active member of a number of technical organizations including the Health Physics Society, the American Nuclear Society, the Institute of Electrical and Electronics Engineers, Inc., ANSI N42, the Aircraft Owners and Pilots Association, and the Experimental Aircraft Association. He was also a proud member of Rotary International.

Mario knew more about analog electrical technology than anyone else I have ever encountered.

His family, friends, colleagues, and coworkers remember Mario as a warm and caring gentleman who always saw the best in people. He was loved for his warmth, friendliness, encouragement, and some very bad jokes.

He is survived by his widow, Isabel, daughters Alexandra and Kathryn, a sister Angela Countess von Hartig of Vienna, many friends and colleagues, and his pet felines. May he rest in peace.





Heads Up – 2007 Midyear Topical Meeting Coming to Knoxville!

Alex Boerner and Chuck Scott, ETCHPS

Submit that abstract! Make that reservation! Book that flight! The East Tennessee Chapter of the Health Physics Society (ETCHPS) is next in line to host the 40th Midyear Topical Meeting and we invite all Society members and their families to join us in Knoxville, 21-24 January 2007.

In the newsletter each month, we will bring you an update on our midyear preparations as we count down to January 2007! To kick things off, please check out the “Call for Papers” which appears as a four-page insert in this month’s newsletter. The official meeting Web site will go live sometime in April 2006.



Make Your Plans for the 2006 HPS Annual Meeting!

Tara M. Medich, CHP

The calendar is slowly but surely turning pages and one season is blending into the next—yes, it’s time to get serious about making your plans for the 2006 Annual Meeting! The New England Chapter of the Health Physics Society is pleased to be hosting the celebration marking the end of the 50th Anniversary Year of the Society.

From 25 to 29 June, radiation safety professionals from across the globe will converge on the Rhode Island Convention Center in Providence to meet with old friends and colleagues and to learn about the latest technological, academic, and regulatory developments in health physics. Featured at this meeting will be highlights of health physics and radiation safety from years past. All vendors in the exhibit hall will be displaying memorabilia



from their collections, and Paul Frame from Oak Ridge Associated Universities is generously providing items from his museum collection for display throughout the meeting.

For more in-depth information

about meeting details and the city of Providence, please visit the annual meeting Web site at www.nechps.org/HPS_Annual/hps_annual.html. The Local Arrangements Committee (LAC) has put together an excellent selection of social events that will make for a memorable trip to New England. If you will be arriving on Saturday, 24 June, you’ll be able to take in an event completely unique to Providence—a WaterFire. The rivers around the Convention Center and Westin Hotel will be ablaze with 100 fires for a truly glowing “Welcome to Providence.”

For specific questions about local arrangements and happenings, please contact the LAC cochairs: Ninni Jacob at njacob@lifespan.org or Bob Scott at scottbob@cox.net.

We’ll see you in Providence!



WaterFire

Radiation Is Good for You

While reading the March 2006 newsletter article on the deceased presidents of the Health Physics Society (HPS), I realized that it seemed like they died at

advanced ages. I did a quick calculation and the average age at death was 80.5 years. (I guesstimated C. Maurice Patterson's age from date of graduation plus 21.) If Wright H. Langham, who was killed in a plane crash, is subtracted the

age increases to 81.8.

I think that this shows either that radiation is good for you or that being president of the HPS is healthy.

Peter Fear - Syracuse, New York

Chapter News

Deep South Chapter

Lorraine Day

It has been a busy year thus far. The Deep South Chapter made a donation to the brand new Louisiana State University (LSU) Health Physics Society student branch—the newest student branch of the Health Physics Society. We would like to congratulate Shayna Loebig for spearheading this effort. The students held their first meeting, dinner, and a movie (on the making of the bomb) in December. Other members of the student chapter include President-elect Lyndsey Kelly and Secretary Robert Steffes.

The chapter is pleased to announce its newest slate of officers for the 2006-2007 year: President Wei-Hsung Wang, Past President Lorraine M. Day, Vice President/Treasurer Mary Haik, Secretary James Pate, and Board Members Lorraine M. Day, L. Max Scott, and Lyndsey R. Kelly. Balloting was conducted electronically via email.

HPS President-elect Brian Dodd was hosted by the Deep South Chapter on 9-10 February 2006. He did double duty presenting not just one, but two seminars during his visit. Dodd first met with members of the State Department of Environmental Quality, where he was hosted by former chapter treasurer Daniel Van Gent. Dodd met with emergency



planning members. On 10 February, Dodd met with Board Member L. Max Scott for a discussion of source security. This was followed by a tour of the unique CAMD/LSU facility, the only state-supported synchrotron ring in the world. After a brief discussion with Erno Sajo, Kenneth Hogstrom, and Kip Matthews on the status of the health and medical physics program at LSU, Dodd presented his light-hearted, but seriously important, seminar on "Tips for Technical Talks" to the LSU graduate students. Following this seminar, Dodd met with the LSU student chapter and with Kip Matthews to discuss homeland security. Roy Parker also met with Dodd about the transportation of radioactive material. Dodd completed his day by giving a superb talk on "The IAEA and Control of Radioactive Sources."

Through this medium, the Deep South Chapter would like to especially thank Dodd for giving so unselfishly of his time. At a time when the economies of both the states of Mississippi and Louisiana (who make up the Deep South Chapter) have been so devastated by the recent hurricanes, the opportunity to meet with the HPS president-elect is particularly poignant. Many members have not had and will not have the opportunity to travel to either the midyear or the annual meeting.

Announcements

International Symposium Includes Sessions on Low-Dose Radiation Effects

Arland Carsten, CHP

An international symposium in memory of Eugene P. Cronkite, MD, will be held 10-12 May 2006 at Brookhaven National Laboratory. Session topics will include:

- leukemogenesis
- management of hematologic disorders
- regulation of hematopoiesis
- low-dose radiation effects
- radiation accidents, bioindicators, and treatment options
- stem cell and cytokine response to radiation

Cronkite was internationally known and respected as a physician, scientist, scholar, educator, and mentor. His contributions to medicine and radiobiology are documented in over 500 publications; his first nine on radiation effects were published in 1947.

Thirty invited speakers will present papers with ample time for open discussion from the audience. Students and young scientists are encouraged to submit posters.

For complete details and registration forms, go to the Brookhaven National Laboratory Web site (<https://www.bnl.gov/cronkite/>) or the HPS Web site (<http://hps.org/newsandevents/otherevents.html>).



NCRP Releases Report No. 151

Structural Shielding Design and Evaluation for Megavoltage X- and Gamma-Ray Radiotherapy Facilities

David A. Schauer, CHP

The purpose of radiation shielding is to limit radiation exposures to members of the public and employees to an acceptable level. NCRP Report No. 151, *Structural Shielding Design and Evaluation for Megavoltage X- and Gamma-Ray Radiotherapy Facilities*, presents recommendations and technical information related to the design and installation of structural shielding.

This information supersedes the recommendations in NCRP Report No. 49, *Structural Shielding Design and Evaluation for Medical Use of X Rays and Gamma Rays of Energies Up to 10 MeV*, pertaining to such medical radiotherapy facilities. Since the publication of NCRP Report No. 49, many facilities have been designed for accelerating voltages greater than the 10 MV maximum that was covered in that report. Therefore, recent shielding designs have had to refer to NCRP Report No. 51, *Radiation*

Protection Design Guidelines for 0.1-100 MeV Particle Accelerator Facilities; NCRP Report No. 79, *Neutron Contamination from Medical Electron Accelerators*; and NCRP Report No. 144, *Radiation Protection for Particle Accelerator Facilities*, in order to account for the higher energies and the associated production of neutrons. In addition, the use of barriers constructed with composite materials has become commonplace. This report includes the necessary information for these higher accelerating voltages as well as a discussion of the various factors to be considered in the selection of appropriate shielding materials and in the calculation of barrier thicknesses.

In addition to conventional radiotherapy, the report covers the newer modalities such as total-body irradiation, intensity modulated radiation therapy, stereotactic radiosurgery, stereotactic radiotherapy, and intraoperative

radiotherapy. A number of example calculations also are included in a separate section of the report, and an appendix on neutron monitoring is included.

The report is mainly intended for those individuals who specialize in radiation protection and particularly the qualified experts who prepare shielding designs for such facilities. However, it will also be of interest to architects, hospital administrators, and related professionals concerned with the planning of new radiation therapy facilities of this type.

NCRP Report No. 151 can be purchased in hard- and soft-copy formats online at <http://NCRPpublications.org>. A 20 percent discount is available to Health Physics Society members for all online purchases by entering the code hps49151 at checkout. For additional information contact David A. Schauer, ScD, CHP, at schauer@NCRPonline.org, 301-657-2652 (x20), or fax 301-907-8768. ☒

10th Annual John Horan Symposium at ISU

Scott Schwahn, CHP
Eastern Idaho Chapter President

Idaho State University (ISU) would like to announce the upcoming 10th Annual John Horan Symposium, being held at the ISU Department of Physics in Pocatello, Idaho. Jointly sponsored by the Great Salt Lake Chapter and the Eastern Idaho Chapter, the theme is "An Enigma: Is There Anything Truly New in

Health Physics Anymore?"

Nationally and internationally notable speakers have been invited to present papers on this intriguing subject.

The symposium will be held on Saturday, 29 April, 1-5 p.m., followed by dinner at the Holiday Inn in honor of Health Physics Society President-elect Brian Dodd, who will be in attendance. Anyone in the area, regardless of

affiliation or lack thereof, is invited to attend.

RSVPs are requested if attending and should be addressed to Maya Keller, Student Branch Secretary, fax: 208-282-4649 or email: kellmaya@isu.edu, by 21 April. Walk-in attendees will also be welcome for the lectures. For more information go to <http://www.physics.isu.edu/health-physics/registration.html>. ☒

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Nominating Committee

Carl J. Paperiello, Chair

Carl J. Paperiello has agreed to chair the Nominating Committee of the American Academy of Health Physics (AAHP) for 2006. Paperiello is currently at the Nuclear Regulatory Commission (cjp1@nrc.gov) but will retire on 30 April 2006. His alternative email is drcjp1@aol.com. The Nominating Committee consists of nine plenary members of the Academy, one of whom is the vice chair of the American Board of Health Physics (ABHP). No current member of the Executive Committee can be a member of the Nominating Committee. The committee selects two nominees for each elective office, determines eligibility and willingness, and submits the names to the Executive Committee for ballot by the Academy membership. The committee also selects candidates for each ABHP vacancy in consultation with the ABHP. Additional responsibilities include soliciting and recommending nominees for the Joyce P. Davis and the William McAdams Awards.

Other members of the Nominating Committee include Stephen Brown, Daniel Burnfield, William P. Fitzgerald, Shawn Googins (Ex Officio), Jeffrey M. Hoffman, Kyle Kleinhans, Kathryn Pryor, and Max L. Scott.

Call for Nominations

Joyce P. Davis Memorial Award

The AAHP has established the Joyce P. Davis Memorial Award in recognition of her dedication to the advancement of health physics and her humanitarian efforts to uphold the ethics of the profession. The recipient of this award should demonstrate excellence in professional achievement as well as being admired for ethical behavior and interpersonal skills.

The eligibility requirements are AAHP membership

for at least 10 years, championship of professional standards and ethics, and exemplary professional service to the AAHP or the ABHP.

Nominations for the award can be made by any member of the Academy. Nominations should include a brief biographical résumé of the nominee's career and service to the profession and AAHP, a nomination letter, and at least three reference letters in support of the nomination and should be submitted to the Nominating Committee (Chair Carl Paperiello) on or before 1 May 2006.

The Selection Committee for this distinguished award is comprised of the AAHP's professional Standards and Ethics Committee (Chair Charles B. Meinhold), the past president of the AAHP, and the past chairman of the ABHP. The award will be presented at the AAHP luncheon during the annual Health Physics Society meeting in Providence, Rhode Island.

ABHP Examination No. 1 – June 1960

Another 10-point question from the first ABHP exam is listed below. Candidates were required to answer 15 out of 20 10-point questions, plus a 50-point essay in an exam time limit of three hours.

2. a) State and discuss the Bragg-Gray principle. Include a mathematical formulation and a statement of qualifying conditions.

b) When P^{32} is administered as a soluble phosphate, the biological half-life for soft tissue is about 40 days. Calculate the effective half-life. Assuming that 10 mc of soluble phosphate P^{32} is administered to a 70 kilogram man and that this is uniformly distributed throughout the body tissues, what is the integral dose for 1 effective half-life? (P^{32} data: $T_{1/2} = 14.4$ days, $E_{\max} = 1.70$ MeV, $E_{av} =$ MeV) ($1 \text{ MeV} = 1.6 \times 10^{-6}$ ergs)

The Display Ads,
Short Course listings,
and Placement Center
are available in the
hard-copy version of
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Health Physics News Contributions and Deadline

Almost everything the Managing Editor receives by 20 April will be printed in the June issue.

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Article II, Section I, of the Bylaws of the Health Physics Society declares: "The Society is a professional organization dedicated to the development, dissemination, and application of both the scientific knowledge of, and the practical means for, radiation safety. The objective of the Society is the protection of people and the environment from unnecessary exposure to radiation. The Society is thus concerned with understanding, evaluating, and controlling the risks from radiation exposure relative to the benefits derived." *Health Physics News* is intended as a medium for the exchange of information between members. *Health Physics News* is published monthly and is distributed to the members of the Society as a benefit of membership. Subscriptions for nonmembers are available. Libraries, institutions, commercial firms, government agencies, and any person not eligible for membership may obtain a subscription. A small inventory of recent back issues is maintained by the Society at the Office of the Executive Secretary to supply copies to new members not yet on the mailing list. Inquiries about back copies and about subscriptions should be directed to the HPS Secretariat.

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Odds and Ends from the Historical Archives

Paul Frame

EMI Radiation Contamination Monitor (early 1960s)

This slick-looking instrument, the Type 1 Radiation Contamination Monitor, was manufactured by EMI Electronics of Hayes, Middlesex, in England. It was a relatively light-weight ratemeter-scaler and it employed a phoswich detector, something very unusual for 1960 (which I believe was the date of first manufacture). The detector used a ZnS screen for alpha particles and a plastic scintillator for betas. The dial on the left side of the instrument allowed the user to operate in the alpha mode, the beta mode, or the alpha plus beta mode. When operated as a scaler the total counts were indicated on the mechanical register located in the lower right-hand corner of the meter.



One neat thing about the EMI Portable Contamination Monitor: it was featured in the James Bond film *Dr. No*. The movie, however, had what appeared to be a GM detector probe coupled to the monitor rather than the “standard” alpha-beta scintillator. By the way, I would like to hear from anyone who has made a hobby documenting the various radiation detectors used in the movies.

Addition to earlier Odds and Ends column: While referring to the discovery of the element promethium, produced at the Oak Ridge Graphite Reactor, I failed to identify the discoverers. They were Charles Coryell, Jacob Marinsky, and Larry Glendenin. The name promethium was coined by Coryell’s wife, Grace Mary. ☒

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Upcoming Events

2006 HPS Summer School
“Medical Health Physics”
<http://nechps.org/SS06/ss06.html>
18-23 June 2006
Brown University
Providence, Rhode Island

51st Annual Meeting
of the Health Physics Society
<http://hps.org/newsandevents/meetings/meeting5.html>
25-29 June 2006
Westin Convention Center
Providence, Rhode Island

HPS Web Site: <http://www.hps.org>