# THE ORIGINS OF THE HEALTH PHYSICS SOCIETY

**RONALD L. KATHREN** 

Portland General Electric Company and Reed College, Portland, Oregon 97205

and

NATALIE E. TARR

Health Physics Division, Oak Ridge National Laboratory,\* Oak Ridge, Tennessee 37830

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Abstract—The origins of the Health Physics Society are traced from its early beginnings in the Manhattan District to the present, with emphasis on the first decade of the Society. Topics considered include early organizational meetings and efforts, scientific meetings and the development of a journal, chapter formation and the evolution and spinoff of the American Board of Health Physics and the International Radiation Protection Association.

# PRIMEVAL ORIGINS

IN APRIL 1899, barely  $3\frac{1}{2}$  yr after the discovery of X-rays, the British Roentgen Society established a committee to collect evidence of the hazardous nature of X-rays (SPEAR *et al.*, 1953). The work of the committee, probably the first organizational effort in the field of radiation protection, was hampered by limited and conflicting data and by a prevalent and tenacious belief that X-rays were harmless.

Not until 16 yr later was additional formal organizational interest shown. In June 1915, Cecil R. C. Lyster, a London radiologist, introduced a resolution before the British Radiological Society calling for the "... universal adoption of stringent rules..." to ensure the protection of X-ray operators (TAYLOR, 1933). His resolution, which followed a paper on X-ray protection by pioneer British radiological physicist Sydney Russ, (Russ, 1915) was adopted unanimously.

In the United States, organizational interest in radiation protection was shown by the American Roentgen Ray Society, which established what was probably the first standing committee on radiation protection on 14 September 1920, at its annual meeting in the old Curtis Hotel in Minneapolis (GRIGG, 1965). This committee, chaired by Henry Pancoast, a Philadelphia radiologist, included in its membership of seven, three physicists—William Coolidge of ductile tungsten fame, William Duane of Boston and James L. Weatherwax of Philadelphia—and preceded by a few months official recognition of its British counterpart.

### EARLY BEGINNINGS

Before the Manhattan District there was limited need for a professional organization of radiation protection personnel, for there were few devoting full or even half time to this activity and the need for organization did not exist. But as the Manhattan District grew into the Atomic Energy Commission, expanding research and development efforts led to a need for persons with formal training in radiation protection—health physics, as the discipline was now named.

The Health Physics Society had its genesis in the Manhattan District. There, for the first time, a distinct administrative unit was formed, putting together eight individuals<sup>†</sup> with a commonality of interests in radiation protection and coining the name "health physics" (MORGAN, 1965). From this beginning in 1942 at the University of Chicago, the health physics profession has grown in both scope and geography, and developed into a viable and distinct professional entity.

Prior to the Health Physics Society, there

<sup>\*</sup> Operated by the Union Carbide Corporation for the U.S. Atomic Energy Commission.

<sup>†</sup> E. O. Wollan was the leader of a group which included H. M. Parker, C. C. Gamertsfelder, K. Z. Morgan, J. C. Hart, R. R. Coveyou, O. G. Landsverk and L. A. Pardue. Four of the original eight health physicists were active in radiation protection work as of July 1974.

were no organizations whose sole or primary interest was radiation protection. The American Industrial Hygiene Association (AIHA), organized in 1939, provided a vehicle for those whose interests and activities lay in the occupational health area, but radiation protection *per se* was only one small facet of the overall concern of this society. Permanent committees on radiation protection had existed within the radiology organizations since at least 1920, staffed in part with physicists interested in this area. Again, these committees were only a small part of an organization whose interests were in other albeit related fields.

To a great extent, the Health Physics Society grew out of the health physics training program at Oak Ridge National Laboratory. Since 1944, the Health Physics Division at Oak Ridge has been providing formal training to young scientists in radiation protection, and these individuals plus those who followed in the AEC Health Physics Fellowship Program at Oak Ridge in particular felt the need of keeping contact with their classmates, colleagues, and instructors as they scattered across the world.

This feeling was nurtured in many by Elda E. Anderson who was placed in charge of the health physics education and training program at ORNL in 1949. Reminiscences of many of her former students include her somewhat wistful queries of their projected whereabouts and activities 10 yr in the future. She very badly wanted the health physicists in general and her Oak Ridge charges in particular to have recognition as a professional group and to remain in contact with each other and with the profession. Very early and clearly she sensed the need for health physicists to establish themselves as a separate profession-to stand on their own two feet, as it were, and not get lost in the shuffle. These ideas she shared with many of her prominent colleagues at Oak Ridge and elsewhere: Karl Morgan, Fred Cowan, Walter Claus, G. W. C. Tait and Lauriston Taylor, among others.

The idea of a society was starkly and squarely placed before the growing nuclear industry by Saul Harris, one of her former students and then Associate Radiophysicist with the State of New York. In a letter to *Nucleonics*, published in November 1952, Harris called for the formation of a radiation protection society "... for closer communication and solution of mutual problems." Harris recognized quite clearly the dichotomy between those within the AEC programs and those on the "outside" and also felt that a professional scientific society would serve to benefit industry and government as well as the individual health physicist (HARRIS, 1952).

Many, however, did not feel that a separate organization with interests devoted exclusively to health physics was needed, among them the editors of Nucleonics who made such a comment at the end of Harris' letter, and the Executive Secretary of the American Industrial Hygiene Association, who stated in reply to Harris, "... radiation protection is simply a new emphasized phase of ... occupational health" (SMYTH, 1953). Other health physicists apparently concurred, or felt that a tie with the medical physicists or some other group would be advantageous and proper. Thus, the formation of a discrete body of professional health physicists was slow in coming.

## THE OSU MEETING AND THE FORMATIVE YEAR

Interest in health physics as a separate discipline continued to grow. In June 1955, the Ohio State University Health Physics Conference was held. This was the first scientific meeting exclusively devoted to health physics. In large measure, this meeting was the organizational effort of Francis J. Bradley, then campus health physicist at Ohio State University (OSU), and was held in cooperation with the U.S. Atomic Energy Commission. Bradley's impetus for the meeting in part came from his association with Elda Anderson, whose soft queries about the professional future of health physics had remained with him from his student days.

The OSU meeting was  $2\frac{1}{2}$  days in duration, 13-15 June 1955. According to the program, the main purpose of the meeting was to draw together those in the field to hear the latest developments and to discuss their problems. Dosimetry was the topic of three of the eight sessions, with waste disposal, air sampling, legislation, organizations, and a general session rounding out the program. The program committee was chaired by Elda Anderson, and included Bradley, L. C. Emerson, M. F. Fair and L. R. Rogers.

At the door, leaflets were passed out the first day listing 10 organizational possibilities for health physicists, including separate society formation with and without a journal, and affiliation with one of four other organizations: AIHA, American Nuclear Society (ANS), Nuclear Engineering Society, and American Institute of Physics (AIP). These possibilities, along with some additional points in favor of organization, were the subject of a talk by Karl Z. Morgan to the AEC Fellowship Alumni, assembled for dinner in the Franklin Room of the Ohio Union. After the dinner and the talk by Morgan and a provocative inquiry into the question of just who was a "qualified expert" by Lauriston Taylor,\* the meeting broke up. The group, however, drifted to Mack Hall where it reassembled and, after brief discussion, voted 180 to 15 to form a professional Health Physics Society with no journal, no paid officers, and dues of \$2.00 per yr.

The next day, a business meeting was held and interim officers and a board of directors elected. Officers and board members were K. Z. Morgan, President; F. P. Cowan, Vice President; E. E. Anderson, Secretary-Treasurer; and Board Members: E. C. Barnes, F. J. Bradley, W. D. Claus, W. T. Ham, Jr., J. W. Healy, H. Mermagen, W. E. Nolan, J. E. Pickering, C. M. Patterson and G. W. C. Tait. The thirteen member board included representation from industry (1), universities (2), USAEC (1), the military (1) and Canada (1), with the remainder coming from the AEC laboratories. Although only two members were from ORNL, most were products of the ORNL training program.

Among the actions of the fledging society was the formation of committees. Listed below with their chairmen are those which played a vital role in the first formative year:

| W. D. Claus,   |
|----------------|
| J. W. Healy    |
| L. S. Taylor   |
| F. P. Cowan    |
|                |
| W. T. Ham, Jr. |
|                |

Of these committees, the Affiliation Committee was charged with the somewhat unusual task of examining the possibility of the newly formed Health Physics Society joining with some other already established organizations. This task was one that required a good deal of diplomacy, for many individuals active in radiation protection felt strongly that a new society was unnecessary. Others were equally strongly in favor of remaining unaffiliated, some with bitter feelings left from unpleasant experiences from the formation of a research oriented society a few years before. The chairman of the Affiliation Committee, after somewhat less than 1 yr, noted in a letter to Interim President Morgan, "I am afraid that the problem of affiliation is the most controversial issue that we face in the new society. My personal opinion is that we should not try to affiliate at the present time but turn the matter over to the permanent officers of the society when they are elected this June."

But the committee did persevere and formally investigated the possibility of affiliation with several organizations, including the AIHA, ANS, AIP, Radiation Research Society and the newly forming Biophysical Society. Response from the societies contacted was, in most cases, favorable, but the committee consensus was for the Health Physics Society to remain on its own. And so, on 16 June 1957, a single 94-word paragraph entitled "Report of the Affiliations Committee" stated just that, along with the recommendation that the committee disbanded since it had completed its assignment.

The other committees functioned well, also. The Committee for Proposals of Name of Organization considered a total of 11 names, ultimately offering to the society membership "Society for Radiation Protection" and "Health Physics Society" for consideration at its second annual meeting held in June 1956 in Ann Arbor. A third name, "Radiation Protection

<sup>\*</sup> Taylor's talk was recorded on a "low-fi" plastic record, held in the archives of the Society.

Society" was suggested from the floor but shortly before the 2230 adjournment time on 25 June 1956 the name "Health Physics Society" was selected by the majority of the 198 members present.

For the first scientific meeting of the new society, the Program Committee put together a five-session affair covering  $2\frac{1}{2}$  days. The afternoon of the third day was devoted to technical tours, a tradition that has since been continued through every annual meeting. The papers presented covered a broad spectrum of topics ranging from practical health physics through facility description to research reports. Of some significance was the absence of a paper on medical health physics, although one of veterinary health physics was included. The lack of medical health physics papers was at least partially attributable to two factors: (1) insufficient interest in this topic by those in the Society who were mostly affiliated with the AEC laboratories; (2) the feeling that other organizations provided a better forum than the HPS. However, the Program Committee did provide a successful program and received a commendation from the general membership.

An active committee during this first formative year of the Society was the Constitution and By-Laws Committee. By the Ann Arbor meeting, this six-member committee had drafted a constitution and by-laws, which was adopted at the general membership meeting in Ann Arbor by a vote of 178 to 19, after considerable floor discussion.

The Qualifications Committee, charged with establishment of the requirements for membership, met in December 1955 in conjunction with the annual meeting of the Radiological Society of North America. Prospective members were to hold a B.S. degree or the equivalent in health physics experience, and in addition were to have two sponsors. The Committee also took a significant step beyond its charter by calling for the establishment of a Certification Committee to "... certify people in the field of Health Physics as Radiation Safety Officers." Collaboration with other interested organizations was suggested and the Qualifications Committee was hopeful that the certification process would eliminate the necessity for associate membership within the Society. Although the latter was not the case, the Qualifications Committee had set the stage for the formation of the American Board of Health Physics, a responsive action to the need for professional identity which had been expressed only 6 months before at the Ohio State meeting.

# GROWTH AND INTERNATIONALIZATION

By the time of the first annual meeting in Ann Arbor, the Society was a year old with a total membership of 628. Several new members were added at the meeting and the membership continued to grow rapidly, exceeding 1000 by early 1958. Less than 5 yr later, the membership reached 2000, and by 1966, 10 yr after the organizing meeting at Ohio State University, the Society could boast of nearly 3000 members (Fig. 1).



FIG. 1. Growth in Health Physics Society Membership, 1956-1966.

Many of these members were in foreign countries—i.e. they lived outside of the North American continent. This posed no real problems, but stirred the imagination of several members—most notably K. Z. Morgan to thoughts of establishing a truly international radiation protection organization. Although the Health Physics Society was open to those in radiation protection throughout the world, it was primarily a North American organization, organized and run by health physicists living in the United States and Canada.

Foreign membership had grown rapidly, however, responsive in many instances to invitations to join from American colleagues. Initially, the Society was virtually all American. Only three attendees of the Ohio State Health Physics Conference were from outside the U.S. Two were Canadian and thus could hardly be classed as foreign, and the other a Japanese AEC employee working at the University of Rochester. By 1959, however, the Society boasted of more than 100 overseas members representing 17 countries, in addition to 32 Canadians. The first European member, Werner Hunzinger, joined the Society in 1957.

The large numbers of overseas members, particularly from Japan, led to the formation of sections. These were organized along national lines, and also served as a national health physics organization. Because they represented the health physicists of an entire country, sections were accorded a relatively important position within the Society, their presidents serving as *ex officio* members of the Board of Directors. The France and Japan Sections affiliated in 1962, followed by the United Kingdom Section the following year.

As the sections grew, it became apparent that an international organization was in the making. Initially, the intent was to seek cooperation with international societies in related areas, such as medical physics. However, several overseas members, notably Bruce Wheatley at CERN, J. Zakovsky, Peter Courvoisier, W. G. Marley, Werner Hunzinger and Walter Moos, were interested in a truly international society. During 1957–1958, these individuals strove towards establishment of a European health physics society.

In the United States, there was also interest in internationalization. Elda Anderson, the charter secretary and fourth president (1959-1960), had long had the dream of an international society. She had planted the seeds in her American students and had also strongly influenced the organization of European health physicists during the summer of 1957 while serving as an instructor in the Health Physics Course at Mol, Belgium. Her dream was shared by many other Americans including Karl Morgan, J. C. Hart, H. H. Abee and W. S. Snyder. In 1963, the membership voted on the formation of an international organization, and an overwhelming majority indicated approval. Thus, the stage was set for the formation of the International Radiation Protection Association (IRPA), which adopted its constitution and became a reality on 3 December 1964. This action obviated the need for the sections within the Society and appropriate measures were taken to discontinue them.

Shortly after the formation of IRPA, the membership was polled on affiliation. The vote was 1144 to 76 in favor of joining IRPA and President H. L. Andrews made formal application for admitting the Health Physics Society, now geographically limited to the United States and Canada.

### THE EXECUTIVE SECRETARY AND INCORPORATION: SIGNS OF MATURATION

In 1959, in response to the increasing business demands of a growing society and the Journal, the Board of Directors appointed an ad hoc committee to examine the practicality of obtaining the services of an executive secretary. Initially, the committee recommended the use of an established organization for this purpose, and the Board concurred. However, sentiment changed, dictated in part by finances, and at the Board meeting on 29 June 1960, considerable discussion ensued. Ultimately, the Board voted to consider R. F. Cowing, a charter member of the Society with some experience in managing church groups, for the position. A somewhat surprised Cowing was approached by R. G. Gallaghar, chairman of the ad hoc committee, and invited to appear before the Board on 30 June 1960. The Board reviewed the proposed duties of the Executive Secretary with Cowing, heard his qualifications and ideas, and after excusing him from the meeting, moved to accept him as part-time Executive Secretary, the first paid employee of the Society.

Cowing's impact was immediately felt. His primary concerns were threefold: communications, membership, and finances, and all were interrelated. Among his first efforts was an attempt to update the membership mailing list, a vital link in communications, and an expensive drain on the treasury, since the list was so inaccurate that fully 80 % of Cowing's first mailing had wrong addresses. The Newsletter, originally known as the President's Letter, was instituted and greatly expanded under Cowing, serving today not only as a carrier of news items but as a sort of mini-journal on professional affairs. As the chaos of the membership rolls cleared, the office of Executive Secretary turned towards other activities such as fiscal overseeing of the Society finances, encouraging affiliates to join and support the Society, and providing continuity between Board meetings as well as serving as a central information source and providing a permanent address for the Society.

One of the Executive Secretary's early tasks was to poll the membership with respect to incorporation of the Society. About half the members voted, and all the ballots returned to him—753—were in favor of incorporation. Not a single "no" vote was received and accordingly, the Board ratified the vote of the membership. Thus, an action initiated several months earlier—the filing of incorporation papers in the State of New York—was consummated, and the Health Physics Society became a non-profit corporate entity in early 1961, 4 yr after K. Z. Morgan and C. M. Patterson first proposed and the Board approved the allocation of \$200 to study the matter.

Among the many tasks of the Executive Secretary was the annual compilation and publication of the Membership Handbook. The first of these was issued 1 November 1957, and contained in addition to the alphabetical listing of members, the constitution and by-laws, organizational and committee structure, listing of previous officers and a few descriptive paragraphs about the Society. A photograph and message from F. P. Cowan, then Society President, was also included. Over the years, the content and format of the Membership Handbook have not changed appreciably, except to add the roster of certified health physicists, a geographical listing of members and a roster of Chapters and their officers. The size, however, has increased from a little booklet of 70 pages measuring  $9.5 \times 15$  cm to 188 pages  $15 \times 23$  cm. The alphabetical listing of members alone in the 1973-1974 Handbook runs to 50 pages, with each listing allotted but a single line.

The Membership Handbook contains a sort of mini-history of the Society compacted into an historical listing of officers. Examination of the officers provides some indication of the maturation of the Society. The first permanent Board and Officers (1956-1957) were virtually all from AEC sponsored projects or laboratories, or in one case, the AEC itself. Only two of the 13 were then from outside the AEC "family"-G. W. C. Tait of Chalk River and R. G. Gallaghar, Liberty Mutual Insurance Company. The present Board and Officers included seven from the academic world among their number, four from the AEC "family" two from industry and one each from a hospital and a local regulatory program. Of interest is the fact that one of the eight original health physicists of the Manhattan District serves as an elected director. Similarly, examination of the 18 Society Presidents (Fig. 2) shows an increasing trend toward the academic world.

Another sign of maturation is the Annual Meeting which has grown from relatively narrow health physics programs attended by a few hundred to a broad-based scientific program attended by about 1000. Not only has the size of the program expanded, but the increasing scope of health physics has necessitated augmentation of the Annual Meeting with a Topical Symposium held annually since 1965.

## THE JOURNAL

One of the most significant contributions of the Society to the scientific community in general and the profession in specific was the establishment of a journal devoted to the science and art of health physics. The idea of a society-cum-journal had been proposed at the original organizing meeting, but the vote had been for the formation of a society only. However, the idea and hope for a journal did not die and investigations into the mechanism of establishing a journal were begun by K. Z. Morgan during his year as charter president. The Publications Committee, chaired by John Auxier, made a thorough study of the pros and cons of a journal, recommending in its report to the Board in June 1957 that the Society publish a journal. It buttressed its

#### PRESIDENTS OF THE HEALTH PHYSICS SOCIETY



KARL Z. MORGAN 1955-1957



FRED P. COWAN 1957-1958



LAURISTON S. TAYLOR 1958-1959

HOWARD L. ANDREWS

1964-1965



ELDA E. ANDERSON 1959-1960

MERRIL EISENBUD

1965-1966



JOHN R. HORAN

1966-1967

ROBLEY D. EVANS

1972-1973

JOHN S. LAUGHLIN 1960-1961



WALTER D. CLAUS 1961-1962



WALTER S. SNYDER 1967-1968



NIEL WALD 1973-1974



C. M. PATTERSON 1962-1963



WRIGHT H. LANGHAM 1968-1969



WILLIAM T. HAM, JR.

1963-1964

J. NEWELL STANNARD 1969-1970





1970-1971



RUSSELL F. COWING Executive Secretary 1960-1974







recommendations with a poll of the membership which overwhelmingly favored a journal. The Publications Committee was thorough, even recommending an editorial organization.

Throughout the spring and summer of 1957, the Publications Committee continued its search for a publisher and firm plan for a journal. The committee, under the leadership of acting chairman John Handloser, ultimately recommended that Pergamon Press be selected as the publisher, foregoing the offer of Professor J. E. Roberts, Hospital Physicists Association, of joint publication of *Physics in Biology and Medicine*.

And so, at a meeting of the Board of Directors in the New York City offices of the Atomic Energy Commission, the journal *Health Physics* was officially born. At this meeting, the results of a formal membership vote were reported and indicated that 89% favored a journal. Pergamon Press was selected as publisher. John Auxier, one of the original editors and present Editor-in-Chief, recalls how he and Elda Anderson urged Morgan to end his search for a suitable editor by accepting the position himself. Morgan reluctantly did so, and began the task of bringing to fruition the wishes of the membership.

Also discussed at that meeting on 29 October 1957 were several issues vital to the new journal. Emphasis was put on quality and concern was expressed over publishing disproportionate numbers of papers from a single laboratory. The Board urged that a variety of papers be published and recommended the establishment of an honorary editorial advisory board with wide foreign representation. This was done, and a 50-member board representing 17 countries plus the World Health Organization was appointed to advise Morgan and his two associate editors, W. S. Snyder and J. A. Auxier. (C. M. Patterson joined the journal staff as an editor in 1966, and G. D. Kerr became an editor in 1972.)

The first issue of the Journal appeared 3 months behind schedule in June 1958. For the first few years, publication was irregular, but in 1962 bimonthly publication was begun. The following year *Health Physics* became monthly. In 1960 a particularly significant single number was published as *Volume 3: The Report of*  ICRP Committee II on Permissible Dose for Internal Radiation Similarly, the proceedings of the annual Hanford Symposia on Radiation Biology have been more or less published routinely in a single issue each year.

The growth of the Journal has been great and indicative of need and interest. Volume 1 had a total of 453 pages; Volume 9, published for calendar year 1963 (the fifth year of the Journal) had more than 1400 pages. In 1970, the Journal published two volumes and ran to more than 1500 pages. In the year after the first issue appeared, 75 manuscripts were received; 5 yr later the number had doubled and in another 2 yr had approximately tripled (Fig.'3).



Fig. 3. Number of manuscripts received annually for publication in the Health Physics Journal through June of the year shown.

#### A SOCIETY SYMBOL

Among the items informally discussed by attendees at the Ann Arbor meeting was the need for a distinctive and meaningful insignia for the new society. No official action, however, was taken by the membership or the Board of Directors. However, in October of 1957 the first design was submitted by S. G. Fidler, then Chairman of the Membership Committee, to the Society Secretary Elda Anderson. The design was circular with an outer ring bearing the society name and a Latin motto "Salus in Vi Neucleari", rather freely translated as "Safety in Nuclear Energy". The center of the proposed emblem featured an  $\alpha, \beta, \gamma$ —spitting snake entwined around a cutaway representation of a reactor.

The sketch was received by Elda Anderson who replied to Fidler noting that it had arrived too late for consideration as a letterhead, since the stationary had already been purchased. She suggested that he send a copy of the sketch and explanation of the symbol to each Board member, and also noted, "Personally, I like everything about it except the snake and I have an aversion to them."

Other proposed designs were received the following month from Saul Harris and A. L. Baietti. These first three designs are in Volume 1, Number 1 of *Health Physics*, June 1958. Several other designs were also received and published in subsequent numbers of the Journal. The last of these, submitted in September 1959, by J. C. Hart and A. D. Warden, who solicited ideas from various colleagues, was adopted in 1960 and has served the Society ever since.

# IDENTITY AND CERTIFICATION

Among the major concerns of the founders of the Society was professional identity and qualification of health physicists. To a great extent, many of the early decisions to "go it alone" were based on a desire to establish and preserve professional identity and perhaps to avoid the snubs and rebuffs that some early health physicists had received from other scientists who felt that health physics was, at best, only semi-professional. Certainly this thinking underlay the formation of the Society itself, as well as the establishment of a separate journal.

In 1956 a Certification Committee, an outgrowth of the earlier Qualifications Committee, was established with the already overburdened Elda Anderson as Chairwoman. Initial efforts were to survey the efforts of other professional societies, and to attempt to incorporate these schema into a viable health physics certification procedure. Certification was an important area of concern within the Society, and was a major discussion topic at many of the early board meetings. Thus, there was some impetus to quickly establish a formal certification mechanism.

The Certification Committee moved towards establishment of a formal procedure, considering at first the creation of a special grade of membership, with election by a special board. By mid-1958 although considerable progress had been made, no formal certification had been established and the Board, at its July meeting, set forth firm guidelines for the committee and allocated a budget expenditure of \$200 to expedite the effort. To some extent, the identify-certification problem had been exacerbated by the classification of health physicists as specialized industrial hygienists by the Federal Civil Service and thus, interest was keen. The labor continued, and on 8 November 1958 the plan for certification as proposed by the committee was approved by the Board. The Committee was also requested to serve as the interim American Board of Health Physics, with staggered membership terms.

The newly formed ABHP immediately embarked on a program of certification. One hundred exceptionally qualified individuals were to be certified by selection; others would be certified by a written examination. The qualification would take into account not only scientific knowledge and professional accomplishments, but ethics as well and all were to sign a code of ethics for the profession prior to being certified. The path of the fledgling certification program was not smooth, however, for many health physicists were opposed to the methods, plan, or rapidity with which the procedure was proceeding. Many openly voiced their objections, some rather strongly in letters to the Board and Dr. Anderson. Objections notwithstanding, the "grandfathers" were selected and the qualifications submitted to the general membership in mid-1959. Approval was received and in the fall the Board of Directors formally established the ABHP by a change in the By-Laws on 29 October 1959. A short time later, W. A. McAdams was selected as chairman. The first written examination was given in June 1960 during the Society's annual meeting in Boston. Fifteen candidates took the examination, scoring an average of 58.7%; 13 were certified by the Board (MOELLER, 1971).

From the outset, the ABHP realized that it should be a separate incorporated body and attempted to gain such stature in New York. Incorporation was contingent upon approval by the Department of Education which, after an investigation, issued to the ABHP a certificate granting the ABHP permission to carry out its proposed mission—the first such certificate issued to a private group. Incorporation followed and on 1 December 1960 the ABHP ceased to be a part of the Health Physics Society.

# IN MEMORY OF ANDY

In the spring of 1961, the Society was shocked and saddened by the premature death of Elda E. Anderson. Known affectionately as "Andy", this indefatigable woman had worked wonders in the establishment of the Health Physics Society. To many of her former students, the Health Physics Society was her legacy for her concern was always with the identity and professionalism of the health physicist. To that end she had planted within them the seeds of organization and pride in their profession. She had served the Society in innumerable capacities-as informal committee member giving freely of her ideas, and as a catalyst to others. She had served as Secretary-Treasurer pro tem, charter Secretary, and as the fourth President, as chairwoman of the important Certification Committee and of the newly incorporated American Board of Health Physics. As a teacher of health physics, she had no peer, and her humanity and humility were virtues well known to her students and colleagues; to many of her students she was not only teacher, but friend, counselor, and confidant as well.

Elda E. Anderson was, for many, their introduction to health physics as well as their reason for remaining in the profession. She instilled a deep interest in many students. Shortly after her death, a memorial fund was established by her friends and associates and by the 1961 Annual Meeting in June, nearly \$1000 had been contributed. The money, held in trust by the East Tennessee Chapter, was accepted by the Society and a committee, chaired by W. T. Ham, Jr., appointed to study possible uses of the fund.

At the next Board meeting, the E.E. Anderson Memorial Fund was established for "... teachers, researchers and others who contribute to the profession of Health Physics." J. S. Laughlin was appointed Chairman of the Fund Com-The following year, the Elda E. mittee. Anderson Award for distinguished service was presented to Lester R. Rogers. Gradually the award evolved into a formal presentation made each year at the Annual Meeting to a young health physicist who has distinguished himself in his profession. The emphasis on youth is fitting as a memorial to one whose professional life was devoted to the training of new health physicists.

#### CHAPTERS

As the Society grew, the need for chapters organized along regional lines became apparent. For many, travel was difficult, and there was a need to communicate or rub elbows, as it were, with others in the profession. Also, there was a feeling among some that the Society was too "Oak Ridge" oriented and that the formation of chapters would serve to provide greater participation and voice for all members.

In 1958 the Council on Rules and Procedures established the mechanism for the formation of regional chapters, and later in that year, the membership voted to incorporate this change in the By-Laws. Thus, at the Board meeting of 17 June 1959, in Gatlinburg, Tennessee, four chapters were newly certified: Baltimore-Washington (as of 8 November 1958), Eastern Idaho, Pittsburgh (now Western Pennsylvania), and Savannah River. The next June four more were added: Columbia, Delaware Valley, Northeastern New York and The East Tennessee Southern California. Chapter was added in the fall of 1960. By 1968 the chapter push appeared over and the roster of chapters numbered 30 with all regions of the United States represented.\* It is of interest to note that no significant effort has been made to organize a Canadian chapter,

<sup>\*</sup> A local health physics organization was organized in Western Oregon and Washington in 1973 and became the 31st Chapter by action of the Board of Directors in July 1974 (Cascade Chapter).

although as of 1972 more than 50 Society members reside in Ontario, with another dozen or so scattered throughout the rest of Canada. However, virtually all of the members in Ontario are employed by three organizations in geographically separate locations with no one location having a sufficiently large group of health physicists to support a chapter of its own (COWPER, 1972).

## EPILOGUE AND ACKNOWLEDGEMENTS

This report has attempted to trace the origins of the Health Physics Society paying particular attention to the early formative years. Little has been said about events beyond the first decade of the Society, for as yet these events are still too fresh to be considered with the objectivity and perception that comes from subsequent occurrences and the passage of time. The early years of the Society are best described by the paradoxical term "contemporary history". The writing of such history is not without its hazards, for the memories of those who participated have dimmed and events may be recalled erroneously or with disproportionate emphasis, or with the mellowness of time. Hence, this report has made extensive use of written sources, using memory for corroboration and amplification. Errors, both factual and interpretive, may creep

in and the responsibility rests solely with the authors.

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