

NOTES AND NEWS

NORMAN ACTON, NEW ISRD SECRETARY GENERAL

Dr. Gudmund Harlem, President of the International Society for Rehabilitation of the Disabled, announced recently that Mr. Norman Acton has accepted the post of Secretary General of the Society. Mr. Acton, who is presently Secretary General of the World Veterans' Federation, will take up his duties at the Society's Secretariat in New York City on November 1, 1967.

Mr. Acton has been active in the field of rehabilitation of the disabled for over 20 years and brings to the International Society his worldwide experience and an abiding concern for the disabled everywhere.

Following World War II, Mr. Acton directed post-war reconstruction programs in Asia and from 1951-1954 served as Assistant Secretary General of the International Society. From 1955-1959 he held the position of Executive Director of the United States Committee for UNICEF (The United Nations Children's Fund).

Since 1961, Mr. Acton has been Secretary General of the World Veterans' Federation. During his tenure, the WVF conducted global rehabilitation programs highlighted by technical assistance and rehabilitation projects in a number of countries, an International Experts Meeting on Prosthetics, Virum, Denmark in 1963, and the First International Prosthetics Course in Africa, at Abidjan, Ivory Coast in 1966.

The International Society for Rehabilitation of the Disabled, to which Mr. Acton now returns, is a world federation of 105 voluntary agencies in 60 countries serving the world's handicapped. Its help consists of organizing expert task forces, committees, commissions, congresses, and conferences in specific areas of disability, and developing information services designed to make new scientific knowledge and technical skills readily available for the benefit of the handicapped in every country without exception.

Mr. Acton's philosophy and vision on rehabilitation was clearly expressed by him in his opening address at the Annual Meeting of the President's Committee for the Employment of the Handicapped in Washington, D.C., this year. Mr. Acton said, among other things, "Of all the fields of human endeavor, I know of none in which there has been greater real progress in the past 20 years than in this complex of interests and activities we call rehabilitation . . . many of the world's problems—including the division of Germany, tension in the Middle East and the conflict in Vietnam—would be a great deal closer to a solution if the parties concerned could capture the

spirit of cooperative endeavor that exists in the rehabilitation fraternity . . . that is made up of people who have seen the real potentiality of the human spirit, and are consequently ready and eager to join hands across the various boundaries which separate mankind in order to help each other. It is for that reason that work for the disabled has been one of the most successful channels of international understanding and cooperation."

NEW AMBRL HAND

The Army Medical Biomechanical Research Laboratory has developed an electromechanical artificial hand which provides an amputee with automatic control of grasp.

The prosthesis applies the use of a piezoelectric sensing device that is built into the thumb. Piezoelectricity is a phenomenon exhibited by certain crystals, such as quartz, in which electricity is produced when pressure is applied; when electricity is applied, the crystals contract and expand.

The hand not only looks alive, but it also mimics the human hand in its ability to sense and apply precisely the required grasping force to permit lifting an object.

The artificial hand was developed by Lloyd Salisbury, Chief of Biomechanical Devices Division and Albert B. Colman, Chief of Biomechanical Design Branch, Army Scientists, and Dr. Fred Leonard, Scientific Director, who initiated the program. It is considered by the developers to be a major breakthrough in hand design.

GARDNER IN SOUTH AMERICA

Henry F. Gardner, Technical Assistant to the Director, VA Prosthetics Center, New York City, spent July 1 through August 4, 1967, in Brazil as a consultant to the Social Welfare Service in the organization of an Amputee Rehabilitation Center in Rio de Janeiro. The World Health organization sponsored Mr. Gardner's trip as part of their aid program in vocational rehabilitation and social welfare currently being organized under Dr. R. Hindley-Smith of the United Kingdom.

While in South America, Mr. Gardner visited Dr. F. Serrano in Bogota, Columbia, to assist him in planning a regional prosthetics course for South America.

LASER CANE DEMONSTRATED IN SWEDEN

J. Malvern Benjamin, Jr., of Bionic Instruments, Inc., demonstrated the C-4 laser cane at the Seventh International Conference on Medical and Biological Engineering held in Stockholm, Sweden, August 14-19, 1967. Bionic Instruments developed the laser cane with the support of the Veterans Administration (see pp. 253-254, BPR 10-7).

A host of distinguished speakers at the Conference covered a wide scope of subjects in the fields of Medicine, Engineering, and Rehabilitation. Included among the many papers presented were the following: Materials for Implants; Clinical Monitoring and Intensive Care Units, Speech and Hearing, Artificial Hearts and Arteries, Aids for the Handicapped, Biomechanics, and Bioengineering.

NU FILM WINS AWARD

The film "Bilateral Hip Disarticulation," produced by Northwestern University, won third place in the Biological Photographers Association's 37th Annual Exhibition in Toronto, Canada, August 24, 1967.

A gratifying aspect of this award for those at NU who were responsible for the film's production is the fact that the film competed with professional studios at the exhibition.

As a result of the winning, many inquiries were made at the exhibition concerning the availability of the film and it is expected that many requests for it will be made. For those interested, the film is stocked by the Research and Development Division of the Prosthetic and Sensory Aids Service of the Veterans Administration in New York City and may be borrowed free of charge for a short period of time.

FREE LIBRARY SERVICE EXTENDED TO OTHER HANDICAPPED

The Library of Congress, Division for the Blind, Washington, D.C. directs a program for free library service to the nation's blind. This service is now available to people with other handicaps. Public Law 89-522 (June 30, 1966) authorized the Library to extend its training to residents of the United States and U.S. citizens abroad who cannot read conventional printed materials because of physical limitations.

Talking Book record players are lent free of charge through 54 State agencies. The books selected for the program are general in nature—classics, current fiction, and nonfiction—the type of reading offered sighted persons patronizing an average public library. All Talking Books are adequately narrated.

To receive materials under the program, the individual reader should obtain a brief statement certifying the characteristics of his physical disability from a competent authority such as a physician, optometrist, registered nurse, or professional staff member of a hospital or other institution or agency or, from a professional librarian. The statement should be sent to the authorized regional library in the person's area or, if not known, to the Library of Congress.

Upon application and certification, the blind or handicapped reader will be sent on loan, post-free, and free of charge, a Talking Book Machine by the appropriate agency in his state; and he will be entitled to borrow, post-

free and free of charge, Talking Books or (braille, or both) from the regional library for the blind serving the area in which he lives. Because of the limited number of copies of any recording, each reader is asked to give the supplying library a list of up to 40 desired titles at a time; frequently the lists are prepared by the library staff, at the reader's request. To assure a continuous flow of service, he is usually sent two titles at the start, and when he returns a recording the next available title on his list is mailed to him promptly, usually the same day. A borrower is allowed to retain book titles for a maximum of four weeks, magazines for a shorter time. As might be expected, there are waiting lists for the newer and more popular books.

The 50 states, Puerto Rico, and the Virgin Islands are served by 32 Regional Libraries for the Blind. For detailed information on any phase of library service for blind or disabled persons, veterans and other, write directly to: Division for the Blind, Library of Congress, Washington, D.C. 20540. This Service is free to handicapped persons as well as blind veterans or any blind person interested in this program.

DR. HAROLD W. GLATTLY

Dr. Harold W. Glattly died of cancer at Walter Reed Hospital on October 26, 1967. He was active in prosthetics for a decade. Formerly Executive Director of the Prosthetics Research Board, National Research Council, February 1, 1957 to 1958, he then served as Executive Secretary of what is now termed the Committee on Prosthetic-Orthotic Education until his retirement July 31, 1967. Concurrently with his work for the CPOE, he also served in recent years as executive secretary for the Committee on the Skeletal System and the Committee on the Genito-Urinary System, other activities of the Division of Medical Sciences, National Research Council.

Born in Mora, Minnesota, he received his medical degree from the University of Iowa. He entered military service in 1926, eventually attaining the rank of Brigadier General. He served at a variety of posts in this country and abroad. Captured at Bataan, he was a prisoner of the Japanese for the remainder of World War II.

In his leadership in prosthetics education, Dr. Glattly was particularly effective in stimulating "grass roots" interest in selected state and local medical societies, in introducing prosthetics topics as examples to illustrate other areas in medical school education, internship, and residency programs, and in pointing out the possibilities for far more below-knee amputations, especially in cases with vascular diseases of the lower extremities where above-knee amputation was routine. He tirelessly arranged lectures, demonstrations, and exhibits at medical and paramedical meetings and helped to develop numerous prosthetics clinic teams. He conceived a plan of distributing to every medical school a complete set of copies of 125 slides and captions prepared by the Veterans Administration to facilitate lectures related to pros-

thetics. His study on prosthetics in orthopedic residency training, published in *Artificial Limbs*, Spring 1964, showed clearly that prosthetics had become a part of residency training, that organized clinic teams were widespread, and that most of the exceptions were planning to initiate prosthetics training and clinic teams.

Dr. Glattly's reports on the survey of newly fitted amputees, conducted jointly by his Committee and the American Orthotics and Prosthetics Association, disclosed a wealth of information. Dr. Glattly particularly emphasized the importance of the cases in older age brackets and the great disparities in ratio of below-knee to above-knee levels between comparable cities, presumably due more to differences in philosophy than to medical facts.

Dr. Glattly's contributions to medicine, prosthetics, and his country were recognized in various ways on many occasions. During his career in the Army Medical Corps, he held numerous important posts. He received two Silver Stars, the Legion of Merit, and the Bronze Star. Under the leadership of Dean J. Warren Perry of the University of Buffalo, colleagues in prosthetics representing the industry and professional certification board, the universities offering prosthetics education, and the government agencies most involved presented to Dr. Glattly shortly after his retirement a plaque, a book of testimonial letters, and some favorite recordings.

Some amputees already owe the preservation of their knee joint quite directly to Dr. Glattly's persistent efforts in proving in large statistical samples that reamputation from below-knee to above-knee levels was almost negligible once successfully fitted in spite of the belief of many surgeons and the advice of many textbooks. Far more amputees and brace wearers will benefit for years to come from improved care by doctors and therapists whose education in prosthetics and orthotics was favorably influenced, or even initiated, by Dr. Harold W. Glattly.

EUGENE F. MURPHY.

VA-SPONSORED SEMINAR IN PHILADELPHIA

A Regional Seminar on prosthetics and orthotics, held in Philadelphia, October 30-November 3, 1967, was conducted by the Prosthetic and Sensory Aids Service and the Veterans Administration Outpatient Clinic in Philadelphia, Pennsylvania. The Veterans Administration, based on its extensive experience in prosthetics and orthotics, organized the seminar to acquaint military hospital clinicians with the extremely complicated details of prosthetic and orthotic rehabilitation.

Lecturers from the VA Prosthetics Center in New York and the VA Outpatient Clinic, Philadelphia, participated in the courses. Presentations were made on bracing for the spine and the extremities, orthopedic shoes, artificial arms and legs, and a VA consultant on orthopedic surgery from Durham, North Carolina, presented a lecture on immediate postsurgical prosthetics

management and the concept of early fitting of prostheses. Included also was a display of a PSAS exhibit on prosthetics research.

The seminar was attended by military clinicians from the U.S. Naval Hospital, Philadelphia; Valley Forge General Hospital, Phoenixville, Pennsylvania; McDonald Army Hospital, Fort Eustis, Virginia; DeWitt Army Hospital, Fort Belvoir, Virginia; and Walter Reed Army Medical Center, Washington, D.C. In addition, physicians, surgeons, therapists, and other clinical personnel from many civilian and Veterans Administration hospitals attended this five-day course which provided a significant amount of educational material related to the rehabilitation of amputees and orthopedically disabled.

Press coverage was made by the Philadelphia Daily News, and the American Legion represented by the Commander, Department of Pennsylvania, gave formal recognition to the value of the seminar. All reports indicate that the course was an outstanding success.

VAPC NEW YORK METROPOLITAN CONFERENCE

The second in a series of conferences on Prosthetics and Orthotics was held by the VA Prosthetics Center, 252 Seventh Avenue, New York City, on November 29, 1967. This series was an outgrowth of a conference held on June 8, 1967, wherein interest was expressed by the participants to have these conferences conducted periodically.

Thirty-two physicians, surgeons, therapists, and prosthetic representatives from nine VA field stations in the Greater New York area participated in this no cost, voluntary, local conference. The following field stations were represented: VAH, Bronx, NY; VAH, Brooklyn, NY; VAOPC, Brooklyn, NY; VAH, Castle Point, NY; VAH, East Orange, NJ; VAOPC, Newark, NJ; VAH, New York, NY; VAOPC, New York, NY; VAH, Montrose, NY. Also represented were the Plans and Policies and the Research and Development Divisions of the Prosthetic and Sensory Aids Service.

Dr. Alan G. Smith, Chief of Orthopedic Surgery, VA Hospital, Brooklyn, New York, was guest lecturer. He discussed and demonstrated his application of the Seattle techniques in immediate postsurgical prosthetics management of below-knee amputees. Presentations were made by other VA physicians and by the professional and technical staffs of the VA Prosthetics Center and the Research and Development Division of the Prosthetic and Sensory Aids Service.

The third conference in this series dealing with above-knee prosthetics will take place early in 1968.

HISTORY ON CARE OF VETERANS

A comprehensive history of the Veterans Administration is obtainable from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. The book, entitled "Medical Care of Veterans," was printed for the Committee on Veteran's Affairs, 90th Congress, first session. The price is \$1.25.

This paper-covered book of over 400 pages was prepared under the direction of Robinson E. Adkins of the Department of Medicine and Surgery with particular assistance from Guy H. Birdsall, former General Counsel of the Veterans Administration and former Chief of the Legislative Service of the VA.

The book begins with a short background in the aid and benefits given to veterans from ancient Greece to the beginning of our own present day Veterans Administration. A detailed report on the activities and progression of the VA since its inception to the present is clearly and interestingly presented.

SYMPOSIUM ON ARTIFICIAL LIMBS

A symposium on "Basic Problems of Artificial Prehension, Movement, and Control of Artificial Limbs" will be held in London, October 31st through November 1st, 1968. The program is being arranged by the Automatic Control Group and the Manipulative and Mechanical Handling Group, with the co-sponsorship of the appropriate professional Groups of the Institution of Electrical Engineers.

The scope of the symposium will include: Fundamental nature of handling—prehension and movement; physiology of muscular control; control and adaption; communication and instrumentation of prosthetics; problems of power operation and control; and acceptability by the patient.

Papers are now being sought on an international basis, and invitations are by direct as well as open call. For information concerning papers, write to: E. P. Davies, C. Eng., A.M.I. Mech. E., The Groups Department, The Institution of Mechanical Engineers, 1 Birdcage Walk, Westminster, London, S.W.1, England.

FREIBERGER SPEAKS BEFORE ELECTRONICS GROUP

Howard Freiburger, standing in for Dr. Murphy who was in Europe at the time, presented an illustrated paper before the Biomedical Research Section of the Northeast Electronics Research and Engineering Meeting (NEREM-67), held at the Sheraton Boston Hotel, Boston, Massachusetts, November 3, 1967.

Mr. Freiburger, Electronics Engineer for the Research and Development Division of the Prosthetic and Sensory Aids Service of the VA, spoke on "Prosthetic Devices." Some highlights of his speech covered the importance

of exerting effort on the most pressing problems of the handicapped rather than on those which may allow for dramatic technological productions. For example, recent developments in bioelectric control of artificial hands are usually appropriate for the below-elbow amputee who least needs the sophistication of such aids. Also, the best prosthesis is not always the most complicated. A split hook can provide more versatile function with a single cable drive and control than an artificial hand. Included in the talk were sections on definitions, statistics of amputees, outstanding current problems in prosthetics, the U.S. prosthetics research program, use of the clinic team, functional design, human factors, multiple disabilities, control of prostheses, immediate postsurgical prostheses, bioelectric applications, and the possibility of skeletal attachment.

Mr. Freiburger also conveyed Dr. Murphy's contentions that amputees may better be served in the following ways: 1. by wider distribution of the best prosthetics practices now available, 2. by better bioengineering of essentially conventional limbs for all levels of amputations, and 3. by wide-spread development and use of "hybrid" (muscle powered and externally powered) arms for those with amputations high above the elbow.

Mr. Freiburger, after his talk, remained quite some time answering questions and allowing people to try the mockup operating APRL hand and Mauch "B" knee mechanism that he brought along for demonstration purposes.

BLIND REHABILITATION CENTER IN PALO ALTO

The Palo Alto, California, Blind Rehabilitation Center, which was activated in July 1967, provides specialized rehabilitation service for the blind.

The Center is specially staffed and equipped to teach skills and to guide the formation of attitudes essential to living with little or no sight. The Center also provides medical, surgical, and neuropsychiatric treatment needed to support and promote the specialized rehabilitation process.

Lists of applicants are screened by the Chief, Medical Administration Division, VAH, Hines, Illinois, and appropriate cases are selected for blind training at the new Center in Palo Alto.

STAFF CHANGES IN UCLA'S PROSTHETICS-ORTHOTICS PROGRAM

Miles H. Anderson, Ed. D., of UCLA's Prosthetics-Orthotics Program and the Division of Orthopedics, is leaving December 31, 1967, to accept an appointment in the School of Education.

Mr. John J. Bray, C.P.O., will be in charge of prosthetist-orthotist instruction and will handle all matters concerning enrollments, course content, class schedules, etc.

Mr. Raymond E. Sollars is administrative director and will handle all matters related to the general administrative affairs of the Program.

Mrs. B. Heiden, B.A., M.A., has been appointed as educational consultant. She will assist in test design, evaluation, and curriculum improvement.

IN MEMORIAM

JOHN KENNETH DUPRESS

1922-1967

John K. Dupress, managing director of the Sensory Aids Evaluation and Development Center at Massachusetts Institute of Technology, died unexpectedly of heart failure December 29, 1967, in Boston, Massachusetts. Born in Fitchburg, Massachusetts, Dupress was orphaned at a very tender age, and was raised by foster parents. At Fitchburg High School he was distinguished in his class by his high scholastic standing.

Dupress enlisted in the army during World War II and was under instruction at Lehigh University for a time before being transferred to the forward area. He took part in the invasion at Normandy and in the Battle of the Bulge, and injuries sustained in action during the last days of the war left him totally blind and with one arm amputated.

After the war he attended Princeton University where he received in 1949 an A.B. degree with honors. Although his principal training at Princeton was in psychology, he had a long and abiding interest in orchestras and classical music with a specific bent for recording and reproducing such sound. Involved in the recording business for a short time, he persisted in this area as a hobby until the end.

With his background of engineering studies at Lehigh and psychology at Princeton, John saw real possibilities for dramatic improvement of aids for the blind in this generation based on new technology and increasing knowledge of human factors. He served as chairman of the Committee on Research of the Blinded Veterans Association, but was always alert to the problems of *all* the blind.

Many of us in the sensory-aids-for-the-blind research community became increasingly well acquainted with John Dupress after 1958, when he joined the staff of the American Foundation for the Blind as director of technological research. While at AFB he established contacts with almost all known sensory-aids researchers in the U.S. and some abroad.

He also inspired many in the academic world to turn their attention to problems of the blind. His relationship with faculty, staff, and students at the Massachusetts Institute of Technology flourished particularly and he soon had official affiliation with MIT in a series of positions concurrent with his work at AFB. In 1959 he instituted an important series of Sensory Research Discussions held monthly at MIT during the school year. The meetings were suspended in 1967, having accomplished their purpose of stimulating faculty and students to work on research projects which would benefit the blind. By

1963 he was full-time at MIT organizing and becoming first director of the Sensory Aids Evaluation and Development Center. This Center, functioning with funds from the Department of Health, Education, and Welfare, has engaged in evaluation work on an ultrasonic path-sounder for the blind, and has done development in braille translating and embossing equipment, collapsible typhlocanes, sound recording instruments and techniques, and on a sounding ball for use by blind persons in athletic games.

Mr. Dupress' funeral was at Old Lyme, Connecticut, site of his residence, and on January 4, 1968, at MIT a Memorial Service was held in his behalf. The MIT Service was organized around recorded selections from the Dupress tape collection, and included spoken recollections of him contributed by a number of his friends throughout the country. Sensory-aids research work has lost one of its leaders with the demise of John Dupress. His colleagues, however, plan to continue the activities he instituted and will be strengthened and aided in their work by memories of his courage, resolve, and insight.

H. FREIBERGER.