

NOTES AND NEWS

EXCERPTS FROM BPR AVAILABLE ON TAPE CASSETTE

Starting with this issue of the Bulletin, sections dealing with sensory-aids research for the blind will be available on tape cassette for our blind and physically handicapped readers. The cassettes will contain sensory-aids articles, items in the "Highlights of Other VA Research Programs" section, as well as pertinent parts of the "Notes and News" section. Readers wishing to borrow this material on cassette should request "Sensory-Aids Excerpts from the Bulletin of Prosthetics Research, BPR 10-17" from:

Division for the Blind and Physically Handicapped
Library of Congress
Washington, D.C. 20542

Listings of material available on cassettes will be in the back of each issue. See the CONTENTS for exact page number.

THE STEREOTONER

A new reading aid for the blind was presented to the public for the first time during the 25th Anniversary Meeting of the President's Committee on Employment of the Handicapped, in the International Ballroom Center of the Washington Hilton, on Friday morning, May 5, 1972. The Stereotoner, which is the result of years of research sponsored by the Veterans Administration, was presented by its developer, H. A. Mauch of Mauch Laboratories, Dayton, Ohio, and demonstrated by Harvey Lauer, a blind electronic reading specialist of the VA Hospital at Hines, Illinois (Fig. 1).

The Stereotoner which is by far the smallest, lightest, and least expensive device of its kind today, and which represents a significant achievement in modern systems technology, translates letter shapes into stereophonic sound patterns which the user learns to recognize. The progression of frequencies from low (descenders) to high (ascenders) along with the relative distribution of power to each ear is used to produce the stereophonic effect. The lower parts of the letters appear to originate from the user's left, the middle ones from the center, and the upper ones from the right. This enables him, with practice, to read printed or typed material of a wide variety of type styles and sizes

with gratifying speed (up to 60 w.p.m. reported so far, maximum not yet determined). When its hand-held probe, a miniature camera ($1\frac{1}{2}$ oz., $\frac{7}{8}$ in. dia. x $3\frac{1}{2}$ in. long), is rolled over the printed line, the letters are projected on photocells inside which trigger the sound patterns.

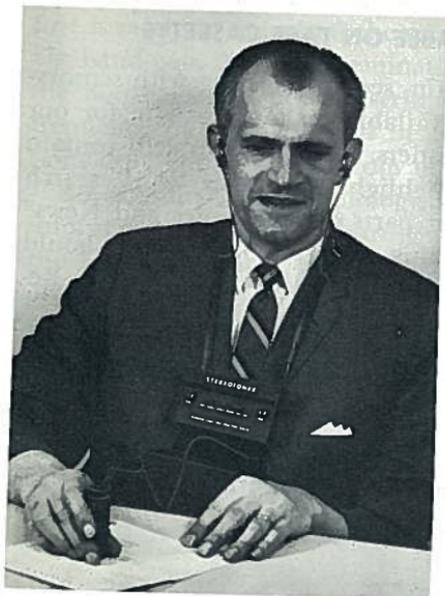


FIGURE 1.—Harvey Lauer demonstrating use of the Stereotoner.

The tiny camera has a zooming range of 10:1 making it possible to read letter sizes from classified ads up to headlines more than $\frac{3}{4}$ in. high. Enabling the user to read headlines, titles, etc. is of obvious importance because of their high information content. Provisions are also made for monaural reading, and for reading italics and white-on-black print. The hand which does not guide the probe is free for other activities such as holding down the reading material, operating a tracking aid for extended reading, holding up merchandise for reading inscriptions, etc.

The small, lightweight control box (17 oz., $4\frac{1}{2}$ in. x 5 in. x $1\frac{1}{2}$ in.) contains the circuitry, storage space for the probe and for the two small earphones, and a rechargeable "D" size battery which provides 9 hours of operation before recharging. It comes with an adjustable strap and is worn either on the chest (during reading) or over the shoulder. The price, on the basis of a first production run of 50, will be \$1,000. Larger production runs will permit significant price reductions. The price includes a tracking aid, a battery charger, and a spare battery. The Stereotoner will become commercially available toward the end of 1972.

1972 CONFERENCE ON SPEECH COMMUNICATION AND PROCESSING

The Audio and Electronics Group of the IEEE in cosponsorship with the Air Force Cambridge Research Laboratory presented the IEEE Pioneer in Speech Communication Award to Franklin S. Cooper "for his discoveries and leadership in fundamental and applied research on speech analysis-synthesis and speech perception." Dr. Cooper is president of Haskins Laboratories, which is under contract with the Prosthetic and Sensory Aids Service of the Veterans Administration to do research on "Audible Outputs of Reading Machines for the Blind."

Ceremonies for the award took place on April 25, 1972, at a luncheon held at the Marriot Motor Hotel in Newton, Mass. This is the second award of its kind to be presented. The first award was presented to Homer Dudley in 1967.

SOVIET DELEGATION VISITS VAPC

In April 1972, a delegation headed by Vladimir P. Barybin, Deputy Minister of Social Security, U.S.S.R., visited the VA Prosthetics Center in New York City.



FIGURE 2.—Vladimir P. Barybin, Deputy Minister of Social Security, U.S.S.R., on the left, expressing his gratitude to Mr. Anthony Staros, Director of VA Prosthetics Center, New York, N.Y., after an April 1972 visit of a Soviet delegation interested in the prosthetics and orthotics activities of the Veterans Administration.

The delegation was interested in the prosthetics and orthotics activities of the Veterans Administration. They were given a complete tour of the Center's facilities.

NEW PAMPHLET ON BLINDNESS

"Living with Blindness," by Irving R. Dickman, is a new Public Affairs Pamphlet No. 473 that summarizes the major causes of blindness and the progress made to date in prevention. It also discusses services and resources available for blind persons, the steps in rehabilitation, and what problems remain. Especially valuable are suggestions for sighted persons on how to help blind people. "Living with Blindness" is available for 25 cents from the Public Affairs Committee, 381 Park Avenue South, New York, N.Y. 10016.

Along the way, Dickman dispels a few myths. "Blind persons," he writes, "are sometimes said to have a sixth sense, or to develop more acute hearing or more sensitive smell and touch than others. . . . No evidence has ever substantiated any of these theories. All that happens is that the blind person learns—or does not learn—to make better use of the senses he has in place of the sense he no longer has, or never had." Dickman discusses how blind people learn, including differences between those who are congenitally blind and those who become blind later in life. He outlines 11 steps in the process of reorganizing one's life, which are likely to be taken by a person who loses his vision. The process, which may take months or years, starts with getting in touch with the local or state agency for the blind and ends with getting a job or at least becoming semi-independent.

Dickman discusses a number of special aspects, such as library services that provide materials in braille and on tapes, records, and in large type for those with enough reading vision; clear-path indicators, including the long cane; dog guides; income tax exemptions and deductions. He also points out a number of problems and needs that remain.

Today, conditions associated with aging account for about half the number of blind persons, and it is estimated that their numbers will more than double by 1985. Dickman suggests that "a program to help such elderly persons acquire independent living skills might permit more of them to go on living in their own homes—with some continuing home-help assistance, of course—rather than entering residential institutions."

MONOGRAPH "LIMB PROSTHETICS—1972" AVAILABLE

"Limb Prosthetics—1972" by A. Bennett Wilson, Jr., Executive Director, Committee on Prosthetics Research and Development, NRC-NAS, is now available in pamphlet form.

The monograph contains 60 pages designed to give concise, up-to-date information on the latest developments in the field of prosthetics.

The pamphlet may be purchased at \$2.25 from the Krieger Publishing Co., Inc., P.O. Box 542, Huntington, New York 11743. Quantity discounts on a minimum of 100 copies may be obtained by contacting the publisher.

INTERNATIONAL CATALOG ON AIDS FOR THE BLIND

The American Foundation for the Blind is preparing an international catalog of aids and appliances that are available for the blind and visually impaired. The catalog will be published under the auspices of the International Research Information Service (IRIS), a Foundation affiliate, under the direction of Leslie L. Clark. IRIS is currently conducting a global canvass seeking information on available aids and appliances.

The first edition will be in English, with revised editions planned. It is tentatively planned to have the catalog ready for distribution before the end of 1972. Mr. Clark stressed that the catalog will contain no information on prototypes. He said that the information would be relevant only to aids and appliances that are in a continuous state of production for the consumer market.

ERRATUM

The caption for Figure 6 on page 116 of the BPR 10-15 Spring 1971 issue of the Bulletin states: "Two braces that employ Fiberglas-epoxy material were developed by AMBRL (left) and VAPC (right)." This caption should read: "Two braces, both developed by AMBRL, that employ Fiberglas-epoxy material."

The author mistook the second brace for a clip-on drop-foot brace developed by VAPC. Both braces are similar in appearance.

WILLIAM H. TALLEY, 1917-1971

The loss of William H. Talley (Fig. 3), by a massive heart attack, coma for a few days, and peaceful death on November 28, 1971, saddened a very wide circle of his admirers, co-workers, and friends. He was buried with military honors in Arlington National Cemetery. Thus ended a distinguished career of well-earned advancements in military life and in the Veterans Administration, characterized by innate intelligence, zealous and dedicated work, unusual administrative and organizational talents, and the modesty and good humor needed to function selflessly in complex bureaucracies.

Bill Talley was born May 10, 1917, in Malden, Missouri. Brought up in modest surroundings during the Depression, he had no illusions of advanced education. After early experience in the construction industry, he entered the Army on December 15, 1939. With his abilities, energies, and self-discipline soon recognized, he won promotion from Private to Master Sergeant in 18 months, and assignment to Officers Candidate School, where he graduated at the top of his class. After commissioning, he again rose rapidly to Major.

During service in Europe in World War II, he was the victim of a direct hit of an 88 mm. shell on January 17, 1945, with the loss of both legs below the knee plus serious—but less visible—concussion with middle ear damage, leading to tinnitus, problems in balance, and some hearing loss. After prolonged convalescence, prosthetic fitting, and rehabilitation, he was retired on December 14, 1946, as a Lieutenant Colonel.

He joined the Veterans Administration at Richmond, Virginia, in 1946 as a Special Prosthetics Representative. Soon, in July 1947, he was transferred to Central Office in Washington where he quickly became a key leader in policy making, operations, administration, and the application of technology in the newly organized Prosthetic Appliance Service and the succeeding Prosthetic and Sensory Aids Service, serving under all three Directors of this unique activity.

He served loyally and efficiently for many years as Chief of the Plans and Policies Division, until growing medical difficulties led to his retirement for disability February 28, 1969. After some months of rest, though, he returned as a part-time employee, performing further extraordinarily valuable service until his untimely death.

It is difficult to capture in words the genius of Bill Talley—perhaps because crisp, concise words in directives and correspondence were his own product, forged and refined with seeming ease to convey his thoughts precisely. He formulated numerous manuals, program guides, sample job descriptions, personnel policies, and specific instructions. These documents reflected the orderly mind, the wisdom, and the literary ability which Bill possessed and used for an important cause.

The unique position of Prosthetics Representative in the Veterans Administration was created during Walter Bura's tenure as Director of the Prosthetic Appliances Service. Each of these veterans had a serious disability requiring rehabilitation and the use of a major prosthetic appliance, gaining personal insight into the problems and achievements of prosthetics. This background supplemented the broader training in VA laws and regulations originally given to any contact representative to allow him to assist his fellow veterans, as well as the technical training which has been provided by intensive specialized courses and a steady flow of reports, bulletins, and refer-

ences. Bill Talley was the champion, the patron, and the inspiration of about 100 Prosthetics Representatives. He defended their unique role as technical and administrative experts who also have exceptional rapport with other disabled veterans. Working with personnel experts, he did much to define and upgrade this classification. Numerous seminars and courses were richer because of his lectures. The Twenty-Fifth Anniversary Celebration in October 1970, afforded his last major opportunities for summary of the program before key officials and for reunions with many of the key men from widely scattered stations.

As a member of the Editorial Board of this Journal, he made many significant contributions to its development. His editorial in the Fall 1968 issue, "Prosthetics Research — A Cost Reduction Program," exemplified his analytical, logical approach to the interaction between research and operational programs.

Integrity was an important characteristic of Bill Talley. In a quarter century he set a high standard of personal ethics and of scrupulous care. When he studied costs of appliances, he even-handedly expected fair prices from commercial facilities and insisted on recognition of the additional (but often hidden) overhead costs of government-run shops. While various individuals from time to time differed with him, no one doubted his sincerity, and all admired his objectivity and dedication to the welfare of all people with disability of any type, whether veteran or not.

His achievements and efforts did not go unnoticed. He received Outstanding Efficiency Ratings with Superior Accomplishment Awards in



FIGURE 3.—William H. Talley.



FIGURE 4.—William J. McIlmurray.

1952 and 1953; a letter of commendation from the Chief Medical Director in 1953; and appointment as a member of the Board of U. S. Civil Service Examiners in October 1967 for Orthotists and Prosthetists, GS-667. The Chief Medical Director's Commendation in 1969 for his "superb leadership, unique talents, imaginative planning and tireless efforts" pays fitting tribute to Bill Talley.

E.F.M.

WILLIAM J. McILMURRAY (1923-1972)

Bill (Fig. 4) was a devoted person: to his wife, Kathleen; to his son, Liam; and to his profession. Although both a prosthetist and orthotist, Bill's main interest, dating back to his World War II days, was in the technology of bracing. Indeed he was a pioneer in orthotics development efforts, making his first major contribution in 1954 when he performed mechanical testing of all known brace hardware. His report on the test results and his study of the economics related to brace supply, also performed in the same year, were the beginnings of the VA's steadily increasing involvement in orthotics developments.

Later he started to interest orthotists in the use of plastic laminates, teaching many of them the techniques he learned from prosthetics. Bill worked with medical colleagues in the development of the PTB brace, an innovation that has enjoyed subsequent success, in a slightly different form, in the practice of below-knee fracture bracing.

Bill was a leader in many ways. He was the one person to whom all of VA's orthotics laboratory personnel could turn for advice, both technical and personal. He tried to visit them frequently to assist them in improving their service to veterans, a goal to which he was compulsively devoted.

In his daily activities in the VA Prosthetics Center in New York, he was known as one of the most dependable and hard-working people on the staff. Although his formal education was limited to high school, Bill's technical knowledge and intelligence permitted him to relate to professional members of other disciplines on an equal basis. He was always eager to learn and was a voracious reader. He was respected and loved by all.

We miss him.

ANTHONY STAROS
Director, VA Prosthetics Center