

Special Notice to Former Recipients of Association Annual Awards

The Chairman of the Awards Committee in charge of selecting the recipients for the Association's Ten Annual Awards requests all former recipients of these awards to make nominations for the specific award which he has received.

These nominations are in addition to nominations made by members of the Awards Committee. Since the responsibility and privilege of submitting nominations is restricted to previous winners and Committee members, it is most desirable and, in fact, most necessary that these individuals take action and send their recommendations now, so that the Committee will have ample time for review and selection.

Former recipients should forward their nominations, accompanied by curriculum vitae and adequate supporting material, to the Chairman of the Awards Committee:

George J. Kidera, M.D.
United Air Lines, Inc.
P.O. Box 8800
Chicago 66, Illinois

No particular form for supplying supporting material will be provided; however, it should definitely be accompanied by a statement of the special accomplishments and the basis for which it is believed the Award is deserved (approximately 250-300 words). For those who have copying equipment at their disposal, the Chairman would appreciate receiving twelve (12) copies for circulating to the Committee members. If this is not possible, a clear, sharp original which can be duplicated is requested. **Nominations must be received by November 15, 1965.**

The following policies regarding nominations for awards are furnished for guidance:

1. Except in the case of the Theodore C. Lyster Award, which shall be open to both members and non-members, nominees for awards must be members of the Association.
2. The Chairman of the Awards Committee is ineligible for an award during his tenure of office.
3. Individuals are eligible for only one award in any one year, and are not eligible for additional awards in subsequent years until after a minimum five-year interval.
4. Individual nominees only are eligible to receive awards— not a team of people or a group of scientists.
5. It is possible for an employee of a company, which company is the sponsor of an award, to be eligible to receive that particular award.

For immediate reference, a list of the Association's Annual Awards and recipients follows:

Annual Awards

RAYMOND F. LONGACRE AWARD

Established to honor the memory of Major Raymond F. Longacre, USA. It is given annually for outstanding accomplishment, in the psychological and psychiatric aspects of Aerospace Medicine. Honorarium sponsored by Eli Lilly and Company.

- 1947—Ross A. McFarland, Ph.D.
- 1948—Detlev W. Bronk, Ph.D.
- 1949—Sir Charles P. Symonds
- 1950—Donald W. Hastings, M.D.
- 1951—Col. Neeley C. Mashburn, USAF, MC (Ret.)
- 1952—Sir Frederick Bartlett
- 1953—Walter F. Grether, Ph.D.
- 1954—John C. Flanagan, Ph.D.
- 1955—Roy R. Grinker, M.D.
- 1956—Saul B. Sells, Ph.D.
- 1957—Brig. Gen. Eugen G. Reinartz, USAF, MC (Ret.)
- *1958—Col. Harry G. Moseley, USAF, MC
- 1959—Capt. George E. Ruff, USAF, MC
- 1960—Brant Clark, Ph.D.
- 1961—Capt. Philip B. Phillips, MC, USN
- 1962—George T. Hauty, Ph.D.
- *1963—Henry A. Imus, Ph.D.
- 1964—Frederick H. Rohles, M.D.
- 1965—Anchard F. Zeller, Ph.D.

LOUIS H. BAUER FOUNDERS AWARD

Established by Eaton Laboratories Division of the Norwich Pharmaceutical Company, to honor Doctor Bauer, the founder of the Aerospace Medical Association. It is given annually for the most significant contribution in Space Medicine.

- 1961—Lt. Col. Stanley C. White, USAF, MC
- 1962—Don Flickinger, M.D.
- 1963—Col. Paul A. Campbell, USAF, MC
- 1964—Col. William K. Douglas, USAF, MC
- 1965—Hubertus Strughold, M.D.

HARRY G. MOSELEY AWARD

The award was established to honor the memory of Colonel Moseley, in recognition of his material accomplishments in Flight Safety. It is given annually for the most outstanding contribution to Flight Safety. Honorarium and trophy sponsored by the Lockheed Aircraft Corporation.

- 1961—Capt. Carl E. Wilbur, MC, USN
- 1962—Col. F. M. Townsend, USAF, MC
- 1963—Brig. Gen. Kenneth E. Pletcher, USAF, MC
- 1964—Capt. W. Harley Davidson, USAF, MC
- 1965—Capt. Richard E. Luehrs, MC, USN

THEODORE C. LYSTER AWARD

Established to honor the memory of Brigadier General Theodore C. Lyster, the first Chief Surgeon, Aviation Section, United States Army Signal Corps. It is given for outstanding achievement in the general field of Aerospace Medicine. Honorarium sponsored by the Purdue Frederick Company, Keith Loring Gentile Memorial Fund.

- *1947—Louis H. Bauer, M.D.
- 1948—Wilbur R. Franks, M.D.
- 1949—Maj. General Harry G. Armstrong, USAF, MC
- 1950—Capt. Ashton Graybiel, MC, USN
- 1951—Rear Adm. B. Groesbeck, Jr., MC, USN
- 1952—Kenneth A. Evelyn, M.D.
- 1953—Capt. Wilbur E. Kellum, MC, USN
- *1954—W. R. Stovall, M.D.
- 1955—Brig. General Otis O. Benson, Jr., USAF, MC
- 1956—Brig. General Don Flickinger, USAF, MC
- 1957—Capt. Charles F. Gell, MC, USN
- 1958—Hubertus Strughold, M.D.
- 1959—Capt. Clifford P. Phoebus, MC, USN
- 1960—Air Commodore A. A. G. Corbet, RCAF
- 1961—Air Commodore William K. Stewart, RAF
- 1962—Robert J. Benford, M.D.
- 1963—Maj. General M. Samuel White, USAF, MC
- 1964—William Randolph Lovelace, II, M.D.
- 1965—William J. Kennard, M.D.

ARNOLD D. TUTTLE AWARD

Established by United Air Lines in memory of Colonel Tuttle. Awarded for original research that has made annually the most significant contribution toward the solution of a challenging problem in Aerospace Medicine.

- 1952—Edward H. Lambert, M.D.
- 1953—James P. Henry, M.D.
- 1954—John P. Marbarger, Ph.D.
- 1955—Fred A. Hitchcock, Ph.D.
- 1956—W. H. Johnson, Ph.D.
- 1957—Maj. David G. Simons, USAF, MC
- 1958—Siegfried J. Gerathewohl, Ph.D.
- 1959—Lawrence E. Lamb, M.D.
- 1960—Herman J. Schaefer, Ph.D.
- 1961—Lt. Col. Charles A. Berry, USAF, MC
- 1962—Clayton S. White, M.D.
- 1963—Charles I. Barron, M.D.
- 1964—Vincent M. Downey, M.D.
- 1965—Capt. Ashton Graybiel, MC, USN

JOHN A. TAMISIEA AWARD

Established by the Civil Aviation Medical Association in memory of Doctor Tamisiea, one of the pioneers in civil aviation medicine. Awarded annually to the outstanding Aviation Medical Examiner who has contributed most to the advancement of the art and science of aviation medicine in its application to the general aviation field.

- 1963—Herbert F. Fenwick, M.D.
- 1964—Delazon S. Bostwick, M.D.
- 1965—Neal E. Baxter, M.D.

JULIAN E. WARD MEMORIAL AWARD

Established by the Society of USAF Flight Surgeons in memory of its first member to have lost his life in an aircraft accident and to honor all Flight Surgeons whose lives are lost in the pursuit of flying activities relating to the practice of aerospace medicine. Awarded annually to a resident in aviation medicine or to an individual who has completed residency training in aerospace medicine not more than one year prior to the date of award. The award is for superior performance and/or outstanding achievement in the art and science of aerospace medicine during residency training.

- 1963—Cdr. Frank H. Austin, Jr., MC, USN
- 1964—Maj. Samuel J. Brewer, USAF, MC
- 1965—Capt. Ronald E. Costin, USAF, MC

ERIC LILJENCRANTZ AWARD

The award was established by Chas. Pfizer & Co., Inc., in memory of Commander Eric Liljencrantz, MC, USN, whose brilliant career in Aviation Medicine was cut short by his death in an airplane accident in 1942. It is given for the best paper on basic research in the problems of acceleration and altitude.

- 1957—Col. John P. Stapp, USAF, MC
- 1958—Brig. Gen. Victor A. Byrnes, USAF, MC (Ret.)
- 1959—Capt. Edward L. Beckman, MC, USN
- 1960—James D. Hardy, Ph.D.
- 1961—Capt. Ashton Graybiel, MC, USN
- 1962—Wilbur R. Franks, M.D.
- 1963—Earl W. Wood, M.D.
- 1964—Capt. Ralph L. Christy, MC, USN
- 1965—David M. Clark, D.Sc.

HOWARD K. EDWARDS AWARD

Established by the Aviation Insurance Agency in memory of Doctor Edwards. Awarded annually for the outstanding practice of clinical aviation medicine pertaining to professional airline pilots.

- 1961—George J. Kidera, M.D.
- 1962—Otis B. Schreuder, M.D.
- 1963—Ludwig G. Lederer, M.D.
- 1964—Andre Allard, M.D.
- 1965—John E. Smith, M.D.

WALTER M. BOOTHBY AWARD

Established by the Aviation Insurance Agency in memory of Doctor Boothby. Awarded annually for outstanding research directed at the promotion of health and prevention of disease in professional airline pilots.

- 1961—John E. Smith, M.D.
- 1962—Ross A. McFarland, Ph.D.
- 1963—Jan H. Tillisch, M.D.
- 1964—Louis R. Krasno, M.D.
- 1965—Earl T. Carter, M.D.

*Deceased.

Medical Support for Gemini

Dr. Charles A. Berry, Chief of Center Medical Programs at NASA's Manned Spacecraft Center, Houston, Texas, has recently sent us a list of the physicians, both military and civilian, who have taken part in the GT space flights, and of those who have been assigned to assist in the GT-5 mission in mid-August. Dr. Baxter, writing in his president's report on the successful GT-4 mission (July issue), mentioned that many of the Aerospace Medical Association's members were closely involved in its success, not only in much of the experimentation and research leading up to the present program, but also participating during the actual flight, such as the medical monitors who watch over the physical well-being of our astronauts as they orbit the earth. During each flight, our members in the medical branches of all three services, and many civilian physician specialists, have been deployed on a world-wide basis to advise and to record the information so vital to future space exploration. The table shows the physicians who have taken part in the first two missions and those who are assigned for the forthcoming one.

Dr. D. O. Coons, assistant to Dr. Berry, will serve as trouble shooter during the GT-5 mission, going wherever the need indicates. Dr. H. Minners, who in previous flights was on the recovery ship, will in all probability be flown by helicopter to the designated ship for the GT-5 flight.

TABLE I. DEPLOYMENT OF PHYSICIAN MONITORS DURING GEMINI FLIGHTS

| GT-3 (Cape) | GT-4 (Houston) | GT-5 (Houston) |
|--|-----------------------|-----------------------|
| Mission Control Center | | |
| C. A. Berry, Director | C. A. Berry, Director | C. A. Berry, Director |
| J. R. Wamsley | A. D. Catterson | G. F. Kelly |
| J. F. Zieglschmid | D. O. Coons | A. D. Catterson |
| Staff Support Room | | |
| G. B. Smith | S. S. Puma | S. S. Puma |
| George Armstrong | K. N. Beers | K. N. Beers |
| W. R. Carpentier | W. R. Carpentier | J. J. Droyscher |
| R. R. Hessberg | L. Dietlein | R. R. Conley |
| | J. Gordon | J. F. Zieglschmid |
| | R. Moser | J. Billingham |
| Canary Islands | | |
| E. L. Beckman | R. H. Shamburek | P. F. Nugent |
| R. H. Shamburek | W. Walters | J. F. Wittmer |
| Canarvon, Australia | | |
| R. A. Pollard | R. A. Pollard | L. N. Walsh |
| W. Bishop | Murray-Alston | C. A. Jernigan |
| Murray-Alston | L. N. Walsh | |
| CSQ: Tracking Ship—Coastal Sentry Quebec | | |
| C. A. Jernigan | G. F. Humbert | R. M. Chubb |
| J. E. Hertzog | C. H. Sawyer | C. L. Ewing |
| Hawaii | | |
| A. D. Catterson | C. A. Jernigan | Q. W. Jones |
| H. R. Unger | D. F. Morss | L. J. Enders |
| K. N. Beers | | |
| RKV: Tracking Ship—Rose Knott Victor | | |
| G. F. Kelly | G. F. Kelly | D. F. Morss |
| D. E. Graveline | L. J. Enders | F. R. Ritzinger |
| Guamas | | |
| R. R. Burwell | G. F. Kelly | J. W. Ord |
| G. D. Young | P. F. Nugent | J. A. Ionno |
| | J. F. Zieglschmid | |
| Corpus Christi, Texas | | |
| R. M. Chubb | D. E. Graveline | (No Monitors to |
| G. F. Humbert | C. E. Gossett | be used.) |
| | G. Allen | |

News of Members Solicited

The Washington Staff will be grateful to members of the Association who may be kind enough to forward information suitable for the "News of Members" column. Honors or awards, election to office of professional or scientific societies, books, monographs, or articles published in other journals, promotions, vocation or avocational events or achievements, changes in duty, changes in affiliation—all these are grist to our mill—and of interest to your friends and associates. Please send all such items to **Aerospace Medical Association, Washington National Airport, Washington D. C. 20001**

Challenges in Manned Space Flight: Apollo and Beyond

The annual lecture presented at the Space Medicine Branch Luncheon, April 28, 1965, during the Meeting of the Aerospace Medical Association at the New York Hilton, was an address given by Dr. George E. Mueller, Associate Administrator for Manned Space Flight, National Aeronautics and Space Administration. Excerpts from Dr. Mueller's address follow:

Today I would like to discuss the rapid rate of current progress in our space program, some aspects of experiment planning in manned space flight, the philosophy of the medical and biological research planned for Gemini and Apollo, and the opportunities for such research in future programs.

How well are we doing? Since the beginning of this year, very well indeed. It has frequently been observed that in projecting scientific and technological progress, we have been optimistic regarding short-term accomplishments, but pessimistic regarding those of a longer-term nature.

Certainly the first part of this observation has been borne out often in the space program in recent years. All of us remember many examples of milestones that took longer to reach than predicted at the beginning of a program. Now, however, as we approach the later phases of programs such as Gemini and Apollo, major milestones are being passed on schedule for the most part and an increasing number are being reached ahead of schedule.

Significance of Success

The significance of the flight successes is that, after seven years, the United States has entered a period in which successful performance of launch vehicles and spacecraft is expected as a matter of course; we are surprised if the flight hardware does not perform well.

This success depends to a very large degree on the cooperation of many people and many organizations, throughout the country and the world. More than 90 per cent of the work is performed by contractors, industry, universities and other non-profit organizations. About 20,000 contractors, with total employment approaching 400,000, take part in the NASA program.

A considerable amount of support and cooperation is provided by the Department of Defense, the three military services, the Departments of State and Commerce, Atomic Energy Commission, National Science Foundation, Smithsonian Institution, Federal Communications Commission, U.S. Information Agency, and Space Science Board of the National Academy of Sciences. Professional societies such as the Aerospace Medical Association play an important role and finally, more than half of the nations of the world participate in the U.S. space program.

Current Programs

Now I would like to touch on some aspects of our current programs. There were three experiments in the recent Gemini mission, two in the biological sciences and one in re-entry physics. Two of the three—the re-entry experiment and one on blood irradiation—provided good data.

Considerable stress is placed on the qualification of the design and manufacture of parts of the space vehicle. We must put equivalent emphasis on the review of design and manufacture of experimental equipment, as well as its compatibility with the space craft and conditions of flight. The flight crew personnel must prepare themselves as completely in advance for experimental activities as for other phases of the mission.

As we look to the future of Manned Space Flight, certain critical questions emerge. Among them are: Can man survive and remain operationally efficient during extended space travel? Can we provide him with the equipment and techniques that will insure his survival? Can we maintain, and even enhance, his contribution to the man-machine system? We are optimistic on all counts. Our experience with Mercury and now with Gemini, limited as it is, leads to that optimism.

Our program of medical and behavioral in-flight investigation has been defined in much greater depth over the past few months. The overall objectives of this program are to determine the effects of space flight on man, the mechanisms by which these effects are mediated, the means of predicting their occurrence and severity, and the means of alleviating or correcting them. The attainment of these objectives will answer our questions regarding man's survival and his operational efficiency and will provide us with the information that is critical to future space system design, operational procedures, and selection and training criteria.

Medical Experiments

Within the constraints of the Gemini program, this experimentation has been expanded to include preliminary evaluation of some critical areas thus far identified, for example, cardiovascular and musculoskeletal. Three medical experiments scheduled on the next flight, GT-4, are directed at these areas. Heart action will be evaluated by the phonocardiogram; the effect of the prescribed exercise regime on the cardiovascular system will be measured, and pre- and post-flight bone densitometry measurements will yield information regarding the question of calcium mobilization. On subsequent Gemini flights other experiments will be conducted to evaluate the effects of spaceflight on body fluids, vestibular functioning, and on the sleep mechanism.

The medical in-flight program in Apollo is designed to expand the scope of investigation and to verify the data and techniques of preceding flights. Currently, 16 medical experiments are either approved or under feasibility study for the early Apollo flights and these are planned to yield additional information regarding pulmonary functions, metabolism blood flow and cellular effects. We will also be assessing the effectiveness of countermeasures.

Growth Capability

In planning for future activities in space, we keep in mind the rapid growth in our capability. Initially, our space payloads were limited to a few pounds. Now, the Saturn I, can place in orbit a payload of more than 10 tons. Next year, the Saturn IB will carry payloads of 18 tons, and the following year we will have the Saturn V, with a capacity of 140 tons. When we add the Air Force vehicles to this total, by the end of the decade we will have the capability of placing a thousand tons of payload in orbit. There is no need, therefore, to limit our vision to small experiments, and our judgment will be on the basis of their importance to human knowledge. Thus, our capabilities for exploration of the moon will be increasing. The early missions in the Apollo program will be limited to stays of a day or two on the moon's surface. But as we progress, it will be possible to extend this duration to weeks and longer.

Benefits in Area of Medicine

One of the questions frequently asked regarding our efforts in space has been the benefit to mankind generally from the substantial investment required to develop and use the capability to propel men and equipment beyond the reach of earth gravity. In one area, at least, these benefits are easy to discern. I refer, of course, to the benefits in the area of medicine. As technology has made it possible to sustain man physically in the hostile conditions of space, we have had to study with fresh perspective the total human system. As you know, these studies have involved the development of new medical techniques. One of the greatest contributions of the national space effort may well be an increasing understanding of the dynamics of the human system as a whole. Four conditions lead us toward this conclusion.

First, healthy human beings are now being studied over a long period of time and quantitative data is being obtained on reactions of the human system to the environmental factors encountered in a stressful situation. *Second*, biotechnology is making it possible to measure man's total reactions as a dynamic organism. As the sophistication of instrumentation continues to improve, the rate of change of living cells can be measured with increasing precision and comprehensiveness. *Third*, in the space environment the human organism has six degrees of freedom of motion, free from external forces. In this environment, it will be possible to validate mathematical models that will

provide new standards of man's responses to dynamic situations. With these standards as guides against which to measure the pattern of human system function on earth, it may be possible to augment significantly the ability of medicine to prognosticate symptoms before they occur. *Fourth*, finally, the increased interaction between the physical and biological sciences should advance understanding in such cases as molecular biology, mathematical biology, neurophysiology, bionics and electrobiology.

Accomplishments In Medicine

Let me list a few of the specific benefits that have already come to pass.

Ground-based studies of weightlessness have shed new light on such matters as body fluid shifts and the mechanisms by which the cardiovascular system responds to stressful and subgravity environments. One of the findings is that the healthy human heart is capable of greater sustained increases in rate without undesirable effect than had been formerly thought possible. In another area research in electroencephalography has been accelerated through miniaturization and there is broader understanding of changes that occur. One promising area is the development of automatic systems of interpretation that would make possible application of electroencephalography on a wide scale.

NASA is conducting a program to develop a system for the computerized reduction storage and analysis of medical information. The data is prepared in a manner that permits interchange of ground-based and in-flight information for comparison and prediction. Such a standardized method of recording and electronic storage could be expanded with the possibility of immediate retrieval for the analysis of worldwide problems.

Miniaturization of equipment is another area with significant possibilities. Bioinstrumentation developed for the space program permits the gathering of data on a continuous basis. The ability to record such information as heart action, blood pressure, temperature, respiration efficiency may lend itself to numerous clinical applications.

Accelerometers employed in space guidance and control systems are being used to study the protective value of football helmets, automotive safety devices, and tremor patterns of patients with Parkinson's disease. The use of spacesuit technology is being investigated in animal subjects in developing a means of external assistance to the cardiovascular system during cardiac surgery. Components similar to those in space suits are used to apply varying pressures to the body to maintain blood flow.

These are but a few examples of how space research has provided and is providing direct benefits to medicine. I expect that those are just the beginning of the medical benefits to all mankind that will be flowing in increasing volume from our efforts in space.

In conclusion, we are doing very well at present in our space program, better than might have been expected not so long ago. The pace or progress is continuing to accelerate and an increasing number of milestones are being passed on or ahead of schedule. The Gemini program is opening the door to a new phase of investigation of the medical and biological aspects of space flight, which will be continued and expanded in Apollo. As we move for-

ward with plans for future programs, we are increasingly aware of the possibilities for expansion of these investigations.

Space research has already provided positive results of value to medicine on earth and there is clear evidence of rapid increase in the volume and significance of these results. And, as we look to the future, we can see continuing opportunities.

With your enthusiastic support and participation, I know we will seize them.

Blind Volunteers Participate in New Naval Research Experiments

Twelve volunteers from the Florida School for the Blind at St. Augustine, Florida, took part in new experimental research programs conducted at the U.S. Naval School of Aviation Medicine in Pensacola, Florida. Dr. Ashton Graybiel, Director of Research at the School, Dr. Brant Clark, visiting professor from San Jose State College, California, and Dr. Earl F. Miller, Head of the Physiological Optics Branch, School of Aviation Medicine, are collaborating on new studies,

making comparisons and recording the reactions of the blind to rotating and tilting environments using the School's Coriolis Acceleration Platform.

Research has been conducted on deaf people and people with normal hearing and vision, and the current studies on the reactions of the blind will give further knowledge on the role of the inner organs of balance and their relationship to vision and other body functions. Experiments included spins for 45 minutes at 5, 7 and 9 rpm's, in a special chair attached to the Slow Rotating Room, during which the blind subject was required to indicate vertical and horizontal position in relation to the earth's surface.

Army Medical Museum—Historical Landmark

The Medical Museum of the Armed Forces Institute of Pathology, formerly the Army Medical Museum, has been officially designated a Registered National Historical Landmark.

A plaque and certificate noting the designation were presented to Brig. Gen. Joe M. Blumberg, Director of the AFIP, by T. Sutton Jett, Director of the National Capital Regional Office of the National Park Service, in ceremonies at the Museum recently. The designation is made through the Park Service by the Department of Interior.



ARMY MEDICAL MUSEUM A NATIONAL HISTORICAL LANDMARK—T. Sutton Jett (left), Director of the National Capital Regional Office of the National Park Service, presents Brig. Gen. Joe M. Blumberg, Director of the Armed Forces Institute of Pathology, with a certificate officially designating the Army Medical Museum (now the Medical Museum of the Armed Forces Institute of Pathology) as a Registered National Historical Landmark. A bronze plaque commemorating the designation is shown.

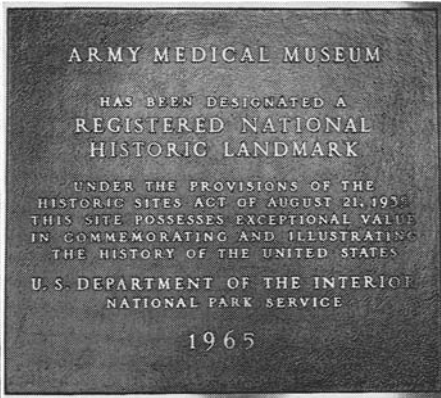
The Army Medical Museum, now known as the Armed Forces Institute of Pathology, started during the Civil War when Surgeon General William A. Hammond ordered Brigade Surgeon John Hill Brinton to start a museum in which specimens of military wounds could be collected. The collection of specimens started with three bones and numbers more than a million and a half today, which together with extensive case histories, make the collection one of the world's best sources of information on disease and trauma in men of military age.

The museum steadily grew throughout its early history until the rapid expansion of its laboratory and research activities during the two world wars led to the reorganization of the Museum in 1946 as the Army Institute of Pathology. It was reorganized again in 1949 into a tri-service organization and was renamed the Armed Forces Institute of Pathology. The Medical Museum became one of the four major departments within the Institute.

The Museum building, known as the "Old Red Brick" and located on the Mall at 701 Independence Ave. SW, was completed in 1887. Although its profusion of brick and terra cotta embellishment makes the building one of the most architecturally elaborate buildings in modern Washington, the building was described, at the time of its construction, as "exceedingly

plain, without ornamentation" and "severely simple in style." During its 80-year history, it has housed the Medical Museum for most of its life, the present National Library of Medicine (formerly the Army Surgeon General's Library), the Army Medical School, the central bureau of the International Association of Medical Museums, and, for some time, the Army Institute of Pathology.

A total of 575 historic structures and sites have been designated by the Secretary of the Interior as eligible to become Registered National Historic Landmarks.



These sites were selected from more than 2,000 sites and structures studied by historians of the National Park Service. The Service, through the Interior Department, received the authority to identify such places of national importance in the Historic Sites Act of 1935.

The Registry of National Historic Landmarks resulted from the Act. Participation in the Registry, indicated by the acceptance of a certificate and bronze plaque, is voluntary. There are eight sites in the National Capital area now participating in the Registry, among them: Decatur House, (Octagon House), St. John's Church (Lafayette Square), Woodrow Wilson House, Old Naval Observatory, Clara Barton House, and Accokeek Creek (Indian) Site. Sponsors of the program hope to create public interest in the physical survival of America's past in order to preserve them. Participation in the Registry does not affect the ownership of the Landmark.

In accepting the certificate and plaque, Gen. Blumberg cited the Museum's dominant role in many areas of American medicine. "When Major Walter Reed did his brilliant work on yellow fever, he was at that time Curator of the Army Medical Museum," Gen. Blumberg said. "It was here that Deputy Surgeon General John Shaw Billings, also a Museum Curator, began the collection of historical microscopes that today is unique and the largest

in the world; it was here that Major Frederick F. Russell was instrumental in the development of vaccination for typhoid fever for use in the armed forces; and it was here that Brevet Lt. Col. Joseph J. Woodward made the first photomicrographs in America, which helped blaze a trail to a better understanding of disease."

The Museum, which still houses some of the offices and laboratories of the Armed Forces Institute of Pathology as well as three main public exhibit halls and several smaller exhibit rooms, attracts more than 700,000 visitors each year.

Board Examination Schedules

The American Board of Preventive Medicine has announced the schedules for the next examinations to be given in the various sub-specialties as follows:

Aerospace Medicine—April 15, 16, 17, 1966, The Dunes, Las Vegas, Nevada. Final date for filing applications, November 1, 1965.

Occupational Medicine—April 23, 24, 25, 1966, Detroit, Michigan. Final date for filing applications, November 1, 1965.

General Preventive Medicine—Part II (for those who have successfully completed Part I)—Orals, October 16, 1965, Conrad Hilton Hotel, Chicago, Illinois. Part I—Various Schools of Public Health, Spring of 1966. Application filing date—November 1, 1965.

Public Health—Various Schools of Public Health, Spring 1966. Final date for filing applications, November 1, 1965. (Dates for examinations at the Schools of Public Health are generally set by each School.)

Requests for information and all applications should be sent to the American Board of Preventive Medicine, Inc., John C. Hume, M.D., Secretary-Treasurer, 615 North Wolfe Street, Baltimore, Maryland 21205.

NEW FEES

The Board has found it necessary to increase fees for certification. The new schedule will go into effect on January 1, 1966. New fees are as follows:

| | |
|--|---------|
| Application fee | \$35.00 |
| Examination fee Part I | 65.00 |
| Examination fee Part II | 65.00 |
| Certificate fee | 10.00 |
| Re-examination fees, each part taken | 50.00 |
| Examination fees for additional affiliated specialties, each specialty | 65.00 |

AEROSPACE MEDICINE
EXAMINATIONS—April 15, 16
and 17, 1966
FILING DEADLINE—November 1,
1965
PLACE—37th Aerospace Medical
Association Annual Meeting
Dunes Hotel, Las Vegas, Nevada

Flight Nurses in the Headlines

Bioastronautics Nurse Cited

Captain Pearl E. Tucker, USAF, NC, received an official commendation letter from the Commander of the Air Force Systems Command citing her for noteworthy accomplishment. The letter was presented to Captain Tucker by Col. Elmer W. Richardson, Vice Commander, Air Force Eastern Test Range, in ceremonies at Patrick



Capt. Tucker Receives Commendation from Col. Richardson.

AFB, in early June. The letter from General B. A. Schriever stated in part: "Your outstanding initiative, dynamic methods and extensive professional knowledge of academic nursing policies were directly responsible for the Surgeon General's acceptance of this 52 week course in Aerospace Nursing."

Captain Tucker, a flight nurse and general duty nurse, was assigned to the Office of the Deputy for Bioastronautics, Air Force Eastern Test Range, with duty station at Cape Kennedy Air Force Station. She is Charge Nurse of the Intensive Care Unit, which is located in the Bioastronautic Operational Support Unit Facilities at the Cape. This intensive care unit is activated and maintained in a state of readiness during the pre-launch and launch phases of all Manned Space Flight Missions. Captain Tucker assists the physicians of the medical evaluation team with the examinations of crew members prior to insertion in the space craft, and at the medical examinations following the space flight.

Almost as soon as she began her duty at Cape Kennedy, Captain Tucker became interested in the establishment of a residency course in aerospace nursing. She developed the course, outlined and detailed curriculum, vigorously and persistently pressing the need and desirability of such training, until it reached the highest level of command, where it was approved and accepted by the Surgeon General. Details of the course were discussed in full by General Strickland in his talk before the Flight Nurse Section at their meeting in New York. (See page 702, July 1965.)

Named Course Supervisor

Captain Tucker has been named Course Supervisor, and because of her personal interest in the program, she was also permitted to assist with the selection of the first

two trainees who started their year of residency at the Cape on July 1.

Captain Tucker joined the USAF Nurse Corps in August 1957, and has since served as Supervisor of the Medical Ward at Warren AFB Hospital (Wyoming); as Charge Nurse, Pediatric Ward, Tachikawa, Japan; has completed the Flight Nurse Course at Brooks, and has been assigned to Recruiting Duty in Detroit, Michigan. Her background before joining the Air Force was unusually varied. She graduated from the Wilkes-Barre (Pennsylvania) General Hospital School of Nursing in 1946, received a Bachelors' Degree in Science from Marywood College, Scranton, Pennsylvania, in 1949, and a Master's degree in Education from Philadelphia's Temple University in 1955. During those years she was a private duty nurse at Wilkes-Barre General Hospital for three years, a Science Instructor at Polytechnic Hospital School of Nursing, Harrisburg, Pennsylvania, for two years, Educational Director there for another two years, and was Assistant Educational Director for Philadelphia General Hospital from 1953 to 1955. She served as a missionary nurse at the Sante Casa de Misericordia, Goiaz, Brazil, for one year and the following year was Clinical Instructor at Memorial Hospital, Wilmington, Delaware.

New Space Nurses Begin Residency



NURSE RESIDENTS IN AEROSPACE MEDICINE assigned to new training program are Captains Nancy J. Barron, (l.) and Dorothy R. Novotny, both of the USAF Nurse Corps.

Special Events Mark Nurse Corps Anniversary



CHILDREN CELEBRATE 16th ANNIVERSARY of USAF NURSE CORPS—Lt. Col. Agnes M. Arrington, Chief Nurse and Consultant, Headquarters Command, Andrews AFB, Washington, D. C., and 1st Lt. Virginia M. Wood, celebrate Nurse Corps 16th Anniversary by sharing cake with children of the Pediatric Ward at USAF Hospital Andrews.

Captain Tucker brings unbounded enthusiasm to her work and will no doubt communicate this same feeling to the two Air Force nurses who are entering the aerospace nursing field, Captain Nancy J. Barron, USAF Nurse Corps, formerly assigned to the USAF Hospital, Andrews AFB, Washington, D. C., now assigned as Nurse Resident in Aerospace Nursing Course, Bioastronautics Operation Support Unit, Air Force Eastern Test Range, Patrick AFB, Florida; and Captain Dorothy R. Novotny, USAF Nurse Corps, former Master Instructor in Operating Room Course, USAF Medical Service School, Gunter AFB, Alabama.

Wings for Nigerian Nurse



1st. Lt. Mary M. Otusanya, Nigerian Air Force (center), is pictured with Colonel Harold V. Ellingson, Commander, USAF School of Aerospace Medicine, and Lt. Colonel Ellen M. Respini, Chief, Flight Nursing Branch, during graduation ceremonies at Brooks AFB, Texas, on May 20, 1965. At the present time, Lt. Otusanya is the only nurse in the Nigerian Air Force. Upon returning to her country, she will plan and organize the training for future Nigerian Air Force nurses.

Lt. Otusanya was one of 40 nurses enrolled in the six-week Flight Nurse Course taught at the USAF School of Aerospace Medicine. During this course, qualified graduate nurses receive education and practice in all aspects of aeromedical evacuation. After graduation, they are prepared to serve as senior members of the Air Force medical team on all aeromedical evacuation flights.

Lt. Colonel Leota H. Clark, Command Nurse, Air Force Systems Command, Andrews AFB, Washington, D. C., gave the graduation address. Captain Nancy A. Weaver, Otis AFB, Massachusetts, was the honor graduate. Diplomas and flight nurse wings were awarded to the graduate by Colonel Harold V. Ellingson and Lt. Colonel Ellen M. Respini.

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