A Snapshot of the Early History of the Space Medicine Branch

as Presented at the 1992 Annual Meeting in Miami Beach by John P. Morberger, Ph.D.*

To understand the origin of the Branch, one must understand the times, the associated events both in and out of government and the medical community, including the parent organization, the Aero Medical Association. The idea of spaceflight and space travel were not well established at the time. The Aero Medical Association was still recovering from the upheaval of World War II and clinical aviation medicine presented a full agenda for its members.

However, there were some rather earthshaking events beginning to happen within the government that served as harbingers of the future of space medicine. In November 1948, a Space Medicine Symposium was held at the USAF School of Aviation Medicine at Randolph AFB, TX. This was initiated as another of General Harry Armstrong’s innovations. The symposium featured the thinking of the several staff members of the School who had come to the United States following World War II from Germany (Project Paper Clip). The symposium was of sufficient success that General Armstrong ordered the establishment of a new Department of Space Medicine at the School in February 1949. This gave the organizational structure needed to allow these visionaries to pursue this new vista in a structured way.

The effort of the new Department, was brought to the outside scientific community one year later in Chicago. In March 1950, the staff of the Department of Space Medicine participated in the program at the Chicago Executive Club noon luncheon. Dr. A. C. Ivy, an early convert to the importance of the new vista, spaceflight, served as the program chairman for this luncheon and had persuaded General Armstrong, Wernher von Braun, Dr. Herbert Strughold, Heinz Haber, Colonel Paul Campbell and Dr. Konrad Buetnner to make presentations. It was well received! More importantly, since these space pioneers were to be in Chicago for the luncheon program, Dr. Ivy also proposed to hold a seminar on this subject that same evening at the University of Illinois, College of Medicine in Chicago. Four weeks before the seminar, he assigned to me the tasks of arrangements, publicity, and to serve as the foil for deflection of the many comments from the faculty about this “far-out Buck Rogers” program after the announcement of the seminar went up. I reserved a lecture room that would hold 250 people. To do this I had to make a projection that the attendance would be between 250-250 and, therefore, I would need this large room. As time passed, I became increasingly concerned that I was going to lack foolishness and the 4 weeks of ridicule heaped upon me by my fellow faculty members did not ease my concern prior to the night of the seminar. At some periods during this time I felt that I would consider a turnout of 25 to be an accomplishment that would have happened. Astonished and, certainly pleased Dr. Ivy. The lecture hall was jammed: standing room only! Estimates of at least 375 were made even though no count was made. Regardless of the reasons those attending came, all went away impressed and a bit overwhelmed.

Dr. Strughold was obviously pleased and “encouraged” me to gather the papers that had been presented at the seminar and get them published. (All who knew Dr. Strughold recognize that “encouraged” is what he really was a “command.”) Thus, I undertook this task with the support of Dr. Ivy. With his assistance I was able to persuade the authors and the University of Illinois Press to publish the results of the seminar. Seven thousand copies of the book, SPACE MEDICINE, were printed in the first printing and were sold in 6 months. Two additional printings of 8,000 copies each were printed and these were sold during the next 3 years. Copies of this publication are now considered classic, and copies are hard to come by. The seed for developing space medicine was sown!

Interestingly enough, the 1950 annual meeting of the Aero Medical Association was held in Chicago. With the recent seminar in March having been such a success, a small band of space advocates held a parallel meeting during the annual meeting to plan their next strategic move to further organize the space medicine effort. Again this effort was chaired by Dr. A. C. Ivy. Others attending were: Dr. E. J. Balles, Colonel R. J. Benford, General O. O. Benson, Dr. K. Buetnner, Colonel P. Campbell, Captain A. Graybiel, V. Guillenin, P. Herbert, V. K. Schwob, Dr. H. J. Schiebel, Colonel B. Strickland, Dr. H. Strughold, and me. You will recognize that many of those who attended this meeting became major contributors to the Aviation Medical Association, later changed to the Aero Medical Association, and more recently named the Aerospace Medical Association. The agenda for this meeting was most ambitious and I think you will find it most interesting. Included were:

1. Discussion of the possibilities for affiliation with existing professional groups or the formation of a new separate organization.

2. A discussion of the Environmental problems to be encountered in space (still quite contemporary).

3. Problems of instrumentation that could be used during space analog testing and later during flight (still contemporary).

4. The requirements for extensive study of the physical characteristics of near and deep space to learn from that studies conducted in the biological sphere were appropriate for meeting man’s entry into spaceflight (little changed).

5. A small ad hoc group, which included myself, were appointed to prepare the petition and the proposed constitution for this new venture, as preparation for their submission to the parent organization for approval for admission as a Constituent organization.

6. Preparing a list of additional members this parent group wanted to recruit.

By October 1950, I had completed a draft of the petition and the constitution. The petition requested that we be accepted as a Constituent Association and called the Space Medicine Branch. Dr. Paul Campbell, took these documents to Executive Committee of the Aviation Medical Association soon thereafter. The Branch was accepted as the Space Medicine Branch in May 1951.

The first meeting of the new Branch was held during May 1951, in Denver. The election of the first officers was conducted. Dr. Paul Campbell was selected as President for 1951-52; Dr. H. Strughold was selected as Secretary and Bibliographer; Captain A. Graybiel as Chairman of Membership; Dr. A. C. Ivy as Chairman of the Program Committee.

The program, two proven performers, Dr. H. Strughold and H. Haber, presented papers.

In November 1951, an International Symposium, entitled “Physiology and Medicine in Space Environment,” was held in San Antonio, TX. This meeting brought together science, medicine, engineering, and government organizations from around the world to examine the issues involved in conducting spaceflight. This symposium was sponsored by Air Force Air University School of Aviation Medicine by its Commandant, Brigadier General E. O. Gosche, and arrangements handled by Lovelace Foundation for Medical Education and Research through the efforts of its Research Director, Dr. C. S. White. You will recall that both General Benson and Dr. White had been active in the formation of the Branch.

Our 1952 meeting was held in March along with the annual meeting of the parent organization. This elected Acting Chairman for this meeting, since Colonel P. Campbell could not attend. I called the meeting to order and we were able to perform our elections. I was chosen to be the Chairman for 1952-53; Capt. J. R. Poppen, Vice Chairman; Dr. H. Strughold continued as Secretary and Bibliographer and was also chosen as our first Treasurer; Dr. C. S. White, Chairman of Membership; Dr. J. R. Henry, Chairman of the Program Committee. One issue raised and hotly discussed was the requirement that all members of the Branch, as a Constituent Organization, must also belong to the parent organization. Annual dues of $2.00 per year were established, and the terms of all officers were established to be for 1 year. Dr. C. S. White of the Lovelace Clinic presented the program with a paper entitled “The Challenge of Space.”

Later in May 1952, Dr. J. R. Henry carried out the early Aerobee rocket balloon flights which carried the first living animals into the near space environment. Colonel B. Strickland and I were present, and recognition for getting these flights of under less than ideal conditions, as regards financing and support. Although the experiments were quite simple in design, the results were dazzling for all of these early space
enthusiasts. It provided actual information about a subject which many of the pioneers had talked about for the preceding years. I must note that Dr. Henry's future plans for flight experiments were cancelled shortly thereafter by higher military authority, due to there being no funds for such efforts.

Getting the Branch established, in retrospect, proved to be the easy part. Troubled waters came during our next year. In May 1953, the next meeting of the Space Medicine Branch was held in Los Angeles and Captain Poppen presided in my absence. The primary issue discussed during the business meeting concerned the qualifications for membership in the Branch and the related membership in the parent organization which allowed only physicians to be full members. Non-M.D.'s could only be Associate Members and were not considered to be on a par with full members. Thus, highly-competent and future potential scientists who had continued to grow in the overall scientific program of 1957 and there was little need to further push this effort as a Branch. In fact, it was discussed that such emphasis might prove counterproductive. It was felt that the parent organization had now embraced most of the earlier goals of the Branch within its daily operations. Therefore, it was concluded that the Branch should downplay its direct role in the scientific program development and allow its members, who were now serving as officers of the Aero Medical Association or on many of the committees of the parent, to look out for interests of space medicine as part of their normal duties. As to its new mission, the Branch would continue to serve as the point of focus to stimulate the interest of younger members in space medicine; to maintain a scientific program watch on the area to offer assistance to those who were pursuing space medicine research, and hopefully, to assist the annual scientific program planning when requested. This was the course that had been followed by the Branch since its charter. Incidentally this was also the year when all became full members of the Aero Medical Association and removed a long-time irritant to the non-M.D. members.

Sputnik flew later that year, in October. Many of the issues related to whether space medicine was to become important or not became more acute, and whether too much emphasis was being placed upon this field by the parent organization dissolved. The movement to a national goal to spacelift, including manned spaceflight, became a reality. The Journal shifted to a monthly publication in May 1959 and there was now ample opportunity to get many more papers published much more quickly. Further, the Journal recognized the change in climate in spaceflight. In addition, the Branch was selected to be the new Editor of the Journal, Aerospace Medicine, in October 1959; soon after this shift in name. By this appointment, I was able to assure that the journal included a continuing discussion of what was happening and what was important in the rapidly developing field of Space Medicine during my tenure as Editor.

"EDITORIAL NOTE: In 1991 the President of the Space Medicine Branch requested that the Branch Historian prepare a summary presentation on the history of the Branch, as part of the celebration of the Branch's 40th anniversary. The response to this effort was impressive. Several of the older members of the Branch were very appreciative of the Historian's work. At the same time many of the more recent members expressed interest in learning more about the origin of the Branch and requested that the early history be made available. The President for 1992, Dr. Richard Jennings, asked the Historian to pursue this request. Accomplishing this request revealed that much of the documentation of the early events was lost quite a number of years ago; several of the early pioneers have died; most of the remaining pioneers are retired or will be retiring in the near future. Therefore, the Historian felt it was important to get the recollections and experiences of those remaining pioneers on record so all could benefit by their words and, hopefully, have a face to face discussion with them. It was with this goal in mind that the Historian asked Dr. John Marburger, one of three original organizers of the Branch, to share his experiences with us at the 1992 annual meeting.

That which is included above incorporates the notes Dr. Marburger used in his presentation with the questions and comments made during his presentation and in separate conversations. Dr. Marburger has graciously reviewed what the Historian has prepared, but any shortcomings should be attributed to the Historian, not Dr. Marburger."

Stanley C. White, M.D.
Space Medicine Branch Historian