

SPACE MEDICINE BRANCH REPORT

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The History of the Branch is one of Change

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As we look upon our 40th anniversary as a Branch of the AsMA it is hard to realize that our annual luncheon was not always held at the annual meeting of AsMA when those interested in spaceflight gathered to review what had happened during the previous year and what was on the agenda for the next year. Time has a way of smoothing out sharp edges that were once encountered by our predecessors during the frequently turbulent periods during our formation and during our first 40 years.

To place our history in context, we need to review a few milestones that have molded this Branch during the first 40 years. It is hard to believe:

- That only 40 years ago it was hard to initiate or conduct a discussion on the subject of space flight at a public or professional meeting;
- That the late 1940s was the period when Dr. James Henry was advised to stop further animal flights on ballistic missile testing. This position was taken since it was considered by senior government officials as a waste of money and valuable resources;
- That General Harry Armstrong, in spite of his position within the government, was gutsy enough to authorize the formation of the Space Medicine Branch at the Air Force School of Aerospace Medicine;
- That in 1950, the Air Force School of Aerospace Medicine and the Lovelace Foundation conducted a precedent-setting symposium on Space Flight, which brought together many scientific disciplines to discuss this "wave of the future."
- There was serious debate by those at the highest scientific levels as to whether man could, or should, live in a space environment. Further, assuming that man could live in space, there was even greater concern about whether technology could provide a safe and liveable environment for him.

Even our parent organization, then named The Aviation Medicine Association, was strictly oriented to aviation and fully committed to learning how to incorporate the lessons learned from World War II as we moved to support the burgeoning aviation industry and shift to jets in military operations. The airline industry was feeling its way as it realized that pressurized cabins, higher altitude operations, and eventually jet operations were in their future. This agenda was judged to be a full "plate" and left little time for thinking beyond what was directly before them. After all, "Buck Rogers" was still only a comic strip and later a TV series that was meant to amuse the kids. Clinical aviation medicine and the next generation of research products to further the aviation heritage dominated the annual program, the

Journal, and the management of the parent organization.

However, there was a "small" nucleus of members within the AsMA who felt that this posture was short-sighted. This group felt a need to have a forum for discussing their concerns and, if valid, to develop a platform for bringing this future need into the mainstream of the AsMA. The stories that accompany this formative period are legion. Some of them are amusing, many express frustration and aggravation and now, years later, seem unbelievable. Even if only partially true, we are indebted to that gallant few who cared enough to take on the system, ignore the ridicule and laughter at their expense, and form the Branch. You may wonder if they did it because of their dedication to a cause that few recognized at the time or as a means of gaining a defense in numbers for the heat they were receiving. I like to believe it was the former, but expect it was a bit of both.

Of special significance for those of us who came to the Branch after its formation, the Branch pioneers realized that if they were to be effective, they would need more than their own constituents to cause changes to occur. They decided to use the AsMA and its management structure as their conduit for effecting change. Thus, they took on the mission of educating the AsMA and thereby preparing it for change in its professional life to include Space Medicine. I commend you to look at the list of the leaders of the AsMA during the period since the formation of the Space Medicine Branch and I think you will be impressed as to how many of those leading the Branch later became active in changing the professional direction of the now Aerospace Medical Association. You may feel that this was inevitable; but I would suggest that having this strong participation and direction by those who had gained experience in the Branch did not hurt.

Of course many of us can vividly recall the anguish which we shared following the tragedies in our flight programs, i.e. the X-2 accident; the X-15 accident and damage; the Apollo fire; and more recently the Challenger accident. Nor have we forgotten the roughly 10% loss of test pilots per year that was characteristic of our medical practice during much of this period because by its very nature this is a risky business.

We also anguished over the accidents and losses suffered by our competition, the Soviets, because those who believe and practice Space Medicine not only understand the gravity of the loss of life but equally understand that any loss has a way of touching all of us. I recall discussing this with Prof. Gzenko in his office one evening after a data

exchange session was completed. He reminded me that regardless of what our national reasons and motivations were for pursuing manned space flight, in the Space Life Sciences arena we are dealing with and are concerned about special people who are pushing into a new frontier.

To this extent we who practice our art and science in this field have served as "key" supporters of this pioneering thrust. This frontier, as is so frequently the case, is not totally defined, is expected to have surprises, and, in many of the ways it is defined, is basically downright hostile. Of equal significance, others, who are frequently less informed or have their own agenda, have and will continue to predict that this environment is uninhabitable or that the investment required to support man will not make his presence worthwhile. As a result, our job is not only one of understanding and reducing the medical, physiological, psychological, and environmental risk to an acceptable level; but also one of advocating the proper and adequate training and the safe and productive incorporation of the crewmembers into the system and into the mission. These have served as the common set of goals of the members of the Space Medicine Branch from the beginning. Further I would predict that these goals, since they have served us well, will remain the goals of the Branch as we begin the next 40 years.

In closing let me suggest that we should learn from our past. Our Branch history has taught us that if you believe that a cause is important or a change is needed, it is essential that you accept the challenge and take the initiative to make the event happen. Let us make the next 40 years as exciting and productive as those who set our style during the past 40. Frankly, I am a bit envious of those who will report on the progress in this vista in another 40 years.

AsMA FUTURE MEETINGS

May 10-14, 1992
Fontainebleau Hilton
Miami Beach, FL

May 23-27, 1993
Sheraton Centre Hotel
Toronto, Ont., Canada

May 8-12, 1994
Convention Center
San Antonio, TX