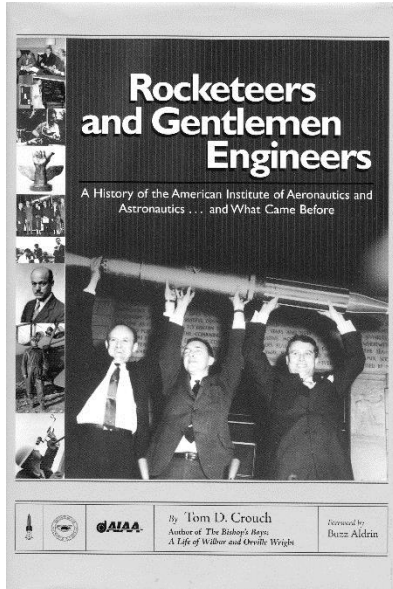


"A History of the AIAA"
A Book Review by Arloe Mayne



I have just finished reading a history of the American Institute of Aeronautics and

Astronautics (AIAA) and its predecessor organizations, by Tom Crouch, a curator at the Smithsonian National Air and Space Museum. It's an AIAA publication, and I recently obtained my copy, on sale, from an offering by the AIAA. I recommend the book; it's medium-sized (about 300 pages); and it covers the ups and downs, mergers, moves, people, awards, etc. etc. of the AIAA. I found the book an easy read, and quite informative about an organization that I have been involved with since about 1962.

It's been a long time since I wrote a book report, but a few people asked if I would do so after I sent out a brief email recommending the book discussed in this review. (Does anyone else remember book reports based on Classic Comic Books? I believe that was a not uncommon thing when I was in high school. Before you jump to conclusions, no, I didn't do that.)

When was the AIAA founded? That's one of those "Well it depends" questions. The AIAA celebrated its 50th anniversary in 1981, so maybe it was founded in 1931. Actually nothing significant, AIAA-wise, happened in 1931, but that is the average of the dates when the American Rocket Society (ARS) and the Institute of the Aeronautical Sciences (IAS) were founded, so 50 years later yields 1981. Crouch's book, by the way, is a sort of 75th anniversary item, covering the AIAA through 2006.

The ARS and the IAS were the two organizations that merged in 1963 to form the AIAA, and they are the basis for the title of Tom Crouch's book "Rocketeers and Gentlemen Engineers: A History of the American Institute of Aeronautics and Astronautics ... and What Came Before". The ARS began as a sort of amateur rocket club, while the IAS was modeled after the Royal Aeronautical Society (RAeS) and was indeed a group of "gentlemen engineers". I believe that Crouch means restrictive and elitist, as the RAeS was, when he says "gentlemen". It is true, however, that the IAS had a class of membership for pilots, and of the two most famous pilots in the US, only one was eligible for membership – Charles Lindbergh was qualified, while Amelia Earheart was not. This lasted until 1939 when Miss Elsa Gardner was invited to join.

The ARS began in New York in 1930 as the American Interplanetary Society (AIS), a group of friends interested in science fiction about interplanetary travel. They met at a speakeasy and Italian restaurant below the apartment of Edward Pendray and his wife Lee, two of the founders of the IAS. In a couple of years, as the AIS began designing,

building, and testing rockets, the name was changed to the ARS. Rockets were not exactly mainstream in the 1930's, and after ten years, the ARS had only 130 members. They grew to 334 members in 1944, and to 20,500 in 1962 as the space race blossomed.

The IAS was also formed in New York, in 1932, by a group that included Edwin Eugene Aldrin, Sr., father of the Apollo 11 astronaut, who wrote the foreword to Crouch's book. An early challenge was to elevate aeronautics so that it was seen as a profession by others. IAS membership came from aviation companies, the military, colleges, and other sources, and in five years membership was up to 1795. By 1962 they had grown to 15,600 members.

The IAS, ARS, and then the AIAA had their headquarters in New York until 1988, when the AIAA moved to Washington. Today, that strikes me as a bit unusual, but I think that I still remember mailing dues, etc. to the AIAA at 1290 Avenue of the Americas in New York. And I remember presenting perhaps my first technical paper at the 1968 Aerospace Sciences Meeting, always held in those days in New York, and referred to as the "Winter Meeting".

Over the years, the IAS received several collections of aeronautical memorabilia, art, artifacts, literature, etc. These included items ranging from the Wright brothers stopwatch used at Kitty Hawk to decorated snuffboxes, and the size of the collection ultimately became too much to deal with so in the early 1960's the material was dispersed to the Smithsonian Institute, the Library of Congress, and similar places. For many years the IAS had the largest aeronautical library in the country, and lent

items by mail to persons not able to come to the library. (How would you like to do your research by mail?)

The IAS and ARS merger was effective January 31, 1963, and the AIAA had 36,500 members at the end of that year. I lack documentation, but I believe that I was a student member of the IAS prior to the merger; I certainly remember it being a pretty big deal even at the student level when the merger occurred. Membership reached essentially 40,000 in 1968, and then dropped, following post-Apollo industry declines, to 27,500 in 1974. I recall being one of many whose membership lapsed in about 1971 when I felt that AIAA dues were rising faster than my salary.

The book provides interesting information about the IAS and ARS founders and subsequent leaders, as well as about the executive directors, probably the most significant being Jim Harford, and various other staff members. The organizations' publications and meetings are discussed – perhaps the largest meeting of all being the 1961 ARS Space Flight Report to the Nation, attended by 12,800 professionals. It was amusing to read that in 1945 when the IAS was looking at a mansion with Fifth Avenue frontage as a new headquarters building, they were told that "scientific societies" were not allowed in residential areas. By declaring that the IAS could be considered a "museum, library and ... similar to a club", Secretary Lester Gardner was given approval for the IAS to move into the mansion.

Crouch brings his training and experience as a historian into full play in describing the beginnings of technical societies in general, followed by descriptions of the formation

and growth of the IAS and the ARS, their merger to form the AIAA and its subsequent activities. Each chapter has a list of references, and Presidents of the three societies and their various award recipients are given in appendices. I enjoyed seeing the names of people that I had some connection to (e.g., Hermann Schlichting of boundary layer fame, the 1973 Wright Brothers Lectureship Award recipient – I had used his book as a textbook, and was really excited when he sat in on a paper that I presented in the 1970's; Allan Bailey with whom I worked at AEDC, the 1979 Losey Award recipient; and several others). There were, of course, many other names that were familiar, ranging from Orville Wright to Theodore von Karman to Steve Squyres.

Some of you probably remember Tony Springer when he was in Huntsville. He was a member of our Section, and I recall a dinner meeting at the Radisson where the bar was far removed from the meeting room. Tony offered to be the runner to bring drinks from the bar (but, no, he didn't buy). It wasn't until shortly after that I learned that he was a candidate for Regional Director, and that the runner task was probably a bit of campaigning. Tony is a fine fellow, I voted for him, and he won the election. Tony, who has held the position of Chairman of the History Technical Committee, and his wife Emily, AIAA's Manager, Region and Section Programs, and a person who has been able to sort out a lot of problems for us in the provinces, together with Rodger Williams, are credited with conceiving of and supporting the writing of this book. Speaking of the provinces, it was Emily Springer from whom I once received an

email said to be from "AIAA Galactic Headquarters".

I have seen Dr. Tom Crouch on television several times, usually with some part of the Air and Space Museum or the Udvar-Hazy Center in the background; I have read many articles by him in the Smithsonian Air and Space magazine, the Smithsonian Magazine, and others. He has had articles published in Astronautics and Aeronautics and the AIAA Journal, and he has written several books about aviators, flying, balloons and airships, etc. I mention these magazines and journals because I believe that the readers of this review will recognize them; Crouch has been published in many more, especially history magazines. He is the author of the book The Bishop's Boys: A Life of Wilbur and Orville Wright, and he is staunch believer in and defender of the Wrights having been the first to achieve sustained powered flight in a heavier-than-air machine.

I will admit that I did not read all of the lists of references, and that surely shortened the book by several pages. The book is generally well-done, but I did run across a few problems with the index; e.g., Lindbergh is mentioned on page 61, but is cited in the index only for his photograph on page 163. Also, they are probably all mentioned at one point or another, but I would like to have seen a list of the various organizations' executive directors.

Arloe Mayne
Section Chairman Emeritus

