Air and Space this Week Item of the Week Al Hibbs, the "Voice of JPL"

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Albert Roach Hibbs was an exceptional mathematician, who played an integral role in the launch of Explorer 1 (see page 3 of the report linked to here) and many other JPL spacecraft missions. His greatest strength was his ability to make complex science and technology concepts understandable and interesting to the general public. His dissertation advisor at Cal Tech was Richard Feynman, who served on Robert Oppenheimer's Manhattan Project team, published his outstanding "introductory" Physics lecture notes (and made Physics fun to read about!), and is most recently remembered for his dunk-it-in-his-ice-water-glass demonstration of why Space Shuttle Challenger's O-rings could not and did not work well in the cold. Both were free spirits. Hibbs and his grad school buddy, Roy Walford, figured out how to beat the casino roulette wheel, and made a chunk of change before the casinos caught on. After graduation, he and Roy took their winnings and sailed the Caribbean until the money was gone. Al also appeared on "You Bet Your Life," and was featured in Life magazine.

Wolford went into medicine, especially longevity and nutrition, and is most remembered today as the physician on the Biosphere II crew. Al went to JPL, as he said, "I want to conquer Space and Roy wants to conquer death." But it was Al who suggested to Feynman that his ideas about micro-robotics might have an important medical application, foreshadowing the field of nanotechnology.

Al was the official spokesperson for a lot of missions, and often appeared on TV and other venues. It was in this capacity that he hosted the "Al Hibbs Show" I mention in the video NASA prepared for my retirement, linked to at the end of this A+StW installment. During the fly-bys of the outer planets in the 70's and early 80's, Al's show featured mission scientists and a real-time link to the Deep Space Network (see the examples in the retirement video link below). Images would appear, line-by-line, on a monitor while Al, his guest(s), and you the viewer, watched together. Nobody saw the images before we did! It was utterly amazing to see the pictures build up slowly, while Al and his guests commented on what we were all seeing.

Al was well known for his themed April Fool's Day <u>parties</u>. Feynman loved them, too, appearing one year as Queen Elizabeth and another as God. Check out the "parties" link for a picture of Al (with a folk singer beard) and already-balding Roy, and Feynman's costumes. Imagine if the icons of the Beat Generation were super-genius rocket scientists instead of poets.... Al was a Friend of Tuva, too!

Al <u>passed away</u> on February 27, 2003. NASA JPL prepared a memorial video: https://www.jpl.nasa.gov/video/details.php?id=196.

For really in-depth looks into Al's career, see his papers at the Huntington Library: https://oac.cdlib.org/findaid/ark:/13030/c8c8280r/entire_text. Also, see: https://www.worldcat.org/title/interview-with-al-hibbs/oclc/733106411

And don't even think about getting me started about the quirky orbital mechanics whiz, <u>Robert W. Farquhar</u>, either.

Geez, somebody oughtta write a book about these two wizards. NASA does the almost impossible, as only NASA can, **and it does it with style**!

My friends at NASA incorporated some of my remarks about *The Al Hibbs Show* into a segment they produced for my retirement celebration (what a wonderful bunch of colleagues!). It's still out there, see:

https://www.youtube.com/watch?v=op1_S6u_1XE&feature=youtu.be