DR. SETI'S STARSHIP

Searching For The Ultimate DX

Remembering Malcolm Raff, WA2UNP

hen first I encountered Mal Raff, on the air in the mid 1970s, I knew we were destined to become lifelong friends. I knew this not because of our shared passion for amateur radio, nor by his particular callsign, but rather from the curious phonetics he used to articulate it. "W A 2 Uranus, Neptune, Pluto," enunciated the voice through the ether, and I knew at once that my new ham radio acquaintance shared my interest in planetary astronomy. In the months that followed, through sporadic on-the-air contacts, I learned that Mal and I shared interest in aviation and music as well.

None of this is surprising, given Mal's background. An undergraduate physics major at Gettysburg College, an outstanding small liberal arts institution in Pennsylvania, this bright New Jersey native went on to attend graduate school at the University of Illinois, where, circa 1961, he took his first flying lesson. This was about the same time that I, slightly younger, was enjoying my own first flying lesson in Florida. However, Mal, being perhaps more motivated, perhaps more resourceful than I, raced through his ratings, picking up private, instrument, commercial, and flight instructor certificates in short order. In time, his academic career transported him to the University of California, Berkeley (I followed his footsteps there some years later). At Berkeley, Mal Raff acquired a Ph.D. in astrophysics, and a fascination with helicopters that culminated in his adding a rotor-wing instructor's rating to his aviation credentials.

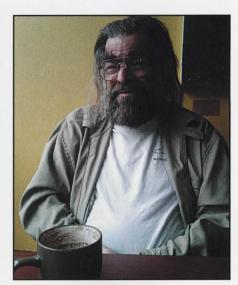
It was that helicopter instructor rating that ultimately led us to meet face to face around 1980 at the Reid Hillview Airport in San Jose, California. I based my own Beechcraft at that particular field, and Mal came fling-winging down from Oakland to introduce himself. We became instantly inseparable, talking ham radio and flying in person whenever in close proximity, and on the airwaves when not.

In 1982, when friends and I co-founded the Frazier Lake Airport in Hollister, California, Mal showed up there in a Bell 47, logging the first landing before we had even begun to construct a runway. Although never a member of the Frazier Lake Airpark Association, Mal nevertheless managed to fly in to many an airport barbecue, as my guest, in whatever helicopter or airplane he happened to be flying that year.

Our careers wound in curiously diverging directions. After grad school, Mal started off in academia, then gave up a teaching post to work in the aerospace industry. I left my aerospace engineering position to accept a college faculty assignment, then using academia as a springboard to go back to school for my own Ph.D. We quipped about which one of us was walking backward through life, but Mal always encouraged my personal and professional growth.

Mal's own professional growth astounded me. He made a dramatic jump from aerospace into biotechnology, developing some of the earliest DNA sequencing techniques, and contributing software to the ultimate classification of the human genome. I once asked Mal how one segued from astrophysics to genetic engineering. "The tools are exactly the same," he replied. "I used to use them to image the very large and distant. Now I apply them to imaging the very small and near. Same difference." That was the kind of insight that made Mal Raff incredibly interdisciplinary.

Richard Factor, WA2IKL (another pilot and interdisciplinaryrenaissance man) and I started up The SETI League in 1994. Mal was early to sign on and became an active and ardent supporter. Our shared SETI interest had become evident more than a decade prior, when Mal accepted my invitation to give a colloquium at the college where I then happened to be teaching. His chosen topic: "Speculations about Extra-Terrestrial Visitors." Mal made regular financial contributions to The SETI League (the size of which fluctuated as his personal fortunes waxed and waned), attended several of our SETICon technical



Possiblythe last picture taken of Malcolm I. Raff, WA2UNP, by cell phone on October 17, 2010. (N6TX photo)

symposia, served on our scientific advisory board, chaired our Strategic Planning Committee, and consoled me as the organization's resources shrank almost in inverse proportion to our growing technological acclaim. Mal shared Richard's vision for privatized science; we were just never able to figure out how to make it pay for itself.

Upon his retirement, Mal decided to expand his musical horizons. Always a gifted pianist, he immersed himself in Brazilian jazz. Deciding he wanted to learn to play the vibraphone, Mal tackled that instrument with the same dedication I had seen him bring to his mastery of aviation, engineering, and biotechnology. He became a regular fixture at (and generous benefactor to) the Berkeley Jazz School. Although the Brazilian jazz combo he cobbled together never gained headliner status, they managed to make beautiful music at a number of Bay Area venues. I would enjoy taking in a performance whenever my travels brought me out west.

When my daughter Erika (who was like a niece to Mal) staged her performance piece "Orbit: Notes from the Edge of Forever" at San Francisco's Intersection

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for the Arts, Mal and I attended the premiere together. He and I were the only people in the audience to crack up when Erika's co-star uttered the throw-away line she had scripted in his honor: "Oh, be a fine girl, kiss me!" We were probably also the only attendees to recognize a rhythmic pulsing in the musical score as the Morse code characters "CQ."

Mal celebrated his 70th birthday at the Jazz School on April 18, 2010. He was diagnosed with a fast-growing brain tumor on August 1st, and died at home on November 3rd. I visited with him two weeks prior; we talked for two hours, hugged each other, and said our goodbyes. I feel that I have lost a brother.

Malcolm I. Raff is survived by his wife, Connie Woods; a sister in Washington's Crossing, Pennsylvania; a very old tortoise; and about a dozen rescued birds, including one very intelligent cockatoo.

Rest in peace, my friend. Paul, N6TX