## **The Bohannon Hypothesis**

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What if there were a cadre of physician-astronauts for the U.S. Air Force's Manned Orbiting Laboratory (MOL) program, in addition to the well-known test pilots? The evidence is slim: just two sentences in a report on the role of pilot-physicians in the U.S. Air Force and an email confirmation by one of those pilot-physicians. But it provides a peek through the wall of secrecy and forgetfulness that still surrounds MOL.

The first NASA astronauts selected in 1959 were military test pilots who made the terms "astronaut" and "test pilot" synonymous for decades. But by October 1963, NASA had dropped the test pilot requirement to ensure enough pilots as astronauts for the predicted space missions of the late 1960s. In June 1965, only two of the first six scientist-astronauts were even jet-qualified; NASA sent the rest to Air Force pilot training.

Simultaneously, military astronaut selection commenced for MOL, the secret parallel space program managed by the Air Force for the National Reconnaissance Office (**Fig. 1**). Only five two-man missions of the Gemini-B/MOL combination were planned, to be launched atop Titan III-M rockets from Vandenberg Air Force Base near Los Angeles, CA. There were 17 graduates of the Air Force Test Pilot School who were selected in three groups between November 1965 and June 1967 for training as MOL pilots.<sup>1</sup>

When announced in December 1963, MOL's purpose was to assess the general military value of man in space. By 1965, MOL had been repurposed as a test bed for new intelligence-gathering techniques and space vehicle operations.

In 1964, Brig. Gen. Joseph S. Bleymaier, Space Systems Division deputy commander for manned systems, said MOL crewmen would have to do both piloting and space experimental work, and that those jobs "require the services of trained and experienced



Fig. 1. The Manned Orbiting Laboratory was to be built by the Douglas Aircraft Company (image courtesy of the U.S. Air Force).

research [e.g., test] pilots.<sup>34</sup> But another general apparently disagreed. Less than a year after being designated the USAF Surgeon General in late 1963, Lt. Gen. Richard L. Bohannon "determined that MOL had a requirement for new pilot-physicians.<sup>33</sup>

The new pilot-physicians were to be recruited from the ranks of flight surgeons that provide clinical care to operational pilots and astronauts. They are usually not jet pilots themselves, but fly in the back seats of high-performance aircraft.<sup>2</sup> They would have monitored the MOL pilots by telemetry during their orbital flights, in addition to overseeing their preflight training and postflight rehabilitation. The specific request for more pilot-physicians suggests that Bohannon intended for them to do more, perhaps even to fly in space as one of the pilots on MOL missions.

As Dr. Peter Mapes, an Air Force pilot-physician of the 1970s and author of a history of the pilot-physician program,<sup>5</sup> explained:

"Early on, our astronaut program put a premium on using pilots for astronauts. Most early astronauts were recruited from pilot ranks. The MOL program was planned to increase the duration of orbital missions and it was apparent that people with medical expertise would be required... In addition, pilot physicians have long been viewed as operational researchers and problem solvers so this strengthened their appeal" (Mapes, P. Personal communication; 2013).

Gen. Bohannon may have thought that it would be easier to convince the Air Force to include pilot-physicians on MOL flights if a cadre of pilot-physicians were already trained and available—not easy, certainly, but easier.

The new pilot-physicians first served a 2-yr commitment as full-time fighter pilots before returning to their medical duties; thus, the two 1964 designees were not available for medical duties until 1966. By 1968, 6 had been trained under Bohannon's initiative, for a total of 16 active pilot-physicians, including 10 older pilot-physicians already on active duty. There had apparently even been some consideration of sending pilot-physicians to test pilot school, perhaps to increase their acceptability as MOL crewmen, but that went nowhere.<sup>3</sup>

But Gen. Bohannon's efforts were for naught: three groups of test pilots had already been selected as MOL astronauts by 1968, with no obvious consideration of the pilot-physicians whatsoever. Then, in June 1969, "the Manned Orbiting Laboratory was cancelled and with it the justification to train physicians as pilots."<sup>3</sup> That is the second sentence in the report that I mentioned.

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Unfortunately, while the available documentation<sup>3,5</sup> lists many of the pilot-physicians by name, it does not specify who was selected and trained when. No relevant records exist in the Surgeon General's office. Bohannon's pilot-physician cadre was apparently neither well-documented nor tightly-knit, so further specifics may never be known.

## REFERENCES

- Anon. "Manned Orbiting Laboratory." [Accessed 6 May 2013.] Available from https://en.wikipedia.org/wiki/Manned\_Orbiting\_ Laboratory.
- Anon. "United States Air Force Medical Service." [Accessed 22 June 2013.] Available from https://en.wikipedia.org/wiki/United\_ States\_Air\_Force\_Medical\_Service.
- Koritz TF. USAF Pilot/Physician Program: History, Current Program, and Proposals for the Future. USAFSAM-TP-89-9; July 1989. [Accessed 7 Jan. 2013.] Available from http://www.dtic.mil/tr/fulltext/ u2/a212671.pdf.
- Lochbaum J. MOL Men Will Train At Brooks. San Antonio Express; November 19, 1964, pp. 1 & 16.
- Mapes PB. Historical Note: The history of the United States Air Force Pilot-Physician Program. Aviat Space Environ Med. 1991; 62(1): 75–80.

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