

The Bohannon Hypothesis

John B. Charles

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.¹

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

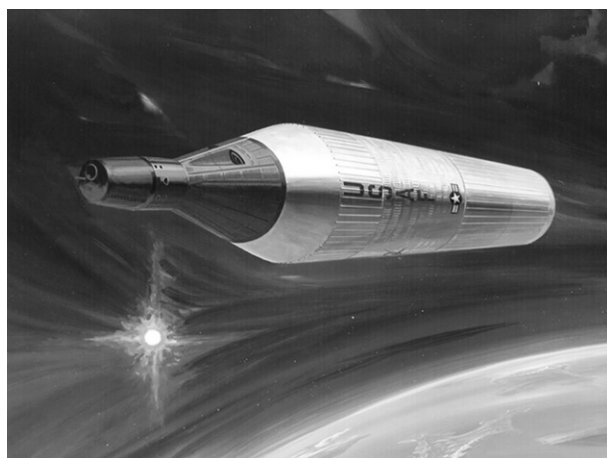


Fig. 1. The Manned Orbiting Laboratory was to be built by the Douglas Aircraft Company (image courtesy of the U.S. Air Force).

research [e.g., test] pilots."⁴ 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."³

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.² 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,⁵ 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.³

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."³ That is the second sentence in the report that I mentioned.

From the NASA Human Research Program, NASA-Johnson Space Center, Houston, TX.

This feature is coordinated and edited by Walter Dalitsch III, M.D., M.P.H. It is not peer-reviewed. The AsMA History and Archives Committee sponsors the Focus as a forum to introduce and discuss a variety of topics involving all aspects of aerospace medicine history. Please send your submissions and comments via email to: walt3@dalitsch.com.

Reprint & Copyright © by the Aerospace Medical Association, Alexandria, VA.

DOI: 10.3357/AMHP.4483.2015

Unfortunately, while the available documentation^{3,5} 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

1. Anon. "Manned Orbiting Laboratory." [Accessed 6 May 2013.] Available from https://en.wikipedia.org/wiki/Manned_Orbiting_Laboratory.

2. Anon. "United States Air Force Medical Service." [Accessed 22 June 2013.] Available from https://en.wikipedia.org/wiki/United_States_Air_Force_Medical_Service.

3. 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>.

4. Lochbaum J. MOL Men Will Train At Brooks. *San Antonio Express*; November 19, 1964, pp. 1 & 16.

5. Mapes PB. Historical Note: The history of the United States Air Force Pilot-Physician Program. *Aviat Space Environ Med.* 1991; 62(1): 75-80.

Delivered by Publishing Technology to: Aerospace Medical Association Member

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION
(Required by 39 U.S.C. 3685)

1. Title of Publication: *Aerospace Medicine and Human Performance*. 2. Publication No. 008-760. 3. Date of Filing: October 1, 2015. 4. Frequency of Issue: Monthly. 5. No. of Issues Published Annually: 12. 6. Annual Subscription Price: \$270. 7. Complete Mailing Address of Known Office of Publication: Aerospace Medical Association, 320 S. Henry St., Alexandria, VA 22314-3579. 8. Complete Mailing Address of Headquarters or General Business Office: Aerospace Medical Association, 320 S. Henry St., Alexandria, VA 22314-3579. 9. Full Names and Complete Mailing Address of Publisher, Editor, and Managing Editor: Pubisher -- Aerospace Medical Association, 320 S. Henry St., Alexandria, VA 22314-3579. Editor -- Frederick Bonato, Ph.D., 1 Normal Avenue, Montclair, NJ 07043. Managing Editor -- Pamela C. Day, B.A., Aerospace Medical Association, 320 S. Henry St., Alexandria, VA 22314-3579. 10. Owner: Aerospace Medical Association, 320 S. Henry St., Alexandria, VA 22314-3579. 11. Known Bondholders, Mortgages, and other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, and Other Securities: None. 12. For Completion by Nonprofit Organizations Authorized to Mail at Special Rates: The purpose, function, and nonprofit status of this organization and the exempt status for Federal income tax purposes has not changed during the preceding 12 months. 13. Publication Name: *Aerospace Medicine and Human Performance*. 14. Issue Date for Circulation Data: September 2015.

15. Extent and Nature of Circulation:	Ave. No. of Copies Each Issue During Preceding 12 Months	No. Copies of Single Issue Published Nearest Filing Date
a. Total no. copies	2173	2226
b. Paid circulation		
1. Paid/requested outside county mail subscriptions	1166	1204
2. Paid in-county subscriptions	0	0
3. Sales through dealers and carriers, street vendors, and counter sales	685	708
4. Other classes mailed through USPS	0	0
c. Total paid/requested circulation	1851	1912
d. Free distribution:		
1. Outside county	0	0
2. In-county	0	0
3. Other classes mailed through USPS	0	0
4. Free distribution outside mail	91	
79		
f. Total free distribution	30	30
g. Total distribution	1881	1942
h. Copies not distributed	292	284
i. TOTAL	2173	2226
Percent Paid and/or Requested Circulation	98%	98%