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Chapter 15

Yitzhak Mayo—Israeli Astronaut Candidate*

Hannes Mayer†

Abstract

In 2003, Col. Ilan Ramon became the first Israeli citizen to go to space on the (ill-fated) Space Shuttle *Columbia*, mission STS-107. Despite the tragedy, the mission was an inspiration for many people around the world, Israelis, Americans, and others; Jews and Gentiles alike. Col. Ramon's flight was one major milestone of Israeli space efforts and the culmination of a journey that began in 1995, when US President Bill Clinton announced that a future Space Shuttle mission would include an Israeli crewmember.

In 1998, two Israeli Air Force officers, Ilan Ramon and Yitzhak Mayo, began their astronaut training at NASA's Johnson Space Center. While Ilan Ramon was selected as a payload specialist, Yitzhak Mayo trained as his backup. Ramon and Mayo trained for the mission that would eventually become STS-107. Among the experiments they rehearsed for, was the Mediterranean-Israeli dust experiment (MEIDEX). Being trained as a backup and having quit training before the actual mission, (then) Lt. Col. Yitzhak Mayo (born in 1954), an experienced aviator, having accumulated numerous flying hours on F-4 and F-16 aircraft, has often been overlooked, when discussing the Israeli space program, but never forgotten.

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I. Introduction

In 1995, US President Bill Clinton announced that an Israeli astronaut was to fly on a US Space Shuttle mission.¹ In 1998, two Israeli Air Force officers, Col. Ilan Ramon and Lt. Col. Yitzhak Mayo, began their astronaut training at NASA's Johnson Space Center. While Ilan Ramon was selected as a payload specialist, Yitzhak Mayo trained as his backup. Ilan Ramon eventually got to fly on STS-107, the space mission which ended in such tragedy. At this time Yitzhak Mayo had retired from the astronaut corps. Being a backup crew member, who never got to fly on a space mission, Yitzhak Mayo is the often forgotten one of the first two Israelis who trained to fly to outer space.

II. Biography

Yitzhak Mayo was born 14 September 1954, in Kfar Hittim, a small village in the northern part of Israel.² After his graduation from high school in 1972, he was drafted into the Israeli Defense Force and volunteered for the Israeli Air Force Academy. At the academy, he qualified as a weapon system officer and a navigator. From 1974 to 1979, Lt. Col. Mayo served as a weapon system officer on the F-4.³

He then went on to study at Ben Gurion University in Beer-Sheva, where he obtained a Bachelor's degree in 1986, and in 1988 a Master's degree in physics, specializing in spectroscopy and chemical lasers.⁴

Yitzhak Mayo converted to the F-16D in 1988 and served as a weapon system officer. After this he spent the years 1988 and 1989 at the IAF Flight Test Center, serving as the head of the avionics section. In this capacity, he was mainly occupied with weapons testing and operational evaluation. He also served as head of the avionics section.

Yitzhak Mayo is married to Rinat, with whom he has three children. He likes swimming, cooking, and reading.⁵ In 1997, Yitzhak Mayo, along with Ilan Ramon, was selected as payload specialist for an upcoming US Space Shuttle mission.

By then he had accumulated more than 3,250 flying hours, mostly on the F-4 and the F-16. He has also gained flying experience on the F-15, F/A-18 and helicopters.⁶

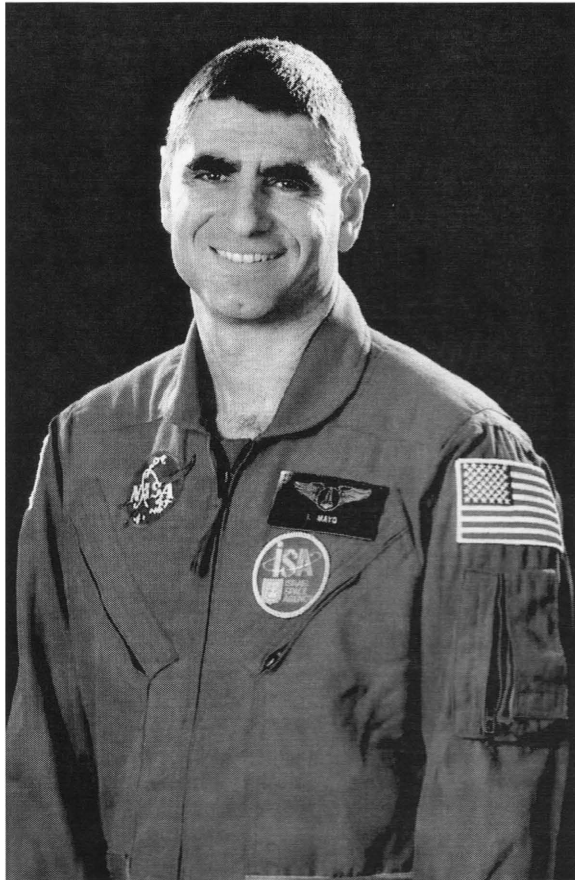


Figure 15–1: Lt. Col. Yitzhak Mayo.
(Courtesy of the Israel Air Force Magazine).

III. Astronaut Training

Ilan Ramon and Yitzhak Mayo reported for training at the NASA Johnson Space Center.⁷ Col. Ramon was selected to fly the eventual mission with Lt. Col. Mayo as backup. Both aspiring astronauts moved to Houston, Texas, in the United States with their families.

The two Israelis easily blended in with their fellow astronaut candidates and the other astronauts at JSC, while training with the 1998 astronaut class.⁸ Because of the international cooperation between NASA and other space agencies—especially in manned programs—the atmosphere proved to be quite international anyway. International astronauts and astronaut candidates training

alongside their American colleagues, as well as US astronauts speaking Japanese, French, and Russian added to that experience.⁹

In January 2000, Ilan Ramon was assigned to fly on the Space Shuttle *Columbia*, mission STS-107, with Yitzhak Mayo as backup.¹⁰

However, before the announcement of the full STS-107 crew, Mayo stopped his training as a backup and returned to Israel in November 2000.¹¹ No public communiqué was made about it on either side.¹² It was reported that Mayo had returned to Israel for personal reasons. Other reports cited financial issues, implying that Israel was not willing to provide the funding for two astronauts.¹³

IV. Involvement with MEIDEX

Ilan Ramon continued to train for the STS-107 mission and specifically for the Israeli MEIDEX experiment. MEIDEX, the Mediterranean-Israeli Dust Experiment, was an experiment to study the temporal and spatial distribution and physical properties of atmospheric desert dust over North Africa, the Mediterranean, and the Atlantic Saharan areas.¹⁴

Yitzhak Mayo continued to work with the MEIDEX team after he quit astronaut training.¹⁵ He was a member of the team that supported the experiment from the ground, throughout the STS-107 mission.¹⁶

We all know how tragically the STS-107 mission ended. The Space Shuttle *Columbia* disintegrated during reentry into Earth's atmosphere on 1 February 2003, with the loss of all crew members.

V. After STS-107

After the tragic loss of the Space Shuttle *Columbia* with its crew, the Israeli government indicated an intention to continue manned space exploration.¹⁷ In an interview back then, Yitzhak Mayo stated that a certain amount of time would have to pass until another Israeli astronaut would launch into space.¹⁸

In 2014, Israel again commenced talks with other space agencies on the topic of sending an Israeli on a space mission.¹⁹ Yitzhak Mayo's name was again mentioned in his context. Given his previous astronaut training, Yitzhak Mayo seems an obvious choice for this task to many commentators. The Israeli Space Agency would not rule out this possibility but identified possible problems concerning his meanwhile advanced age.²⁰

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