## In the Museum: The Mystery of the MiG

Air & Space Magazine Z. Byron Wolf

**R**uss Lee is an aeronautics curator for the National Air and Space Museum, and it's his job to piece together the occasional historical puzzle that some of the Museum's aircraft present. Lee has successfully uncovered the histories of the Museum's North American B-25 Mitchell bomber and its collection of Horten gliders. His latest case, however, a Mikoyan-Gurevich MiG-15bis, has him stumped.

Nicknamed Fagot by NATO, the MiG-15 is a single-seat, swept-wing, Soviet air force jet fighter that was designed to intercept high-altitude strategic bombers. On December 30, 1947, a MiG-15 prototype made the first official test flight, and in the next nine years, more than 15,000 MiG-15s were manufactured in the Soviet Union, Poland, Czechoslovakia, and the People's Republic of China. At one time deployed in 15 countries, including the former East Germany, Egypt, Iraq, and Cuba, the fighter is perhaps most famous for dueling with U.S. Air Force North American F-86 Sabres during the Korean War.

The Museum's MiG-15 is free of the bullet holes and battle scars that could be expected if it had flown in combat, so it is not likely that the aircraft tangled with F-86s in the skies over North Korea, but Lee doesn't know for sure. Unfortunately, a key piece of information is missing. "There should be a little metal plate that gives the serial number for the airplane," he says. "If we can find it, the plane probably has a few more stories to tell us. It is possible that for whatever reason, between the time it was built and the time we got it, someone pulled the plate off." What Lee does know is that the MiG formerly belonged to the People's Republic of China, but he does not know when and where the fighter was manufactured, nor does he know the military units to which it may have been assigned.

The MiG-15 became part of the Museum's collection in 1986 after Robert C. Mikesh, a now-retired aeronautics curator, arranged to trade three surplus U.S. Navy T-28s for a MiG-15 that the Champlin Fighter Museum in Mesa, Arizona, had purchased from China in 1985 for \$130,000. The MiG was loaded onto a commercial Chinese freighter, which set sail across the Pacific on September 9, 1985, and arrived in Long Beach, California, about a month later. It was then trucked to Marine Corps Air Station El Toro in California. On January 7, 1986, the MiG was loaded into a C-5A and flown to Andrews Air Force Base in Maryland, then driven to the Museum's Paul E. Garber Preservation, Restoration and Storage Facility.

Now, 13 years later, the MiG sits in Garber's Building 10, wedged behind the enormous tail section of the Enola Gay, the Boeing B-29 that dropped an atomic bomb on Japan during World War II. Garber restoration specialist Bob Padgett (below) is cleaning the MiG and painting it with an anti-corrosion agent. The underbelly of the fighter is so badly corroded, though, that Padgett will replace the skin there. While working on the MiG, Padgett has been searching for the plate with the serial number, but he doesn't really expect to find it. Based on the craftsmanship that he sees in the MiG, Padgett believes it was manufactured in the former Soviet Union, and he thinks it is likely that the Soviets removed the serial number before turning the aircraft over to China. Padgett also thinks, based on the wear and tear that he sees in the engine, that the MiG logged a fair amount of flying time.

While the Museum's MiG-15 may not have an illustrious flight record (Lee thinks the Chinese probably used it as a trainer), it is—with its stubby, hollow nose, swept wings, and prominent tailplane—representative of the technology and look of early jet fighters. And though the MiG was probably manufactured in Russia, it has German roots. After World War II, German engineers who had been working on a jet fighter for their own government found themselves suddenly without an employer. So the Soviet Union offered several thousand engineers and technicians security and employment in exchange for their expertise. Among the German aeronautical designers exported to Russia were many who had worked for the Luftwaffe on airplanes, including noted German designer Siegfried Günther, who is thought to have worked on the MiG-15.

Whatever its origins, the MiG-15 was a superb airplane, able to outperform any of the American-made piston-engine and first-generation jet aircraft (such as the F-80) that challenged it during the Korean War. It wasn't until early 1953, after F-86 Sabres had been on the scene, that the United States achieved complete air superiority. The two fighters were fairly evenly matched, though the MiG had a faster climb rate, higher operating ceiling, and tighter turning rate at altitude. But the Korean and Chinese pilots who flew MiG-15s were no match for the far more experienced and better trained Sabre pilots, who started downing MiGs at a prodigious rate.

Though the Museum's MiG-15 is not currently scheduled for a full restoration, it will be ready for display when the long-planned Dulles Center opens in 2003. Museum curators have allocated space for a grouping of Korean War-era aircraft, including the MiG, a Grumman F9F Cougar, a Yak-9, and the MiG-15's old enemy, the F-86. Lee acknowleges that without the MiG's serial number, the fighter's history may never be pieced together, in which case it can serve only as a representative of its type. Still, that's not such a bad assignment, considering the impact that the MiG-15's innovations had on aerial warfare during the Korean War and since.

Before he lost his life in a glider accident on July 13, 1999, Donald D. Engen had a long and varied career, which included distinguished tours with the U.S. Navy, Piper Aircraft, and the Federal Aviation Administration. Engen's final job was serving as director of the National Air and Space Museum, where he made it his top priority to raise the funds necessary to build the long-planned Dulles Center, which will house some 300 air- and spacecraft. In his autobiography Wings and Warriors: My Life as a Naval Aviator, he wrote: "Early every morning, as I enter the National Air and Space Museum's empty and quiet great halls, which will soon be filled with thousands of visitors, I savor the cool air and walk among the many aviation and space exhibits in awe." We can only imagine the awe and satisfaction that Engen would have felt had he lived to see the completion of the Dulles Center.

So far the Museum has raised \$92 million of the \$130 million required. If you would like to contribute in memory of Engen, you may send a donation to: Donald D. Engen Memorial Fund, National Air and Space Museum, Room 3509, MRC 0321, Independence Ave. at Sixth St. SW, Washington, DC 20560-0321, or call (202) 357-4487.