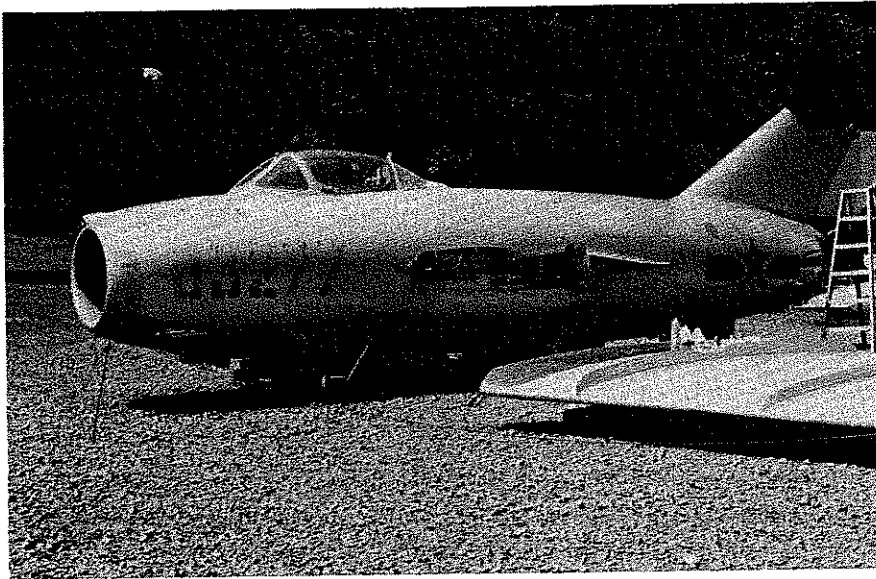


MiG-15 ARRIVES AT NEAM



The MiG-15 shortly after its arrival at the Museum, in the process of being assembled. The Russian jet fighter was in surprisingly excellent condition.

The long-awaited Mikoyan-Gurevich MiG-15 arrived at the Museum this summer and its pristine condition surprised many, despite Museum Director Mike Speciale's assurance that we were getting an excellent airplane. After assembly, the MiG's aluminum skin was polished to a high lustre by Restoration Manager Bob Blair. Then Bob painstakingly repainted all of the markings. The result was a jet fighter that almost gives the appearance of having just rolled off the assembly line.

For the time being, the Russian jet will remain in the outside display area, adjacent to the Restoration Building. While it might have been anticipated that an acquisition of this importance would immediately go on exhibit in center court of the Main Exhibition Building, a SITES (Smithsonian Institution Traveling Exhibit Service) exhibit featuring the World War II photographs of Edward Steichen displayed in the Hamilton Standard Gallery, utilize that area. The Steichen photographs will be exhibited until October 21. Then the Hamilton Standard Gallery must

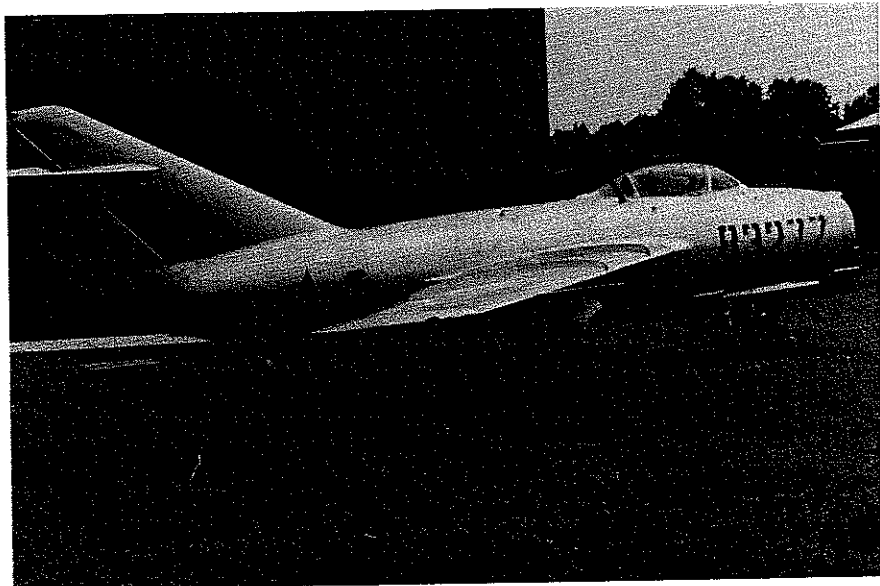
be disassembled, and possibly some aircraft moved, before the MiG-15 can be moved into its deserved place of honor in the center of the exhibit area of the Main Exhibition Building.

The MiG-15 should prove to be a major attraction for the Museum, as the public becomes aware of what we

have to offer. While we feel we already have an outstanding attraction, there is no doubt that the name "MiG" holds a fascination for a number of people, undoubtedly still remembering its notoriety in the war in Vietnam. It may be the wrong war, but we will have to be able to tell our customers the difference between the MiG-21 and its predecessor, the MiG-15.

When captured German research documents told of the advantages of wing sweepback, Artem Mikoyan, brother of the Russian Minister of Foreign Trade, and Mikhail Gurevich, a mathematician, designed the MiG-15 airframe in record time. The design shows some similarity to the German WW-II Tank Ta.189 and some have attributed the design to Siegfried Gunther, a German scientist. Regardless who was responsible, it must be conceded that the design, construction and production of such an advanced type as the MiG-15 was a remarkable achievement for the U.S.S.R.

Mikoyan and Gurevich were well known in aviation circles, being re-



The MiG-15 "Fagot" after polishing and touch-up painting is now on display adjacent to the Restoration Building.

49

sponsible for the MiG-3 of World War II fame, and the MiG-9 of 1946, one of the first all-Russian jet fighters to go into service in Soviet Squadrons.

As good as the MiG-15 design was, it required only a good turbojet engine to make it an outstanding fighter. However, in 1945 the turbojet engine was still in the initial developmental stage in the Soviet Union, which still relied upon the technological expertise acquired from the production of certain German turbojets.

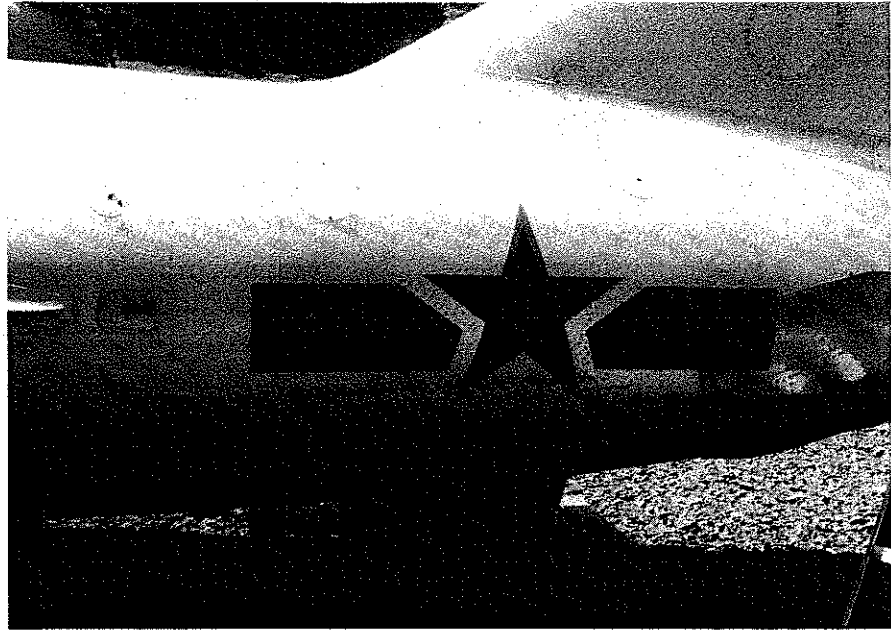
Through a fortuitous agreement with Great Britain (remember, Great Britain and Russia were still allies in 1945), Russia was granted a manufacturing license for the Rolls Royce Nene, Britain's most advanced turbojet engine at the time. Russia received an initial supply of 25 of the centrifugal-flow Nene turbojets from Rolls Royce.

After undergoing a series of modifications to adapt the airframe to the powerful British engine, the MiG-15 prototype was completed, and made its first flight on December 30, 1947.

Production of the Russian jet fighter began soon after, and Klimov built the license-built Nene as the RD-45. It had an initial rating of 5,450 lb thrust which provided a maximum speed of 664 mph at 40,000 feet.

It had been an outstanding technical achievement for the Russian engineers to make a technical analysis and breakdown of the many components and materials of the Rolls Royce Nene engine, and then to redesign and produce it as the RD-45 powerplant for the MiG-15.

Like most Soviet fighters, the MiG-15 was designed as simply as possible to facilitate production, and as small and light weight as possible to obtain a high rate of climb and maneuverability.



The unique Red Chinese Air Force markings appear on the sides of our MiG-15, and required only touch-up painting to appear factory fresh.

Deliveries of the new jet fighter to squadron units began by the end of 1948.

The Korean War broke out on June 25, 1950 when North Korea invaded South Korea. At a conference between Russia and North Korea in August 1950, the Chinese Communists agreed to cross into Korea, provided that the U.S.S.R. supply Red China with modern arms and aircraft. Within a matter of weeks, the Russians, under Stalin's orders, began deliveries of MiG-15 jet fighters to China and started training Chinese pilots.

On November 1, 1950, the first confrontation between the Red Chinese jets and United Nations forces took place when six MiG-15 jets jumped four U.S.A.F. P-51 Mustangs over Namsidong in North Korea. The Mustangs escaped without a loss.

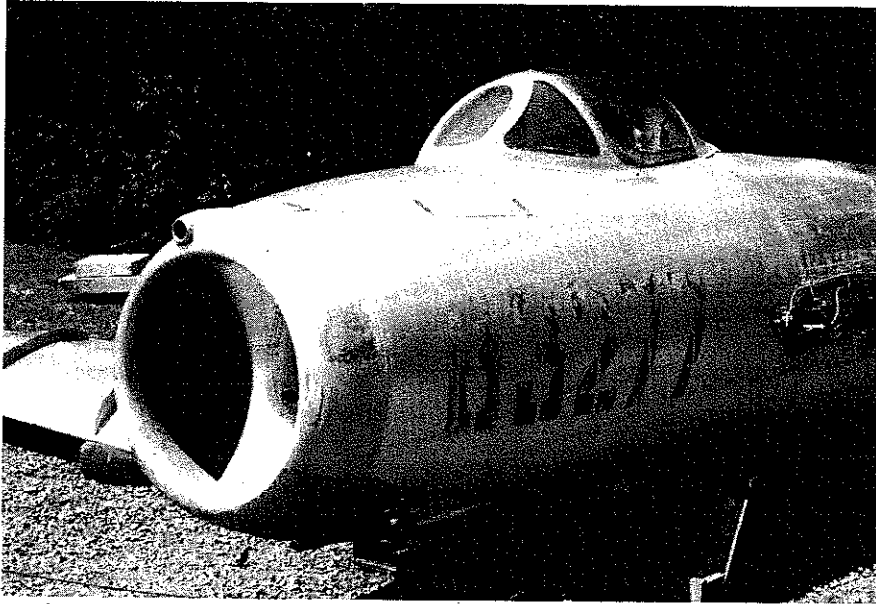
The world's first aerial combat between jets took place on November 8. Four American P-80C Shooting Stars met four MiG-15's in the air and succeeded in bringing one down. The

next day, an American RB-29 Superfortress was lost to MiG-15 fire.

The Russian MiG-15 soon proved itself to be one of the world's best jet fighters. Repeatedly it demonstrated its superiority over contemporary American jet-powered aircraft and forced the American aeronautical industry to go to great lengths to recover from this setback.

The general opinion of American pilots who fought the MiG-15 was that above 35,000 feet, the MiG-15 was superior to the F-86E, but that below this altitude, the Sabre generally gained an advantage. Some RAF officers also gave the opinion that the MiG-15 had better acceleration and a high rate of climb, but was somewhat unstable fore-and-aft, tending to spin in tight turns.

An improved version, the MiG-15bis ("bis" - French to mean second, or improved version) began to appear over Korea in 1952, flown by Red Chinese pilots. The RD-45 engine was modified to produce 6,750 lb. thrust with water injection. Fuel ca-



This close-up of the MiG-15 during assembly shows its workmanship and extremely clean design.

capacity was increased by adding additional internal storage as well as wing-mounted drop tanks. Additional electronic gear was also added.

That the MiG-15 losses in the Korean War were ten times those of their United Nations counterparts was due to a number of factors – inexperience of the pilots flying them and the relatively poor control and ineffective teamwork of the MiG-15 pilots versus the superior flying ability, gunsights and tactics of the Allies – rather than any shortcomings of the Russian fighter.

The MiG-15, whatever the shortcomings of its design, deserves its place in aviation history as the first jet fighter to go into large-scale production and service in the Soviet Union and other satellite nations, and for the sheer numbers in which it was produced. Approximately 8,000 examples were built in the Soviet Union over a five year period, plus considerable quantities built under license in Poland, Czechoslovakia and mainland China. Some authorities have estimated the total number of the jet fighters built get as high as 18,000. The MiG-15 was still opera-

tional by some nations as a trainer in the latter half of the 1970's.

The N.A.T.O. code name assigned to the MiG-15 was "Fagot." Wingspan and length of the MiG-15 were 33 feet 1 inch and 36 feet 3 inches, respectively. It had a gross weight of 12,566 pounds, with a ceiling of 50,000 feet. Armed with two 25-mm Nudelmann cannon, the MiG-15 had an operational range of 1,220 miles.

Reportedly, the New England Air Museum's MiG-15 was a Chinese license-built version. If true, it was probably built by the National Aircraft Factory at Shenyang who with their subcontractors throughout mainland China produced parts for the MiG-15.

The Russian jet fighter is an extremely valuable addition to the Museum's collection, for it was, truly, one of the outstanding jet fighters of all time. The decision to trade our Hawker Tempest for the MiG-15 will probably go down in CAHA/NEAM history as one of the more important steps in the development of the Museum.

We owe a debt of gratitude to our Museum Director, Mike Speciale, for engineering this trade with Aero-Trader, Chino, CA.

All members are urged to come to the Museum and see, close-up, this famous Russian fighter.

INTERVIEW WITH BOB HALL

After the Pratt & Whitney Airshow, Bob Stepanek took the opportunity to visit with Bob Hall, of Newport, RI. The poster advertising the airshow featured a beautiful color drawing of the Gee Bee Model Z "City of Springfield." Bob Hall designed the Model Z, and Bob felt that a Bob Hall autograph on the poster would be an excellent item for the forthcoming Museum auction.

Although Hall is severely crippled, his mind remains keen and active, particularly when it came to recalling events pertaining to the Model Z. When asked what caused the crash of the Model Z during the speed record attempt, Hall responded, "The gas cap came off and struck the canopy, causing Lowell Bayles to move the stick, overstressing the aircraft."

And when asked why he left the Granville organization so abruptly after this fatal crash, Hall said simply, "They couldn't afford to pay me."

Hall was later Chief Engineering Test Pilot for Grumman and did all of the testing of the XP-50, the Army version of the XF5F-1, twin engine Navy fighter. On the wall of Hall's office hangs a photo of the XP-50 and the D-ring from a parachute which he used to save his life when the XP-50 went into Long Island Sound.

The visit with Bob Hall was all too short but extremely fascinating.