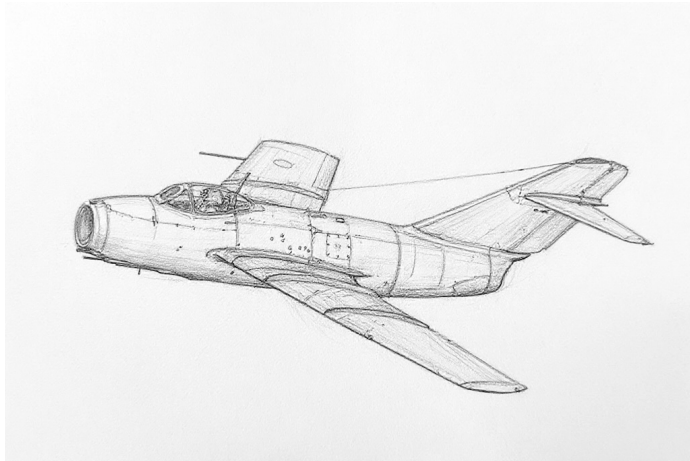


# Mikoyan-Gurevich MiG-15



The Mikoyan-Gurevich MiG-15 was an early jet interceptor and day fighter. The MiG-15 was one of the first fighters to incorporate a swept wing and a swept tail to reduce the effects of compressibility and allow higher transonic speeds. However, it used conventional elevators rather than an all-flying tail, and so became difficult to control at high speeds. The NATO reporting name for the aircraft is “Fagot.”

## Versions

### ***MiG-15***

The initial MiG-15 was powered by the 5,000 lbf Klimov RD-45, an unauthorized copy of the Rolls-Royce Nene engine (which had been sold to the Soviet Union in small numbers with the agreement of the British Government). As it was initially intended to serve as an interceptor, it carried a very heavy gun armament of one 37 mm N-37 cannon with 40 rounds and two 23 mm NS-23 cannons with 80 rounds per gun, all under the nose. The NATO reporting name for the aircraft is “Fagot-A.”

The MiG-15 entered service with the Soviet VVS in 1949 and the PVO in 1950, but was rapidly replaced by the MiG-15bis.

### ***MiG-15bis***

The MiG-15bis was the main production version and was an improvement on the original MiG-15 in a number of small but important ways. The engine was upgraded to the 5,950 lbf Klimov VK-1, a development of the RD-45. The NS-23 cannons were replaced by faster-firing NR-23 cannons. The MiG-15 formed the basis for the development of the MiG-17. The NATO reporting name for the aircraft is “Fagot-B.”

The MiG-15bis entered service with the Soviet VVS and PVO in 1950. It also served dozens of Soviet allies in the

following years, notably the Chinese PLAAF and PLAN and the North Korean KPAF.

### ***MiG-15UTI***

The MiG-15UTI was a two-seat training aircraft, with reduced fuel and armament. The NATO reporting name is Midget.

The MiG-15bis entered service with the Soviet VVS and PVO in 1950. Like the MiG-15bis, it also served with dozens of Soviet allies in the following years.

### ***MiG-15P***

The MiG-15P was a prototype all-weather interceptor, equipped with the RP-1 Izumrud radar (NATO reporting name “Scan Fix”) and with its armament reduced to two 23 mm NR-23 cannons.

### ***MiG-15ISH***

The MiG-15ISH was a prototype attack version with pylons in the wings for bombs or rockets in addition to the stations for fuel tanks.

## Armament and Stores

To counter its short endurance, the MiG-15 could use 250, 300, 400, or 600 liter fuel tanks on its under-wing stations. The larger tanks reduced maneuverability. It could also be armed with rockets or bombs, but given this does not seem to be common.

## Combat

The MiG-15bis saw extensive combat, including in the Korean War with the VVS and PVO, the PLAAF, and the KPAF, and in clashes between the PLAAF and ROCAF, in the Suez Crisis with the EAF. They also performed many interceptions of aircraft during the Cold War.

When used as a fighter, it was limited by the slow rate of fire of its guns (400 rounds per minute for the N-37 and 800 for the NR-23), but a single hit on a fighter or fighter-bomber could often inflict fatal damage. As an interceptor in Korea, its combination of high speed and powerful armament allowed it to inflict heavy losses of USAF B-29 bombers engaged in daytime raids and effectively force them to operate under the cover of darkness.

## ADCs

- MiG-15bis
- MiG-15UTI

- MiG-15P
- MiG-15ISh

### **See Also**

- Shenyang JJ-2 and FT-2
- MiG-17

### **Photo Credit**

- MiG-15: slezo (CC BY 2.0)

MiG-15bis										Crew: Pilot									
										Maneuver HFPs/DPs:									
LR/DR		1.0		1.5															
VR				0.5															
Power APs/DPs/FPs: ○										Turn DPs:									
CL		1/2		DT		Fuel		CL		1/2		DT							
AB		—		—		—		TT		0.0		1.0							
M		1.5		1.0		1.0		HT		1.0		1.0							
N		0.0		0.0		0.0		BT		2.0		3.0							
I		0.5		0.5		0.5		ET		—		—							
SPBR		0.5		0.5		1.0													
					Cruise Speed: 5.0    Restr. Arcs: —														
					Climb Speed: 3.5    Blind Arcs: 30–														
					Visibility: 4    Internal Fuel: 125														
					Size: +1    AtA Refuel: No														
					Vulnerability: +1    Ejection Seat: Early														
Speeds and Ceilings										Climb Capabilities									
Alt. Band		Conf. Ceil.		CL 51		1/2 48		DT 44		Dive Speed		CL AB Oth		1/2 AB Oth		DT AB Oth		Alt. Band	
EH+		46+		3.0 – 5.5		3.0 – 5.0		—		6.0		— 0.5		— 0.5		— —		EH+	
VH		36–45		2.5 – 6.0		2.5 – 5.0		2.5 – 5.0		6.0		— 1.0		— 0.5		— 0.5		VH	
HI		26–35		2.0 – 6.0		2.0 – 5.5		2.5 – 5.0		6.5		— 1.0		— 1.0		— 0.5		HI	
MH		17–25		1.5 – 6.0		2.0 – 5.5		2.0 – 5.0		6.5		— 1.5		— 1.0		— 1.0		MH	
ML		8–16		1.5 – 6.5		1.5 – 6.0		1.5 – 5.5		7.0		— 1.5		— 1.0		— 1.0		ML	
LO		0–7		1.0 – 6.5		1.5 – 6.0		1.5 – 5.5		7.0		— 1.5		— 1.5		— 1.0		LO	

Radar: —			ECM:			Weapon Stations Diagram:											
ECCM: —			RWR: —														
Arcs: —			DDS: —														
Search: —			DJM: —														
Track: —			AJM: —														
Lock-On: —			BJM: —														
Guns: Two 23 mm NR-23 One 37 mm N-37			Technology:			Load Point Limits: CL : 0–1											
To Hit: 4/2/1			None			1/2: 2–4											
Ammunition: 3.0						Weight Limit: 1,600 DT : 5+											
Gunsight: TT+0/HT+2/BT+3						Station Limit Allowed Loads											
Ranging: —						1 and 2 550 BB RK RP FT											
AtA/AtG: 5/4						Load Notes:											
Bomb System: Manual						1. May use 250L, 300L, 400L, or 600L FTs. The larger tanks can be carried as an exception to the normal rules for load limits, but the turn rate is limited to HT if 300L or 400L tanks are used and to TT if 600L tanks are used.											
Notes:																	
1. The Mikoyan-Gurevich MiG-15bis is a day fighter. It is a development of the MiG-15 with a more powerful VK-1 engine. The NATO reporting name for the aircraft is Fagot-B.																	
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 5.0.																	
3. Hit rolls at high transonic speed or greater have a +1 modifier to the hit roll due to instability generated by the conventional horizontal stabilizers and elevators.																	
VPs: 8/5/3/1									v1 0000000 0000-00-00T00:00:00								

MiG-15P										Crew: Pilot									
										Maneuver HFPs/DPs:									
LR/DR		1.0		1.5															
VR				0.5															
Power APs/DPs/FPs: ○										Turn DPs:									
CL		1/2		DT		Fuel		CL		1/2		DT							
AB		—		—		—		TT		0.0		1.0							
M		1.5		1.0		1.0		HT		1.0		1.0							
N		0.0		0.0		0.0		BT		2.0		3.0							
I		0.5		0.5		0.5		ET		—		—							
SPBR		0.5		0.5		1.0													
					Cruise Speed: 5.0    Restr. Arcs: —														
					Climb Speed: 3.5    Blind Arcs: 30–														
					Visibility: 4    Internal Fuel: 125														
					Size: +1    AtA Refuel: No														
					Vulnerability: +1    Ejection Seat: Early														
Speeds and Ceilings										Climb Capabilities									
Alt. Conf.		CL		1/2		DT		Dive		CL		1/2		DT		Alt.			
Band Ceil.		51		48		44		Speed		AB Oth		AB Oth		AB Oth		Band			
EH+		46+		3.0 – 5.5		3.0 – 5.0		—		6.0		— 0.5		— 0.5		EH+			
VH		36–45		2.5 – 6.0		2.5 – 5.0		2.5 – 5.0		6.0		— 1.0		— 0.5		VH			
HI		26–35		2.0 – 6.0		2.0 – 5.5		2.5 – 5.0		6.5		— 1.0		— 1.0		HI			
MH		17–25		1.5 – 6.0		2.0 – 5.5		2.0 – 5.0		6.5		— 1.5		— 1.0		MH			
ML		8–16		1.5 – 6.5		1.5 – 6.0		1.5 – 5.5		7.0		— 1.5		— 1.0		ML			
LO		0–7		1.0 – 6.5		1.5 – 6.0		1.5 – 5.5		7.0		— 1.5		— 1.0		LO			
Radar: RP-1 Izumrud										ECM:					Weapon Stations Diagram:				
ECCM: 0										RWR: —									
Arcs: Limited										DDS: —									
Search: 10–6										DJM: —									
Track: 6–6										AJM: —									
Lock-On: 5										BJM: —									
Guns: Two 23 mm NR-23										Technology:					Load Point Limits:				
To Hit: 4/2/1										None					CL : 0–1				
Ammunition: 3.0															1/2: 2–4				
Gunsight: TT+0/HT+2/BT+3															Weight Limit: 1,600				
Ranging: RE															DT : 5+				
AtA/AtG: 4/3															Station Limit Allowed Loads				
Bomb System: Manual															1 and 2 550 BB RK RP FT				
Notes:															Load Notes:				
1. The Mikoyan-Gurevich MiG-15P is a prototype all-weather interceptor. It is a development of the MiG-15bis and is equipped with the RP-1 Izumrud radar. The NATO reporting name for the aircraft is Fagot and for the radar is Scan Fix.															1. May use 250L, 300L, 400L, or 600L FTs. The larger tanks can be carried as an exception to the normal rules for load limits, but the turn rate is limited to HT if 300L or 400L tanks are used and to TT if 600L tanks are used.				
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 5.0.																			
3. Hit rolls at high transonic speed or greater have a +1 modifier to the hit roll due to instability generated by the conventional horizontal stabilizers and elevators.																			
VPs: 9/6/3/2															v1 0000000 0000-00-00T00:00:00				

MiG-15UTI										Crew: Pilot and Observer									
										Maneuver HFPs/DPs:									
LR/DR		1.0		1.5															
VR				0.5															
Power APs/DPs/FPs: ○										Turn DPs:									
CL		1/2		DT		Fuel		CL		1/2		DT							
AB		—		—		—		TT		0.0		1.0							
M		1.5		1.0		1.0		HT		1.0		1.0							
N		0.0		0.0		0.0		BT		2.0		3.0							
I		0.5		0.5		0.5		ET		—		—							
SPBR		0.5		0.5		1.0													
					Cruise Speed: 5.0    Restr. Arcs: —														
					Climb Speed: 3.5    Blind Arcs: 30–														
					Visibility: 4    Internal Fuel: 100														
					Size: +1    AtA Refuel: No														
					Vulnerability: +1    Ejection Seat: Early														
Speeds and Ceilings										Climb Capabilities									
Alt. Conf.		CL		1/2		DT		Dive		CL		1/2		DT		Alt.			
Band Ceil.		51		48		44		Speed		AB Oth		AB Oth		AB Oth		Band			
EH+		46+		3.0 – 5.5		3.0 – 5.0		—		6.0		— 0.5		— 0.5		EH+			
VH		36–45		2.5 – 6.0		2.5 – 5.0		2.5 – 5.0		6.0		— 1.0		— 0.5		VH			
HI		26–35		2.0 – 6.0		2.0 – 5.5		2.5 – 5.0		6.5		— 1.0		— 1.0		HI			
MH		17–25		1.5 – 6.0		2.0 – 5.5		2.0 – 5.0		6.5		— 1.5		— 1.0		MH			
ML		8–16		1.5 – 6.5		1.5 – 6.0		1.5 – 5.5		7.0		— 1.5		— 1.0		ML			
LO		0–7		1.0 – 6.5		1.5 – 6.0		1.5 – 5.5		7.0		— 1.5		— 1.0		LO			
Radar:					ECM:					Weapon Stations Diagram:									
ECCM:					RWR:														
Arcs:					DDS:														
Search:					DJM:														
Track:					AJM:														
Lock-On:					BJM:														
Guns:					Technology:					Load Point Limits:									
One 12.7 mm A-12.7					None					CL : 0–1									
To Hit:										1/2: 2–4									
Ammunition:										Weight Limit:									
3.0										1,600									
Gunsight:										DT : 5+									
TT+0/HT+2/BT+3										Station									
Ranging:										Limit									
—										1 and 2									
AtA/AtG:										Allowed Loads									
1/1**										550    BB RK RP FT									
Bomb System:										Load Notes:									
Manual										1. May use 250L, 300L, 400L, or 600L FTs. The larger tanks can be carried as an exception to the normal rules for load limits, but the turn rate is limited to HT if 300L or 400L tanks are used and to TT if 600L tanks are used.									
Notes:																			
1. The Mikoyan-Gurevich MiG-15UTI is a two-seat training aircraft. It is a development of the MiG-15bis with an additional cockpit and reduced fuel and armament. The NATO reporting name for the aircraft is Midget.																			
2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 5.0.																			
3. Hit rolls at high transonic speed or greater have a +1 modifier to the hit roll due to instability generated by the conventional horizontal stabilizers and elevators.																			
VPs: 7/5/2/1															v1 0000000 0000-00-00T00:00:00				

<b>Radar:</b> — ECCM: — Arcs: — Search: — Track: — Lock-On: —	<b>ECM:</b> RWR: — DDS: — DJM: — AJM: — BJM: —	<b>Weapon Stations Diagram:</b>									
<b>Guns:</b> Two 23 mm NR-23 One 37 mm N-37 To Hit: 4/2/1 Ammunition: 3.0 Gunsight: TT+0/HT+2/BT+3 Ranging: — AtA/AtG: 5/4	<b>Technology:</b> None	<b>Load Point Limits:</b> CL : 0–1 1/2: 2–4 <b>Weight Limit:</b> 1,600 DT : 5+									
<b>Bomb System:</b> Manual	<b>Notes:</b> 1. The Mikoyan-Gurevich MiG-15ISH is a prototype close-air-support aircraft. It is a development of the MiG-15bis with two additional tandem wing stations. The NATO reporting name for the aircraft is Fagot. 2. High transonic drag (HTD). Low roll rate (LRR) if speed ≥ 5.0. 3. Hit rolls at high transonic speed or greater have a +1 modifier to the hit roll due to instability generated by the conventional horizontal stabilizers and elevators.	<table><tr><th>Station</th><th>Limit</th><th>Allowed Loads</th></tr><tr><td>1 and 4</td><td>550</td><td>BB RK RP FT</td></tr><tr><td>2 and 3</td><td>550</td><td>BB RK RP</td></tr></table> <b>Load Notes:</b> 1. Can use 250L, 300L, 400L, or 600L FTs. The larger tanks can be carried as an exception to the normal rules for load limits, but the turn rate is limited to HT if 300L or 400L tanks are used and to TT if 600L tanks are used. 2. Stations 2 and 3 can carry two BB each.	Station	Limit	Allowed Loads	1 and 4	550	BB RK RP FT	2 and 3	550	BB RK RP
Station		Limit	Allowed Loads								
1 and 4	550	BB RK RP FT									
2 and 3	550	BB RK RP									
<b>VPs:</b> 9/6/3/2		v1 0000000 0000-00-00T00:00:00									