

## **Mikoyan-Gurevich MiG-21**

- MiG-21F
- MiG-21F-13
- MiG-21PF
- MiG-21PFM
- MiG-21FL
- MiG-21S
- MiG-21M
- MiG-21SM
- MiG-21MF
- MiG-21bis

<b>MiG-21F</b>								<b>Crew:</b> Pilot		
								<b>Maneuver DPs:</b>		
								LR/DR	1.5	
								VR	0.5	
<b>Power APs/DPs:</b> ○								<b>Turn DPs:</b>		
	CL	1/2	DT	Fuel				CL	1/2	DT
AB	3.0	3.0	2.5	5.0				TT	1.0	1.0
M	2.0	2.0	1.5	2.0				HT	1.5	1.5
N	0.0	0.0	0.0	1.0				BT	2.0	2.5
I	1.0	1.0	1.0	0.0	Cruise Spd. CL: 6.0			ET	2.5	—
SPBR	1.0	1.0	2.0	—	Restr. Arcs: 180L 60°				—	—
					Climb Spd.: 4.5					
					Blind Arcs: 30°					
					Visibility: 5					
					Internal Fuel: 200					
					Size: +0			AtA Refuel: No		
					Vulnerability: -2			Ejection Seat: Std		

Speeds and Ceilings						Climb Capabilities					
Alt.	Conf.	CL	1/2	DT	Dive Speed	CL	1/2	DT			
Band	Ceil.	58	56	54		AB	Oth	AB	Oth	AB	Oth
EH+	46+	3.5 – 11.0	3.5 – 10.0	4.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5
VH	36–45	3.0 – 12.0	3.0 – 11.0	3.5 – 10.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5
HI	26–35	2.5 – 10.0	3.0 – 9.0	3.0 – 8.0	11.0	2.0	1.0	2.0	0.5	1.5	0.5
MH	17–25	2.0 – 9.0	2.5 – 8.0	2.5 – 7.5	10.0	2.0	1.0	2.0	1.0	1.5	0.5
ML	8–16	2.0 – 7.5	2.0 – 7.5	2.5 – 7.0	8.0	3.0	1.5	3.0	1.0	2.0	1.0
LO	0–7	1.5 – 6.5	2.0 – 6.5	2.0 – 6.5	7.0	4.0	2.0	3.0	1.0	2.0	1.0

<b>Radar:</b>	SRD-5MN Baza-6	<b>ECM:</b>	IFF	<b>Weapon Stations Diagram:</b>
ECCM:	0	RWR:	—	
Arcs:	Limited	DDS:	—	
Search:	—	DJM:	—	
Track:	10–6	AJM:	—	
Lock-On:	5	BJM:	—	
<b>Guns:</b>	Two 30 mm NR-30	<b>Technology:</b>		<b>Load Point Limits:</b>
To Hit:	5/3/1	None		CL : < 3 1/2: < 5
Ammunition:	2.0			<b>Weight Limit:</b> 2,200 DT : ≥ 5
Gunsight:	TT+0/HT+2/BT+3			
Ranging:	RE			
AtA/AtG:	5/6			
<b>Bomb System:</b>	Manual			<b>Station</b> <b>Limit</b> <b>Allowed Loads</b>
<b>Notes:</b>				1 and 3      550      BB RP RK DR
1.	The Mikoyan-Gurevich MiG-21F is a day fighter. This is the first production version with two NR-30 cannons, but without a search radar or missile armament. The NATO reporting name for the aircraft is Fishbed-B and for the radar is High Fix.			2      1,100      FT
2.	The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.			
				<b>VPs:</b> 14/9/5/2
				v3.0000000 0000-00-00T00:00:00

<b>MiG-21F-13</b>										<b>Crew:</b> Pilot								
					<b>Maneuver DPs:</b>					LR/DR 1.5 VR 0.5								
<b>Power APs/DPs:</b> ○					<b>Turn DPs:</b>					CL 1/2 DT TT 1.0 1.0 1.0 HT 1.5 1.5 1.5 BT 2.0 2.5 2.5 ET 2.5 — —								
AB 3.0 3.0 2.5 5.0 M 2.0 2.0 1.5 2.0 N 0.0 0.0 0.0 1.0 I 1.0 1.0 1.0 0.0 SPBR 1.0 1.0 2.0 —					Cruise Spd. CL: 6.0 Restr. Arcs: 180L Climb Spd.: 4.5 Blind Arcs: 30– Visibility: 5 Internal Fuel: 200 Size: +0 AtA Refuel: No Vulnerability: -2 Ejection Seat: Std													
					<b>Speeds and Ceilings</b>					<b>Climb Capabilities</b>								
Alt. Band	Conf. Ceil.	CL 58	1/2 56	DT 54	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth										
EH+	46+	3.5 – 11.0	3.5 – 10.0	4.0 – 9.0	12.0	1.0 0.5	1.0 0.5	1.0 0.5		EH+								
VH	36–45	3.0 – 12.0	3.0 – 11.0	3.5 – 10.0	12.0	1.0 0.5	1.0 0.5	1.0 0.5		VH								
HI	26–35	2.5 – 10.0	3.0 – 9.0	3.0 – 8.0	11.0	2.0 1.0	2.0 0.5	1.5 0.5		HI								
MH	17–25	2.0 – 9.0	2.5 – 8.0	2.5 – 7.5	10.0	2.0 1.0	2.0 1.0	1.5 0.5		MH								
ML	8–16	2.0 – 7.5	2.0 – 7.5	2.5 – 7.0	8.0	3.0 1.5	3.0 1.0	2.0 1.0		ML								
LO	0–7	1.5 – 6.5	2.0 – 6.5	2.0 – 6.5	7.0	4.0 2.0	3.0 1.0	2.0 1.0		LO								
<b>Radar:</b> SRD-5ND Kvant		<b>ECM:</b> IFF		<b>Weapon Stations Diagram:</b>														
ECCM:	0	RWR:	—															
Arcs:	Limited	DDS:	—															
Search:	—	DJM:	—															
Track:	10–6	AJM:	—															
Lock-On:	5	BJM:	—															
<b>Guns:</b> One 30 mm NR-30		<b>Technology:</b>		<b>Load Point Limits:</b> CL : < 3 1/2: < 5														
To Hit:	4/2/1	None		<b>Weight Limit:</b> 2,200 DT : ≥ 5														
Ammunition:	2.0			<b>Station</b> Limit Allowed Loads														
Gunsight:	TT+0/HT+2/BT+3	1 and 3 550 BB RP RK DR IRM																
Ranging:	RE	2 1,100 FT																
AtA/AtG:	4/3			<b>Load Notes:</b>														
<b>Bomb System:</b> Manual		1. From 1961, may use AA-2 IRMs.																
<b>Notes:</b>																		
1. The Mikoyan-Gurevich MiG-21F-13 is a day fighter. This is an improved version of the MiG-21F, with provision for AA-2 IRMs, but with only one NR-30 gun and still without a search radar. The NATO reporting name for the aircraft is Fishbed-C and for the radar is High Fix. 2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.																		
<b>VPs:</b> 16/11/5/3								v3 0000000 0000-00-00T00:00:00										

<b>MiG-21PF</b>					Crew: Pilot																																
					Maneuver DPs:																																
<b>Power APs/DPs:</b> ○ <table> <tr><td>AB</td><td>3.0</td><td>3.0</td><td>2.5</td><td>5.0</td></tr> <tr><td>M</td><td>2.0</td><td>2.0</td><td>1.5</td><td>2.0</td></tr> <tr><td>N</td><td>0.0</td><td>0.0</td><td>0.0</td><td>1.0</td></tr> <tr><td>I</td><td>1.0</td><td>1.0</td><td>1.0</td><td>0.0</td></tr> <tr><td>SPBR</td><td>1.0</td><td>1.0</td><td>2.0</td><td>—</td></tr> </table>					AB	3.0	3.0	2.5	5.0	M	2.0	2.0	1.5	2.0	N	0.0	0.0	0.0	1.0	I	1.0	1.0	1.0	0.0	SPBR	1.0	1.0	2.0	—	LR/DR 1.5 VR 0.5							
AB	3.0	3.0	2.5	5.0																																	
M	2.0	2.0	1.5	2.0																																	
N	0.0	0.0	0.0	1.0																																	
I	1.0	1.0	1.0	0.0																																	
SPBR	1.0	1.0	2.0	—																																	
<b>Turn DPs:</b> <table> <tr><td>CL</td><td>1/2</td><td>DT</td></tr> <tr><td>TT</td><td>1.0</td><td>1.0</td><td>1.0</td></tr> <tr><td>HT</td><td>1.5</td><td>1.5</td><td>1.5</td></tr> <tr><td>BT</td><td>2.0</td><td>2.5</td><td>2.5</td></tr> <tr><td>ET</td><td>2.5</td><td>—</td><td>—</td></tr> </table>					CL	1/2	DT	TT	1.0	1.0	1.0	HT	1.5	1.5	1.5	BT	2.0	2.5	2.5	ET	2.5	—	—														
CL	1/2	DT																																			
TT	1.0	1.0	1.0																																		
HT	1.5	1.5	1.5																																		
BT	2.0	2.5	2.5																																		
ET	2.5	—	—																																		
Cruise Spd. CL: 6.0 Restr. Arcs: <sup>180L</sup> <sub>60-</sub> Climb Spd.: 4.5 Blind Arcs: 30– Visibility: 5 Internal Fuel: 225 Size: +0 AtA Refuel: No Vulnerability: -2 Ejection Seat: Std																																					
Speeds and Ceilings							Climb Capabilities																														
Alt. Band	Conf. Ceil.	CL 58	1/2 56	DT 54	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth																													
EH+	46+	3.5 – 11.0	3.5 – 10.0	4.0 – 9.0	12.0	1.0 0.5	1.0 0.5	1.0 0.5	EH+																												
VH	36–45	3.0 – 12.0	3.0 – 11.0	3.5 – 10.0	12.0	1.0 0.5	1.0 0.5	1.0 0.5	VH																												
HI	26–35	2.5 – 10.0	3.0 – 9.0	3.0 – 8.0	11.0	2.0 1.0	2.0 0.5	1.5 0.5	HI																												
MH	17–25	2.0 – 9.0	2.5 – 8.0	2.5 – 7.5	10.0	2.0 1.0	2.0 1.0	1.5 0.5	MH																												
ML	8–16	2.0 – 7.5	2.0 – 7.5	2.5 – 7.0	8.0	3.0 1.5	3.0 1.0	2.0 1.0	ML																												
LO	0–7	1.5 – 6.5	2.0 – 6.5	2.0 – 6.5	7.0	4.0 2.0	3.0 1.0	2.0 1.0	LO																												
<b>Radar:</b> RP-21 Sapfir ECCM: 0 Arcs: 180+ Search: 30–6 Track: 18–6 Lock-On: 7			<b>ECM:</b> IFF RWR: A DDS: — DJM: — AJM: — BJM: —	<b>Weapon Stations Diagram:</b>																																	
<b>Guns:</b> — To Hit: — Ammunition: — Gunsight: TT+0/HT+2/BT+3 Ranging: RE AtA/AtG: —			<b>Technology:</b> None	<b>Load Point Limits:</b> CL : < 3 1/2: < 5 <b>Weight Limit:</b> 2,200 DT : ≥ 5																																	
<b>Bomb System:</b> Manual				<b>Station</b> Limit Allowed Loads 1 and 3 550 BB RP RK DR BRM IRM 2 1,100 FT																																	
<b>Notes:</b> <ol style="list-style-type: none"> <li>The Mikoyan-Gurevich MiG-21PF is an all-weather interceptor. It is equipped with the RP-21 radar, a more powerful engine than the MiG-21F versions, and the ability to use AA-1 BRMs and AA-2 IRMs. The NATO reporting name for the aircraft is Fishbed-D and the radar is Spin Scan-A.</li> <li>The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.</li> </ol>																																					
<b>VPs:</b> 18/12/6/3										v3 0000000	0000-00-00T00:00:00																										

<b>MiG-21PFM</b>										<b>Crew:</b> Pilot																																																																															
					<b>Maneuver DPs:</b>					LR/DR 1.5 VR 0.5																																																																															
<b>Power APs/DPs:</b> ○					<b>Turn DPs:</b>					CL 1/2 DT TT 1.0/1.5 1.0/1.5 1.0/1.5 HT 1.5/2.0 1.5/2.0 2.0/2.5 BT 2.0/2.5 2.5/3.0 2.5/3.0 ET 2.5/3.0 — —																																																																															
AB 3.0 3.0 2.5 5.0 M 2.0 2.0 1.5 2.0 N 0.0 0.0 0.0 1.0 I 1.0 1.0 1.0 0.0 SPBR 1.0 1.0 2.0 —					Cruise Spd. CL: 6.0 Restr. Arcs: 180L Climb Spd.: 4.5 Blind Arcs: 30– Visibility: 5 Internal Fuel: 220 Size: +0 AtA Refuel: No Vulnerability: -2 Ejection Seat: Std					Selectable combat flaps. If selected and speed ≤ 4.5, use higher drag and reduce minimum speeds by 0.5.																																																																															
<table border="1"> <thead> <tr> <th colspan="5"><b>Speeds and Ceilings</b></th> <th colspan="5"><b>Climb Capabilities</b></th> </tr> <tr> <th>Alt. Band</th> <th>Conf. Ceil.</th> <th>CL 58</th> <th>1/2 56</th> <th>DT 54</th> <th>Dive Speed</th> <th>CL AB Oth</th> <th>1/2 AB Oth</th> <th>DT AB Oth</th> <th></th> </tr> </thead> <tbody> <tr> <td>EH+</td> <td>46+</td> <td>3.5 – 11.0</td> <td>3.5 – 10.0</td> <td>4.0 – 9.0</td> <td>12.0</td> <td>1.0 0.5</td> <td>1.0 0.5</td> <td>1.0 0.5</td> <td>EH+</td> </tr> <tr> <td>VH</td> <td>36–45</td> <td>3.0 – 12.0</td> <td>3.0 – 11.0</td> <td>3.5 – 10.0</td> <td>12.0</td> <td>1.0 0.5</td> <td>1.0 0.5</td> <td>1.0 0.5</td> <td>VH</td> </tr> <tr> <td>HI</td> <td>26–35</td> <td>2.5 – 10.0</td> <td>3.0 – 9.0</td> <td>3.0 – 8.0</td> <td>11.0</td> <td>2.0 1.0</td> <td>2.0 0.5</td> <td>1.5 0.5</td> <td>HI</td> </tr> <tr> <td>MH</td> <td>17–25</td> <td>2.0 – 9.0</td> <td>2.5 – 8.0</td> <td>2.5 – 7.5</td> <td>10.0</td> <td>2.0 1.0</td> <td>2.0 1.0</td> <td>1.5 0.5</td> <td>MH</td> </tr> <tr> <td>ML</td> <td>8–16</td> <td>2.0 – 7.5</td> <td>2.0 – 7.5</td> <td>2.5 – 7.0</td> <td>8.0</td> <td>3.0 1.5</td> <td>3.0 1.0</td> <td>2.0 1.0</td> <td>ML</td> </tr> <tr> <td>LO</td> <td>0–7</td> <td>1.5 – 6.5</td> <td>2.0 – 6.5</td> <td>2.0 – 6.5</td> <td>7.0</td> <td>4.0 2.0</td> <td>3.0 1.0</td> <td>2.0 1.0</td> <td>LO</td> </tr> </tbody> </table>	<b>Speeds and Ceilings</b>									<b>Climb Capabilities</b>					Alt. Band	Conf. Ceil.	CL 58	1/2 56	DT 54	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth		EH+	46+	3.5 – 11.0	3.5 – 10.0	4.0 – 9.0	12.0	1.0 0.5	1.0 0.5	1.0 0.5	EH+	VH	36–45	3.0 – 12.0	3.0 – 11.0	3.5 – 10.0	12.0	1.0 0.5	1.0 0.5	1.0 0.5	VH	HI	26–35	2.5 – 10.0	3.0 – 9.0	3.0 – 8.0	11.0	2.0 1.0	2.0 0.5	1.5 0.5	HI	MH	17–25	2.0 – 9.0	2.5 – 8.0	2.5 – 7.5	10.0	2.0 1.0	2.0 1.0	1.5 0.5	MH	ML	8–16	2.0 – 7.5	2.0 – 7.5	2.5 – 7.0	8.0	3.0 1.5	3.0 1.0	2.0 1.0	ML	LO	0–7	1.5 – 6.5	2.0 – 6.5	2.0 – 6.5	7.0	4.0 2.0	3.0 1.0	2.0 1.0	LO					
<b>Speeds and Ceilings</b>					<b>Climb Capabilities</b>																																																																																				
Alt. Band	Conf. Ceil.	CL 58	1/2 56	DT 54	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth																																																																																	
EH+	46+	3.5 – 11.0	3.5 – 10.0	4.0 – 9.0	12.0	1.0 0.5	1.0 0.5	1.0 0.5	EH+																																																																																
VH	36–45	3.0 – 12.0	3.0 – 11.0	3.5 – 10.0	12.0	1.0 0.5	1.0 0.5	1.0 0.5	VH																																																																																
HI	26–35	2.5 – 10.0	3.0 – 9.0	3.0 – 8.0	11.0	2.0 1.0	2.0 0.5	1.5 0.5	HI																																																																																
MH	17–25	2.0 – 9.0	2.5 – 8.0	2.5 – 7.5	10.0	2.0 1.0	2.0 1.0	1.5 0.5	MH																																																																																
ML	8–16	2.0 – 7.5	2.0 – 7.5	2.5 – 7.0	8.0	3.0 1.5	3.0 1.0	2.0 1.0	ML																																																																																
LO	0–7	1.5 – 6.5	2.0 – 6.5	2.0 – 6.5	7.0	4.0 2.0	3.0 1.0	2.0 1.0	LO																																																																																
<b>Radar:</b> RP-21M Sapfir ECCM: 0 Arcs: 180+ Search: 30–6 Track: 18–6 Lock-On: 7			<b>ECM:</b> IFF RWR: A DDS: — DJM: — AJM: — BJM: —		<b>Weapon Stations Diagram:</b>																																																																																				
<b>Guns:</b> — To Hit: — Ammunition: — Gunsight: TT+0/HT+2/BT+3 Ranging: RE AtA/AtG: —			<b>Technology:</b> None		<b>Load Point Limits:</b> CL : < 3 1/2: < 5 <b>Weight Limit:</b> 2,200 DT : ≥ 5																																																																																				
<b>Bomb System:</b> Manual					<b>Station</b> Limit Allowed Loads 1 and 3 550 BB RP RK DR BRM IRM 2 1,100 FT GP																																																																																				
<p><b>Notes:</b></p> <ol style="list-style-type: none"> <li>The Mikoyan-Gurevich MiG-21PFM is an all-weather interceptor. It is a development of the MiG-21PF with blown flaps, improved RP-21M radar, the capability to carry the GP-9 gun pod, and from 1966 the capability to carry the Kh-66 ASM. The NATO reporting name for the aircraft is Fishbed-F and for the radar is Spin Scan-A.</li> <li>The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.</li> </ol>																																																																																									
<b>VPs:</b> 18/12/6/3								v3 0000000 0000-00-00T00:00:00																																																																																	

<b>MiG-21FL</b>					<b>Crew:</b> Pilot							
					<b>Maneuver DPs:</b>							
<b>Power APs/DPs:</b> ○					LR/DR 1.5 VR 0.5							
CL 1/2 DT Fuel												
AB	3.0	3.0	2.5	5.0								
M	2.0	2.0	1.5	2.0								
N	0.0	0.0	0.0	1.0								
I	1.0	1.0	1.0	0.0								
SPBR	1.0	1.0	2.0	—								
					Cruise Spd. CL: 6.0 Restr. Arcs: 180L Climb Spd.: 4.5 Blind Arcs: 30– Visibility: 5 Internal Fuel: 220 Size: +0 AtA Refuel: No Vulnerability: -2 Ejection Seat: Std							
					<b>Turn DPs:</b>							
					CL 1/2 DT TT 1.0 1.0 1.0 HT 1.5 1.5 1.5 BT 2.0 2.5 2.5 ET 2.5 — —							

<b>MiG-21S</b>										<b>Crew:</b> Pilot						
					<b>Maneuver DPs:</b>											
<b>Power APs/DPs:</b> ○					LR/DR	1.5										
CL 1/2 DT Fuel					VR	0.5										
AB	3.0	2.5	2.0	5.0						<b>Turn DPs:</b>						
M	1.5	1.0	1.0	2.0	CL	1/2	DT									
N	0.0	0.0	0.0	1.0	TT	1.0/1.5	1.0/1.5	1.0/1.5								
I	1.0	1.0	2.0	0.0	HT	1.5/2.0	1.5/2.0	2.0/2.5								
SPBR	1.0	2.0	2.0	—	BT	2.5/3.0	2.5/3.0	2.5/3.0								
					ET	2.5/3.0	3.0/3.5	—								
					Selectable combat flaps. If selected and speed ≤ 4.5, use higher drag and reduce minimum speeds by 0.5.											
<b>Speeds and Ceilings</b>																
Alt. Band	Conf. Ceil.	CL 56	1/2 50	DT 44	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth								
EH+	46+	4.0 – 11.0	4.5 – 10.0	—	12.0	1.0 0.5	1.0 0.5	— —	EH+							
VH	36–45	3.5 – 12.0	4.0 – 11.0	5.0 – 9.0	12.0	1.0 0.5	1.0 0.5	1.0 0.5	VH							
HI	26–35	3.0 – 10.5	3.5 – 9.0	4.0 – 8.0	12.0	2.0 0.5	1.0 0.5	1.0 0.5	HI							
MH	17–25	2.5 – 9.0	3.0 – 8.0	3.0 – 7.0	10.0	3.0 1.0	2.0 1.0	1.5 0.5	MH							
ML	8–16	2.0 – 8.5	2.5 – 7.5	2.5 – 6.5	9.0	4.0 1.0	3.0 1.0	1.5 0.5	ML							
LO	0–7	2.0 – 8.0	2.0 – 7.0	2.5 – 6.0	8.5	4.0 2.0	3.0 1.0	2.0 1.0	LO							
<b>Radar:</b> RP-22 Saphir			<b>ECM:</b>	IFF	<b>Weapon Stations Diagram:</b>											
ECCM:	0		RWR:	A												
Arcts:	180+		DDS:	—												
Search:	48–12		DJM:	—												
Track:	30–8		AJM:	—												
Lock-On:	7		BJM:	—												
<b>Guns:</b> —			<b>Technology:</b>		<b>Load Point Limits:</b>											
To Hit:	—		None		CL : < 5 1/2: < 7											
Ammunition:	—				<b>Weight Limit:</b> 4,400 DT : ≥ 7											
Gunsight:	TT+0/HT+2/BT+3				<b>Station</b>	<b>Limit</b>	<b>Allowed Loads</b>									
Ranging:	RE				1 and 5	550	BB RP RK EP FT BRM IRM RHM									
AtA/AtG:	—				2 and 4	1,100	BB RP RK FT DR IRM									
<b>Bomb System:</b> Manual					3	1,100	EP PP FT GP									
<b>Notes:</b>																
1. The Mikoyan-Gurevich MiG-21S is an all-weather interceptor. It is equipped with the RP-22 radar and is able to use the AA-2 IRMs and RHMs and AA-1 BRMs. It has internal guns, but is able to mount a GP-9 gun pod. The NATO reporting name for the aircraft is Fishbed-J and for the radar is Jay Bird.																
2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.																
<b>VPs:</b> 22/15/7/4								v3 0000000 0000-00-00T00:00:00								

<b>MiG-21M</b>										<b>Crew:</b> Pilot																																																																															
					<b>Maneuver DPs:</b>					LR/DR 1.5 VR 0.5																																																																															
<b>Power APs/DPs:</b> ○					<b>Turn DPs:</b>					CL 1/2 DT TT 1.0/1.5 1.0/1.5 1.0/1.5 HT 1.5/2.0 1.5/2.0 2.0/2.5 BT 2.5/3.0 2.5/3.0 2.5/3.0 ET 2.5/3.0 3.0/3.5 —																																																																															
CL 1/2 DT Fuel					Cruise Spd. CL: 6.0 Restr. Arcs: 180L Climb Spd.: 4.5 Blind Arcs: 30– Visibility: 5 Internal Fuel: 220 Size: +0 AtA Refuel: No Vulnerability: -2 Ejection Seat: Std					Selectable combat flaps. If selected and speed ≤ 4.5, use higher drag and reduce minimum speeds by 0.5.																																																																															
<table border="1"> <thead> <tr> <th colspan="5"><b>Speeds and Ceilings</b></th> <th colspan="5"><b>Climb Capabilities</b></th> </tr> <tr> <th>Alt. Band</th> <th>Conf. Ceil.</th> <th>CL 56</th> <th>1/2 50</th> <th>DT 44</th> <th>Dive Speed</th> <th>CL AB Oth</th> <th>1/2 AB Oth</th> <th>DT AB Oth</th> <th></th> </tr> </thead> <tbody> <tr> <td>EH+</td><td>46+</td><td>4.0 – 11.0</td><td>4.5 – 10.0</td><td>—</td><td>12.0</td><td>1.0 0.5</td><td>1.0 0.5</td><td>— —</td><td>EH+</td></tr> <tr> <td>VH</td><td>36–45</td><td>3.5 – 12.0</td><td>4.0 – 11.0</td><td>5.0 – 9.0</td><td>12.0</td><td>1.0 0.5</td><td>1.0 0.5</td><td>1.0 0.5</td><td>VH</td></tr> <tr> <td>HI</td><td>26–35</td><td>3.0 – 10.5</td><td>3.5 – 9.0</td><td>4.0 – 8.0</td><td>12.0</td><td>2.0 0.5</td><td>1.0 0.5</td><td>1.0 0.5</td><td>HI</td></tr> <tr> <td>MH</td><td>17–25</td><td>2.5 – 9.0</td><td>3.0 – 8.0</td><td>3.0 – 7.0</td><td>10.0</td><td>3.0 1.0</td><td>2.0 1.0</td><td>1.5 0.5</td><td>MH</td></tr> <tr> <td>ML</td><td>8–16</td><td>2.0 – 8.5</td><td>2.5 – 7.5</td><td>2.5 – 6.5</td><td>9.0</td><td>4.0 1.0</td><td>3.0 1.0</td><td>1.5 0.5</td><td>ML</td></tr> <tr> <td>LO</td><td>0–7</td><td>2.0 – 8.0</td><td>2.0 – 7.0</td><td>2.5 – 6.0</td><td>8.5</td><td>4.0 2.0</td><td>3.0 1.0</td><td>2.0 1.0</td><td>LO</td></tr> </tbody> </table>	<b>Speeds and Ceilings</b>									<b>Climb Capabilities</b>					Alt. Band	Conf. Ceil.	CL 56	1/2 50	DT 44	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth		EH+	46+	4.0 – 11.0	4.5 – 10.0	—	12.0	1.0 0.5	1.0 0.5	— —	EH+	VH	36–45	3.5 – 12.0	4.0 – 11.0	5.0 – 9.0	12.0	1.0 0.5	1.0 0.5	1.0 0.5	VH	HI	26–35	3.0 – 10.5	3.5 – 9.0	4.0 – 8.0	12.0	2.0 0.5	1.0 0.5	1.0 0.5	HI	MH	17–25	2.5 – 9.0	3.0 – 8.0	3.0 – 7.0	10.0	3.0 1.0	2.0 1.0	1.5 0.5	MH	ML	8–16	2.0 – 8.5	2.5 – 7.5	2.5 – 6.5	9.0	4.0 1.0	3.0 1.0	1.5 0.5	ML	LO	0–7	2.0 – 8.0	2.0 – 7.0	2.5 – 6.0	8.5	4.0 2.0	3.0 1.0	2.0 1.0	LO					
<b>Speeds and Ceilings</b>					<b>Climb Capabilities</b>																																																																																				
Alt. Band	Conf. Ceil.	CL 56	1/2 50	DT 44	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth																																																																																	
EH+	46+	4.0 – 11.0	4.5 – 10.0	—	12.0	1.0 0.5	1.0 0.5	— —	EH+																																																																																
VH	36–45	3.5 – 12.0	4.0 – 11.0	5.0 – 9.0	12.0	1.0 0.5	1.0 0.5	1.0 0.5	VH																																																																																
HI	26–35	3.0 – 10.5	3.5 – 9.0	4.0 – 8.0	12.0	2.0 0.5	1.0 0.5	1.0 0.5	HI																																																																																
MH	17–25	2.5 – 9.0	3.0 – 8.0	3.0 – 7.0	10.0	3.0 1.0	2.0 1.0	1.5 0.5	MH																																																																																
ML	8–16	2.0 – 8.5	2.5 – 7.5	2.5 – 6.5	9.0	4.0 1.0	3.0 1.0	1.5 0.5	ML																																																																																
LO	0–7	2.0 – 8.0	2.0 – 7.0	2.5 – 6.0	8.5	4.0 2.0	3.0 1.0	2.0 1.0	LO																																																																																
<b>Radar:</b> RP-21MA Sapfir			<b>ECM:</b> IFF		<b>Weapon Stations Diagram:</b>																																																																																				
ECCM:	0		RWR:	A																																																																																					
Arcts:	180+		DDS:	—																																																																																					
Search:	35–8		DJM:	—																																																																																					
Track:	24–8		AJM:	—																																																																																					
Lock-On:	7		BJM:	—																																																																																					
<b>Guns:</b> 23 mm GSh-23			<b>Technology:</b>		<b>Load Point Limits:</b>					CL : < 5 1/2: < 7																																																																															
To Hit:	7/4/2		None		<b>Weight Limit:</b> 4,400					DT : ≥ 7																																																																															
Ammunition:	2.0				<b>Station</b>		<b>Limit</b>	<b>Allowed Loads</b>																																																																																	
Gunsight:	TT+0/HT+2/BT+3				1 and 5	550	BB RP RK EP FT IRM																																																																																		
Ranging:	RE				2 and 4	1,100	BB RP RK FT DR IRM																																																																																		
AtA/AtG:	5/5				3	1,100	EP PP FT																																																																																		
<b>Bomb System:</b> Manual			<b>Load Notes:</b>		1. From 1961, may use AA-2 IRMs.																																																																																				
<b>Notes:</b>																																																																																									
1. The Mikoyan-Gurevich MiG-21M is an all-weather interceptor. It is an export version of the MiG-21S, with the RP-21MA radar instead of the RP-22 and armed with an internal GSh-23L gun and AA-2 IRMs. The NATO reporting name for the aircraft is Fishbed-J and for the radar is Spin Scan-B. 2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.																																																																																									
<b>VPs:</b> 22/15/7/4								v3 0000000 0000-00-00T00:00:00																																																																																	

<b>MiG-21SM</b>									<b>Crew:</b> Pilot					
									<b>Maneuver DPs:</b>					
									<b>Turn DPs:</b>					
<b>Power APs/DPs:</b> ○					LR/DR				1.5					
	CL	1/2	DT	Fuel	VR				0.5					
AB	3.5	2.5	2.5	6.0										
M	1.5	1.0	1.0	2.0										
N	0.0	0.0	0.0	1.0										
I	1.0	1.0	2.0	0.0	Cruise Spd. CL: 6.0	Restr. Arcs: 180L 60-								
SPBR	1.0	2.0	2.0	—	Climb Spd.: 4.5	Blind Arcs: 30-								
					Visibility: 5	Internal Fuel: 220								
					Size: +0	AtA Refuel: No								
					Vulnerability: -2	Ejection Seat: Std					Selectable combat flaps. If selected and speed ≤ 4.5, use higher drag and reduce minimum speeds by 0.5.			

Speeds and Ceilings						Climb Capabilities					
Alt. Band	Conf. Ceil.	CL 56	1/2 50	DT 44	Dive Speed	CL AB	1/2 AB	DT AB	CL Oth	1/2 Oth	DT Oth
EH+	46+	4.0 – 11.0	4.5 – 10.0	—	12.0	1.0	0.5	—	1.0	0.5	—
VH	36–45	3.5 – 12.0	4.0 – 11.0	5.0 – 9.0	12.0	1.0	0.5	1.0	0.5	1.0	0.5
HI	26–35	3.0 – 10.5	3.5 – 9.0	4.0 – 8.0	12.0	2.0	0.5	1.0	0.5	1.0	0.5
MH	17–25	2.5 – 9.0	3.0 – 8.0	3.0 – 7.0	10.0	3.0	1.0	2.0	1.0	1.5	0.5
ML	8–16	2.0 – 8.5	2.5 – 7.5	2.5 – 6.5	9.0	4.0	1.0	3.0	1.0	1.5	0.5
LO	0–7	2.0 – 8.0	2.0 – 7.0	2.5 – 6.0	8.5	4.0	2.0	3.0	1.0	2.0	1.0

<b>MiG-21MF</b>										<b>Crew:</b> Pilot								
					<b>Maneuver DPs:</b>					LR/DR 1.5 VR 0.5								
<b>Power APs/DPs:</b> ○					<b>Turn DPs:</b>					CL 1/2 DT TT 1.0/1.5 1.0/1.5 1.0/1.5 HT 1.5/2.0 1.5/2.0 2.0/2.5 BT 2.5/3.0 2.5/3.0 2.5/3.0 ET 2.5/3.0 3.0/3.5 —								
CL 1/2 DT Fuel					Cruise Spd. CL: 6.0 Restr. Arcs: 180L Climb Spd.: 4.5 Blind Arcs: 30– Visibility: 5 Internal Fuel: 220 Size: +0 AtA Refuel: No Vulnerability: -2 Ejection Seat: Std					Selectable combat flaps. If selected and speed ≤ 4.5, use higher drag and reduce minimum speeds by 0.5.								
<b>Speeds and Ceilings</b>					<b>Climb Capabilities</b>													
Alt. Band	Conf. Ceil.	CL 56	1/2 50	DT 44	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth										
EH+	46+	4.0 – 11.0	4.5 – 10.0	—	12.0	1.0 0.5	1.0 0.5	— —	EH+									
VH	36–45	3.5 – 12.0	4.0 – 11.0	5.0 – 9.0	12.0	1.0 0.5	1.0 0.5	1.0 0.5	VH									
HI	26–35	3.0 – 10.5	3.5 – 9.0	4.0 – 8.0	12.0	2.0 0.5	1.0 0.5	1.0 0.5	HI									
MH	17–25	2.5 – 9.0	3.0 – 8.0	3.0 – 7.0	10.0	3.0 1.0	2.0 1.0	1.5 0.5	MH									
ML	8–16	2.0 – 8.5	2.5 – 7.5	2.5 – 6.5	9.0	4.0 1.0	3.0 1.0	1.5 0.5	ML									
LO	0–7	2.0 – 8.0	2.0 – 7.0	2.5 – 6.0	8.5	4.0 2.0	3.0 1.0	2.0 1.0	LO									
<b>Radar:</b> RP-22 Saphir		<b>ECM:</b> IFF		<b>Weapon Stations Diagram:</b>														
ECCM:	0	RWR:	A															
Arcts:	180+	DDS:	—															
Search:	48–12	DJM:	—															
Track:	30–8	AJM:	—															
Lock-On:	7	BJM:	—															
<b>Guns:</b> 23 mm GSh-23		<b>Technology:</b> None		<b>Load Point Limits:</b>						CL : < 5 1/2: < 7								
To Hit:	7/4/2			<b>Weight Limit:</b> 4,400 DT : ≥ 7														
Ammunition:	2.0			<b>Station</b> Limit Allowed Loads														
Gunsight:	TT+0/HT+2/BT+3			1 and 5	550	BB RP RK EP FT MDR IRM												
Ranging:	RE			2 and 4	1,100	BB RP RK FT DR MDR IRM												
AtA/AtG:	5/5			3	1,100	EP PP FT												
<b>Bomb System:</b> Manual				<b>Load Notes:</b>														
<b>Notes:</b>										1. May use AA-2 and AA-8 IRMs. MDRs may only carry two AA-8 IRMs.								
1. The Mikoyan-Gurevich MiG-21MF is an all-weather interceptor. It is an export version of the MiG-21SM. The NATO reporting name for the aircraft is Fishbed-J and for the radar is Jay Bird. 2. The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.																		
<b>VPs:</b> 24/16/8/4								v3 0000000 0000-00-00T00:00:00										

<b>MiG-21bis</b>					Crew: Pilot																																																																																				
					<b>Maneuver DPs:</b>																																																																																				
<b>Power APs/DPs:</b> ○ <table border="1"> <tr><td>AB</td><td>3.0</td><td>2.5</td><td>2.5</td><td>5.5</td></tr> <tr><td>M</td><td>1.5</td><td>1.0</td><td>1.0</td><td>1.5</td></tr> <tr><td>N</td><td>0.0</td><td>0.0</td><td>0.0</td><td>1.0</td></tr> <tr><td>I</td><td>1.0</td><td>1.0</td><td>2.0</td><td>0.0</td></tr> <tr><td>SPBR</td><td>1.0</td><td>1.0</td><td>1.0</td><td>—</td></tr> </table>					AB	3.0	2.5	2.5	5.5	M	1.5	1.0	1.0	1.5	N	0.0	0.0	0.0	1.0	I	1.0	1.0	2.0	0.0	SPBR	1.0	1.0	1.0	—	LR/DR	1.5																																																										
AB	3.0	2.5	2.5	5.5																																																																																					
M	1.5	1.0	1.0	1.5																																																																																					
N	0.0	0.0	0.0	1.0																																																																																					
I	1.0	1.0	2.0	0.0																																																																																					
SPBR	1.0	1.0	1.0	—																																																																																					
					VR	0.5																																																																																			
<b>Turn DPs:</b> <table border="1"> <tr><td>CL</td><td>1/2</td><td>DT</td></tr> <tr><td>TT</td><td>1.0/1.5</td><td>1.0/1.5</td><td>1.5/2.0</td></tr> <tr><td>HT</td><td>1.5/2.0</td><td>1.5/2.0</td><td>2.0/2.5</td></tr> <tr><td>BT</td><td>2.5/3.0</td><td>2.5/3.0</td><td>—</td></tr> <tr><td>ET</td><td>2.5/3.0</td><td>—</td><td>—</td></tr> </table>					CL	1/2	DT	TT	1.0/1.5	1.0/1.5	1.5/2.0	HT	1.5/2.0	1.5/2.0	2.0/2.5	BT	2.5/3.0	2.5/3.0	—	ET	2.5/3.0	—	—																																																																		
CL	1/2	DT																																																																																							
TT	1.0/1.5	1.0/1.5	1.5/2.0																																																																																						
HT	1.5/2.0	1.5/2.0	2.0/2.5																																																																																						
BT	2.5/3.0	2.5/3.0	—																																																																																						
ET	2.5/3.0	—	—																																																																																						
Cruise Spd. CL: 6.0 Restr. Arcs: <sup>180L</sup> <sub>60-</sub> Climb Spd.: 5.0 Blind Arcs: 30– Visibility: 5 Internal Fuel: 264 Size: +0 AtA Refuel: No Vulnerability: -2 Ejection Seat: Std					Selectable combat flaps. If selected and speed ≤ minimum + 2.5, use higher drag and reduce minimum speeds by 0.5.																																																																																				
<b>Speeds and Ceilings</b> <table border="1"> <thead> <tr> <th>Alt.</th><th>Conf.</th><th>CL</th><th>1/2</th><th>DT</th><th>Dive Speed</th><th>CL</th><th>1/2</th><th>DT</th><th></th></tr> <tr> <th>Band</th><th>Ceil.</th><td>56</td><td>48</td><td>44</td><th>AB Oth</th><td>AB Oth</td><td>AB Oth</td><td>AB Oth</td><td></td></tr> </thead> <tbody> <tr><td>EH+</td><td>46+</td><td>4.5 – 13.5</td><td>5.0 – 10.5</td><td>—</td><td>13.5</td><td>2.0 1.0</td><td>1.0 0.5</td><td>— —</td><td>EH+</td></tr> <tr><td>VH</td><td>36–45</td><td>3.5 – 13.0</td><td>4.0 – 11.0</td><td>4.0 – 6.5</td><td>13.5</td><td>3.0 1.0</td><td>2.0 1.0</td><td>1.0 —</td><td>VH</td></tr> <tr><td>HI</td><td>26–35</td><td>3.0 – 13.0</td><td>3.0 – 11.5</td><td>3.5 – 6.5</td><td>13.5</td><td>5.0 1.5</td><td>4.0 1.0</td><td>1.5 0.5</td><td>HI</td></tr> <tr><td>MH</td><td>17–25</td><td>2.5 – 11.5</td><td>3.0 – 11.0</td><td>3.0 – 6.5</td><td>11.0</td><td>6.0 2.0</td><td>5.0 2.0</td><td>2.0 1.0</td><td>MH</td></tr> <tr><td>ML</td><td>8–16</td><td>2.5 – 9.5</td><td>2.5 – 9.5</td><td>2.5 – 7.0</td><td>9.5</td><td>6.0 2.0</td><td>6.0 2.0</td><td>3.0 1.0</td><td>ML</td></tr> <tr><td>LO</td><td>0–7</td><td>2.0 – 8.5</td><td>2.0 – 8.0</td><td>2.5 – 7.5</td><td>8.5</td><td>7.0 3.0</td><td>6.0 3.0</td><td>4.0 1.5</td><td>LO</td></tr> </tbody> </table>	Alt.	Conf.	CL	1/2						DT	Dive Speed	CL	1/2	DT		Band	Ceil.	56	48	44	AB Oth	AB Oth	AB Oth	AB Oth		EH+	46+	4.5 – 13.5	5.0 – 10.5	—	13.5	2.0 1.0	1.0 0.5	— —	EH+	VH	36–45	3.5 – 13.0	4.0 – 11.0	4.0 – 6.5	13.5	3.0 1.0	2.0 1.0	1.0 —	VH	HI	26–35	3.0 – 13.0	3.0 – 11.5	3.5 – 6.5	13.5	5.0 1.5	4.0 1.0	1.5 0.5	HI	MH	17–25	2.5 – 11.5	3.0 – 11.0	3.0 – 6.5	11.0	6.0 2.0	5.0 2.0	2.0 1.0	MH	ML	8–16	2.5 – 9.5	2.5 – 9.5	2.5 – 7.0	9.5	6.0 2.0	6.0 2.0	3.0 1.0	ML	LO	0–7	2.0 – 8.5	2.0 – 8.0	2.5 – 7.5	8.5	7.0 3.0	6.0 3.0	4.0 1.5	LO				
Alt.	Conf.	CL	1/2	DT	Dive Speed	CL	1/2	DT																																																																																	
Band	Ceil.	56	48	44	AB Oth	AB Oth	AB Oth	AB Oth																																																																																	
EH+	46+	4.5 – 13.5	5.0 – 10.5	—	13.5	2.0 1.0	1.0 0.5	— —	EH+																																																																																
VH	36–45	3.5 – 13.0	4.0 – 11.0	4.0 – 6.5	13.5	3.0 1.0	2.0 1.0	1.0 —	VH																																																																																
HI	26–35	3.0 – 13.0	3.0 – 11.5	3.5 – 6.5	13.5	5.0 1.5	4.0 1.0	1.5 0.5	HI																																																																																
MH	17–25	2.5 – 11.5	3.0 – 11.0	3.0 – 6.5	11.0	6.0 2.0	5.0 2.0	2.0 1.0	MH																																																																																
ML	8–16	2.5 – 9.5	2.5 – 9.5	2.5 – 7.0	9.5	6.0 2.0	6.0 2.0	3.0 1.0	ML																																																																																
LO	0–7	2.0 – 8.5	2.0 – 8.0	2.5 – 7.5	8.5	7.0 3.0	6.0 3.0	4.0 1.5	LO																																																																																
<b>Radar:</b> RP-22 Saphir-21 ECCM: 0 Arcs: 180+ Search: 54–12 Track: 36–8 Lock-On: 7					<b>ECM:</b> IFF RWR: B DDS: — DJM: — AJM: — BJM: —	<b>Weapon Stations Diagram:</b>																																																																																			
<b>Guns:</b> 23 mm GSh-23 To Hit: 6/3/1 Ammunition: 2.0 Gunsight: TT+0/HT+1/BT+2 Ranging: RE AtA/AtG: 5/5					<b>Technology:</b> None	<b>Load Point Limits:</b> CL : < 3 1/2: < 5 <b>Weight Limit:</b> 3,930 DT : ≥ 5																																																																																			
<b>Bomb System:</b> Manual						<b>Station</b> <b>Limit</b> <b>Allowed Loads</b> 1 and 5      1,100      BB RP RK MDR IRM RHM FT 2 and 4      550      BB RP RK MDR IRM RHM 3      1,100      GP FT																																																																																			
<b>Notes:</b> <ol style="list-style-type: none"> <li>The Mikoyan-Gurevich MiG-21bis is an all-weather interceptor. It is a development of the MiG-21SM with an improved engine. The NATO reporting name for the aircraft is Fishbed-L/N and for the radar is Jay Bird.</li> <li>Low transonic drag (LTD).</li> <li>The thick front canopy gives a +1 modifier to sighting rolls for targets in the 180+ arc.</li> <li>Emergency AB (ChR AB) may be used if speed is at least high transonic and altitude is 13 or less. When used, the AB power is 5.0/4.5/4.0 and the fuel use is 7.5. Emergency AB cannot be used for more than two consecutive game turns or more than eight game turns in total.</li> </ol>					<b>Load Notes:</b> <ol style="list-style-type: none"> <li>May use R-3, R-13, and R-60 IRMs (AA-2 and AA-8). May use R-3R RHM (AA-2C). MDRs are for R-60s only.</li> <li>Station 3 may carry a 490L FT or a special 800L FT. If carrying an 800L FT, the station is overloaded and the aircraft must remain below low transonic speed.</li> </ol>																																																																																				
<b>VPs:</b> 24/16/8/4								v3 0000000	0000-00-00T00:00:00																																																																																