

## **Northrup F-89 Scorpion**

- F-89D
- F-89H
- F-89J (Rocket-and-Fuel Pods)
- F-89J (Fuel-Only Pods)

<b>F-89D Scorpion</b>								<b>Crew:</b> Pilot and Radar Officer	
<b>Power APs/DPs:</b> ○○								<b>Maneuver HFPs/DPs:</b>	
AB 1.0 1.0 1.0 6.0				LR/DR 1.0 1.5				VR 1.0	
M 1.0 1.0 0.5 3.0								<b>Turn DPs:</b>	
N 0.0 0.0 0.0 1.0				CL 1/2 DT				CL 1/2 DT	
I 1.0 1.0 2.0 0.0				TT 0.0 0.0 1.0				TT 0.0 0.0 1.0	
SPBR 1.0 2.0 2.0 —				HT 1.0 1.0 2.0				HT 1.0 1.0 2.0	
Cruise Spd. CL: 4.5 Restr. Arcs: —				BT 2.0 2.0 2.0				BT 2.0 2.0 2.0	
Climb Spd.: 3.5 Blind Arcs: 30–				ET — — —				ET — — —	
Visibility: 7 Internal Fuel: 575									
Size: +0 AtA Refuel: No									
Vulnerability: +0 Ejection Seat: Std									

<b>Speeds and Ceilings</b>				<b>Climb Capabilities</b>					
Alt. Band	Conf. Ceil.	CL 49	1/2 45	DT 40	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth	
EH+	46+	3.0 – 5.0	—	—	6.0	0.50 0.25	— —	— —	EH+
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 4.5	6.0	0.50 0.25	0.50 0.25	0.50 0.25	VH
HI	26–35	2.5 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5	0.50 0.25	0.50 0.25	0.50 0.25	HI
MH	17–25	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	1.00 0.50	1.00 0.50	1.00 0.50	MH
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0	1.00 0.50	1.00 0.50	1.00 0.50	ML
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.0	1.00 0.50	1.00 0.50	1.00 0.50	LO

<b>Radar:</b> APG-40	<b>ECM:</b> IFF	<b>Weapon Stations Diagram:</b>													
ECCM: 0	RWR: —														
Arcs: 180+	DDS: —														
Search: 100–20	DJM: —														
Track: 40–8	AJM: —														
Lock-On: 7	BJM: —														
<b>Guns:</b> —	<b>Technology:</b> CC Rocket Attack	<b>Load Point Limits:</b>							CL : 0–4						
To Hit: —		1/2: 5–8													
Ammunition: —		<b>Weight Limit:</b> 4,400							DT : 9+						
Gunsight: TT+0/HT+1/BT+2		<b>Station</b>	<b>Limit</b>	<b>Allowed Loads</b>											
Ranging: RE		1 and 4	0												
AtA/AtG: —		2 and 3	1,600 BB FT												
<b>Bomb System:</b> Manual		<b>Load Notes:</b>													
<b>Notes:</b>	1. The Northrop F-89D Scorpion is an all-weather interceptor. 2. High transonic drag (HTD). 3. The E-6 fire-control system provides CC Rocket Attack technology.														
								v2.0000000 0000-00-00T00:00:00							
<b>VPs:</b> 12/8/4/2															

<b>F-89H Scorpion</b>								<b>Crew:</b> Pilot and Radar Officer		
								<b>Maneuver HFPs/DPs:</b>		
								LR/DR	1.0	1.5
								VR	1.0	
<b>Power APs/DPs:</b>					OO			<b>Turn DPs:</b>		
								CL	1/2	DT
AB	1.0	1.0	1.0	6.0				TT	0.0	0.0
M	1.0	1.0	0.5	3.0				HT	1.0	1.0
N	0.0	0.0	0.0	1.0				BT	2.0	2.0
I	1.0	1.0	2.0	0.0	Cruise Spd. CL: 4.5			ET	—	—
SPBR	1.0	2.0	2.0	—	Restr. Arcs: —					
					Climb Spd.: 3.5					
					Blind Arcs: 30–					
					Visibility: 7					
					Internal Fuel: 575					
					Size: +0					
					AtA Refuel: No					
					Vulnerability: +0					
					Ejection Seat: Std					
If not using AB, reduce maximum speeds by 0.5.										

Speeds and Ceilings						Climb Capabilities							
Alt. Band	Conf. Ceil.	CL 49	1/2 45	DT 40	Dive Speed	CL AB	1/2 AB	DT AB		CL Oth	1/2 Oth	DT Oth	
EH+	46+	3.0 – 5.0	—	—	6.0	0.50	0.25	—	—	—	—	EH+	
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 4.5	6.0	0.50	0.25	0.50	0.25	0.50	0.25	VH	
HI	26–35	2.5 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5	0.50	0.25	0.50	0.25	0.50	0.25	HI	
MH	17–25	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	1.00	0.50	1.00	0.50	1.00	0.50	MH	
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0	1.00	0.50	1.00	0.50	1.00	0.50	ML	
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.0	1.00	0.50	1.00	0.50	1.00	0.50	LO	

<b>Radar:</b>	APG-40	<b>ECM:</b>	IFF	<b>Weapon Stations Diagram:</b>
ECCM:	1	RWR:	—	
Arcs:	180+	DDS:	—	
Search:	120–20	DJM:	—	
Track:	60–10	AJM:	—	
Lock-On:	7	BJM:	—	
<b>Guns:</b>	—	<b>Technology:</b>		<b>Load Point Limits:</b>
To Hit:	—	CC Rocket Attack		CL : 0–4
Ammunition:	—			1/2: 5–8
Gunsight:	TT+0/HT+1/BT+2			
Ranging:	RE			
AtA/AtG:	—			<b>Weight Limit:</b> 4,400 DT : 9+
<b>Bomb System:</b>	Manual			<b>Station</b> Limit Allowed Loads
<b>Notes:</b>				1 and 4 390 IRM RHM
1.				2 and 4 1,600 BB FT
2. High transonic drag (HTD).				
3. The E-9 fire-control system provides CC Rocket Attack technology.				<b>Load Notes:</b>
				1. Stations 1 and 4 are fixed wing-tip pods for rockets, missiles, and fuel. Each can carry 2 factors of air-to-air rockets, giving a total of 4 factors for with pods. Each can also carry three RHM/IRM. The pod fuel is included in the internal fuel.
				2. May use GAR-1/-1D RHMs and GAR-2/-2A IRMs. Typically carries three RHMs in one pod and three IRMs in the other.
<b>VPs:</b> 14/9/5/2				v2.0000000 0000-00-00T00:00:00

<b>F-89J Scorpion (Rocket-and-Fuel Pods)</b>								<b>Crew:</b> Pilot and Radar Officer			
<b>Power APs/DPs:</b> ○○								<b>Maneuver HFPs/DPs:</b>			
AB 1.0 1.0 1.0 6.0								LR/DR	1.0	1.5	
M 1.0 1.0 0.5 3.0								VR	1.0		
N 0.0 0.0 0.0 1.0								<b>Turn DPs:</b>			
I 1.0 1.0 2.0 0.0								CL	1/2	DT	
SPBR 1.0 2.0 2.0 —								TT	0.0	0.0	1.0
If not using AB, reduce maximum speeds by 0.5.								HT	1.0	1.0	2.0
								BT	2.0	2.0	2.0
								ET	—	—	—

Speeds and Ceilings						Climb Capabilities					
Alt. Band	Conf. Ceil.	CL 49	1/2 45	DT 40	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth			
EH+	46+	3.0 – 5.0	—	—	6.0	0.50 0.25	—	—	—	—	EH+
VH	36–45	3.0 – 5.5	3.0 – 5.0	3.0 – 4.5	6.0	0.50 0.25	0.50 0.25	0.50 0.25	0.50 0.25	0.50 0.25	VH
HI	26–35	2.5 – 6.0	2.5 – 5.5	3.0 – 5.0	6.5	0.50 0.25	0.50 0.25	0.50 0.25	0.50 0.25	0.50 0.25	HI
MH	17–25	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	6.5	1.00 0.50	1.00 0.50	1.00 0.50	1.00 0.50	1.00 0.50	MH
ML	8–16	2.0 – 6.5	2.0 – 6.0	2.0 – 5.5	7.0	1.00 0.50	1.00 0.50	1.00 0.50	1.00 0.50	1.00 0.50	ML
LO	0–7	1.5 – 6.5	1.5 – 6.0	2.0 – 5.5	7.0	1.00 0.50	1.00 0.50	1.00 0.50	1.00 0.50	1.00 0.50	LO

<b>Radar:</b> APG-40	<b>ECM:</b> IFF	<b>Weapon Stations Diagram:</b>															
ECCM: 1	RWR: —																
Arcs: 180+	DDS: —																
Search: 120–20	DJM: —																
Track: 60–10	AJM: —																
Lock-On: 7	BJM: —																
<b>Guns:</b> —	<b>Technology:</b> CC Rocket Attack	<b>Load Point Limits:</b>						CL : 0–4									
To Hit: —								1/2: 5–8									
Ammunition: —		<b>Weight Limit:</b> 4,400						DT : 9+									
Gunsight: TT+0/HT+1/BT+2		<b>Station</b>	<b>Limit</b>	<b>Allowed Loads</b>													
Ranging: RE		1 and 8	0														
AtA/AtG: —		2 and 7	1,600	BB FT Nuclear RK													
<b>Bomb System:</b> Manual		3–4 and 5–6	150	IRM													
<b>Notes:</b>	<b>Load Notes:</b>																
1. High transonic drag (HTD).	1. Stations 1 and 8 are fixed wing-tip pods for rockets and fuel. Each can carry 4.5 factors of air-to-air rockets, giving a total of 9 factors with both pods. The pod fuel is included in the internal fuel.																
2. The MG-12 fire-control system provides CC Rocket Attack technology.	2. May use AIR-2A nuclear RK.																
	3. May use GAR-2/-2A IRM.																
<b>VPs:</b> 15/10/5/3								v2.0000000									
								0000-00-00T00:00:00									

<b>F-89J Scorpion (Fuel-Only Pods)</b>								<b>Crew:</b> Pilot and Radar Officer
<b>Power APs/DPs:</b> ○○								<b>Maneuver HFPs/DPs:</b>
AB 1.0 1.0 1.0 6.0				LR/DR 1.0 1.5				VR 1.0
M 1.0 1.0 0.5 3.0								
N 0.0 0.0 0.0 1.0								
I 1.0 1.0 2.0 0.0								
SPBR 1.0 2.0 2.0 —								
If not using AB, reduce maximum speeds by 0.5.								