

# Dassault/Dornier Alpha Jet



The Dassault/Dornier Alpha Jet is a two-seat advanced trainer and light attack aircraft. It was developed starting in 1967 and entered service in 1979.

## Versions

### *Alpha Jet E*

The Alpha Jet E was the trainer version, with the E designation taken from *École* (school). It was equipped with two underwing and one centerline weapon stations, but in French and Belgian service these were intended only for weapons training. Some of its later users employed it as a light strike aircraft, despite its shortcomings compared to aircraft dedicated to this role.

It initially served in the French Armée de l'air and the Belgian Air Force, but later with the air forces of Egypt, Morocco, Nigeria, Qatar, Togo, Côte d'Ivoire, and with private companies.

### *Alpha Jet A*

The Alpha Jet A was the attack version, with the A designation taken from *Appui Tactique* (tactical support). Compared to the E version, the A version had two additional underwing weapon stations, a more advanced weapon system, and could replace the rear crew member with an ECM suite.

It initially served in the German Luftwaffe, but after the end of the Cold War many of these aircraft were sold to the air forces of Portugal and Thailand.

## Armament and Stores

The Alpha Jet has no internal guns, but when armed would typically carry a gun pod on the centerline station, normally

a CC420 30 mm DEFA pod for E models or a 27 mm Mauser pod for A models. The gun pod was originally not jettisonable, but this restriction was lifted by the 1989 upgrade of Luftwaffe Alpha Jet As.

Typical stores would be SNEB 68 mm or CRV7 70 mm RPs or HE or cluster bombs.

## Combat

The Alpha Jet E saw combat in both Moroccan and Nigerian service, in the former case against Polisario Front in the Western Sahara War and in the latter against the Boko Haram militant group.

## ADCs

- Alpha Jet A
- Alpha Jet E

## Photo Credit

- Alpha Jet: Tim Felce (CC CC BY 2.5)

Alpha Jet A										Crew: Pilot and Observer							
										Maneuver HFPs/DPs:							
LR/DR		1.0		1.0													
VR				0.0													
Turn DPs:																	
		CL		1/2		DT											
TT		1.0		1.0		1.0											
HT		1.0		2.0		2.0											
BT		3.0		3.0		4.0											
ET		—		—		—											
Power APs/DPs/FPs: ○○					Cruise Speed: 5.0					Restr. Arcs: —							
CL 1/2 DT Fuel					Climb Speed: 4.0					Blind Arcs: 30–							
AB — — — —					Visibility: 4					Internal Fuel: 180							
M 1.5 1.0 1.0 2.0					Size: +1					AtA Refuel: No							
N 0.0 0.0 0.0 1.0					Vulnerability: −1					Ejection Seat: Std							
I 0.5 0.5 0.5 0.0																	
SPBR 0.5 1.0 1.0 —																	
Speeds and Ceilings						Climb Capabilities											
Alt. Conf.		CL		1/2		DT		Dive		CL		1/2		DT		Alt.	
Band Ceil.		45		38		32		Speed		AB Oth		AB Oth		AB Oth		Band	
EH+ 46+		—		—		—		—		— —		— —		— —		EH+	
VH 36–45		2.5 – 5.5		3.0 – 5.0		—		7.0		— 0.5		— 0.5		— —		VH	
HI 26–35		2.5 – 6.0		2.5 – 5.5		2.5 – 5.0		7.0		— 1.0		— 0.5		— 0.5		HI	
MH 17–25		2.0 – 6.0		2.0 – 5.5		2.5 – 5.0		7.0		— 1.0		— 1.0		— 0.5		MH	
ML 8–16		1.5 – 6.0		2.0 – 5.5		2.0 – 5.0		7.0		— 1.0		— 1.0		— 1.0		ML	
LO 0–7		1.0 – 6.0		1.5 – 5.5		1.5 – 5.0		7.0		— 2.0		— 1.5		— 1.0		LO	
Radar: —					ECM: IFF					Weapon Stations Diagram:							
ECCM: —					RWR: A												
Arcs: —					DDS: —												
Search: —					DJM: B3												
Track: —					AJM: —												
Lock-On: —					BJM: —												
Guns: —					Technology:					Load Point Limits:							
To Hit: —					None					CL : 0–4							
Ammunition: —										1/2: 5–8							
Gunsight: TT+0/HT+1/BT+2										Weight Limit: 5,550 DT : 9+							
Ranging: —										Station Limit Allowed Loads							
AtA/AtG: —										1 and 5 750 FT BB BG RP IRM EP							
										2 and 4 1,350 BB BG RP DR EP							
										3 1,350 BB BG RP GP PP							
Bomb System: Ballistic										Load Notes:							
Notes: 1. The Dassault/Dornier Alpha Jet A is a light attack aircraft. 2. High transonic drag (HTD). 3. Either the observer or the RWR and DJM may be carried.										1. May use 310L and 450L FTs							
										2. May use 27 mm Mauser BK-27 or CC420 30 mm DEFA GPs. Prior to 1989, the GP cannot be jettisoned.							
										3. From 1989, may use AIM-9 and Matra 550 IRMs.							
										VPs: 12/8/4/2							
										v1 00000000 0000-00-00T00:00:00							

Alpha Jet E										Crew: Pilot and Observer										
										Maneuver HFPs/DPs: LR/DR 1.0 1.0 VR 0.0										
Turn DPs: CL 1/2 DT TT 1.0 1.0 1.0 HT 1.0 2.0 2.0 BT 3.0 3.0 4.0 ET — — —																				
															Cruise Speed: 5.0    Restr. Arcs: — Climb Speed: 4.0    Blind Arcs: 30– Visibility: 4    Internal Fuel: 180 Size: +1    AtA Refuel: No Vulnerability: –1    Ejection Seat: Std					
Power APs/DPs/FPs: ○○																				
CL	1/2	DT	Fuel																	
AB	—	—	—	—																
M	1.5	1.0	1.0	2.0																
N	0.0	0.0	0.0	1.0																
I	0.5	0.5	0.5	0.0																
SPBR	0.5	1.0	1.0	—																
Speeds and Ceilings											Climb Capabilities									
Alt. Band	Conf. Ceil.	CL 45	1/2 38	DT 32	Dive Speed	CL AB	Oth	1/2 AB	Oth	DT AB	Oth	Alt. Band								
EH+	46+	—	—	—	—	—	—	—	—	—	—	EH+								
VH	36–45	2.5 – 5.5	3.0 – 5.0	—	7.0	—	0.5	—	0.5	—	—	VH								
HI	26–35	2.5 – 6.0	2.5 – 5.5	2.5 – 5.0	7.0	—	1.0	—	0.5	—	0.5	HI								
MH	17–25	2.0 – 6.0	2.0 – 5.5	2.5 – 5.0	7.0	—	1.0	—	1.0	—	0.5	MH								
ML	8–16	1.5 – 6.0	2.0 – 5.5	2.0 – 5.0	7.0	—	1.0	—	1.0	—	1.0	ML								
LO	0–7	1.0 – 6.0	1.5 – 5.5	1.5 – 5.0	7.0	—	2.0	—	1.5	—	1.0	LO								
Radar: —				ECM: IFF				Weapon Stations Diagram:												
ECCM: —				RWR: —																
Arcs: —				DDS: —																
Search: —				DJM: —																
Track: —				AJM: —																
Lock-On: —				BJM: —																
Guns: —				Technology: None				Load Point Limits: CL : 0–4												
To Hit: —								1/2: 5–8												
Ammunition: —								Weight Limit: 5,550 DT : 9+												
Gunsight: TT+0/HT+1/BT+2								Station Limit Allowed Loads												
Ranging: —								1 and 3 750 FT BB BG RP IRM EP												
AtA/AtG: —				2 1,350 BB BG RP GP PP																
Bomb System: Manual																				
Notes:																				
1. The Dassault/Dornier Alpha Jet E is a trainer with a secondary light attack capability.																				
2. High transonic drag (HTD).																				
VPs: 10/7/3/2											v1.0000000 0000-00-00T00:00:00									