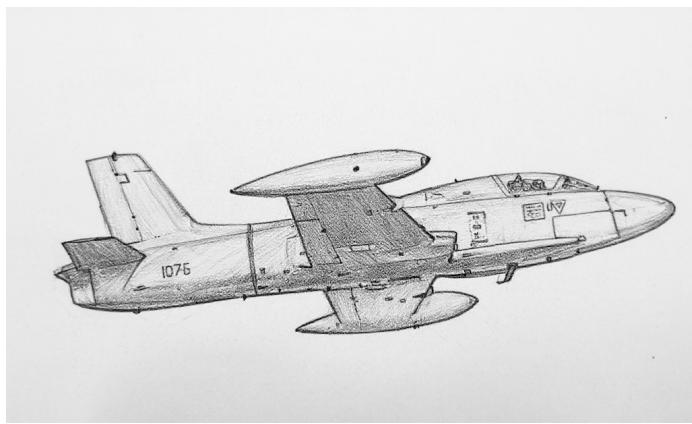


Aermacchi MB-326



The Aermacchi MB-326 was designed as a trainer but then developed into a light attack aircraft. It featured tandem seating, a single Viper 11 turbojet engine, a low wing with wing-tip fuel tanks, and excellent performance for an aircraft of its class and era.

Versions

MB-326

The initial MB-326 trainer (with no letter suffix) entered service with the Italian AMI in 1962. It had no provision for armament.

MB-326B/E/F/H

The MB-326B/E/F/H were the first combined trainer and light attack versions. They were largely similar and all featured the 2,500 lbf Viper 11 engine. They were equipped with six under-wing weapon stations for up to 2000 lb of stores, including gun pods, bombs, and rocket pods. Versions after the B could also carry under-wing fuel tanks.

The B was delivered to the Tunisian air force in 1965, the E to the Italian AMI for weapons training in 1968, the F to the Ghanaian air force in 1965, and the H to the Australian RAAF and RAN starting in 1967.

The H was also manufactured in Australia by the Commonwealth Aircraft Corporation (CAC) as the CA-30. It served in the Australian RAAF and RAN from 1967 to 2001 and was known informally as the "Macchi". It replaced the Vampire T.33A, T.34A, and T.35 trainers.

MB-326G

The later MB-326G light attack version featured a more powerful 3,410 lbf Viper 20-540 engine and a strengthened wing, which gave better performance in general and allowed up to 4000 lb of stores to be carried.

The GB version was delivered to the Argentine COAN start-

ing in 1969 and served until sometime after the 1982 South Atlantic War, when it became impossible to maintain because of the UK embargo of spares for the Viper engine.

The GB also was delivered to the Zairean air force in 1969 and the Zambian air force in 1971.

The GC version was delivered to the Brazilian air force starting in 1971. It was also manufactured under license by Embraer as the EMB-326. In Brazilian FAB service, the GC was known as the AT-26 or RT-26 Xavante and served from 1971 to 2010. A number of Brazilian GCs were transferred to the Argentine Navy after 1982 to replace losses in the South Atlantic War.

MB-326K and Impala Mk II

The MB-326K was a dedicated light attack aircraft and dispensed with the second crew member. It had two internal 30 mm DEFA cannon mounted in the fuselage, an armored, single-seat cockpit, an uprated 4,000 lbf Viper 632-43 engine, six stations for up to 4000 lb of stores, including gun pods, bombs, rocket pods, fuel tanks, a four-camera photo-reconnaissance pod, and R.550 Magic infrared-homing missiles.

The K was used by the South African SAAF starting sometime after 1971. It was also manufactured under license in South Africa from 1974 by the Atlas Aircraft Corporation, albeit with the earlier 3,140 lbf Viper 20-540 motor. Both variants of the K served in the SAAF as the Impala Mk.II. They later served in the Brazilian FAB from 2004 to 2009 as the AT-26A Xavante.

MB-326L

The MB-326L was a two-seater version of the K without the integrated guns.

It was used by the air forces of Ghana, Tunisia, the UAE, and Zaire from 1975. It was further developed into the MB-336.

MB-326M and Impala Mk I

Despite M coming after K and L in the alphabet, the M was delivered before both. It was largely similar to the G.

It was manufactured both by Aermacchi and under license in South Africa by the Atlas Aircraft Corporation.

Both versions served with the South African SAAF from 1966 as the Impala Mk I.

Armament and Stores

The E/F/H could use 300L under-wing FTs, whereas the G/K/L/M could use slightly larger 330L FTs.

All versions from the B onwards could carry a variety of bombs, rocket pods, and gun pods.

In Argentine COAN service, the MB-326GB would typically mount two single .50 cal gun pods plus four LAU-10 RPs (each with four Zuni rockets), four LAU-32 RPs (each with seven 70 mm rockets), four Matra-122 RPs (each with seven 68 mm), four Mk 81 250 lb bombs, or two Mk 82 500 lb bombs.

In RAAF service, the MB-326H could mount two SUU-11A/A 7.62 mm gun pods with a rate of fire of 2000 rpm per pod and 200 rounds per pod (3 ammo). It could also carry eight 25 kg practice bombs or, presumably in an emergency situation, 250 lb or 500 lb bombs. To increase its range or endurance, it could use 300L fuel tanks.

In Brazilian FAB service, the air-to-ground options for the AT-26 Xavante (G and K) included 250 lb and 500 lb bombs, 7.62 mm gun pods, and rocket pods with seven, nineteen, or thirty-seven 70 mm rockets.

In the SAAF service, the Impala Mk I and II (M and K) were typically armed with up to six Matra F2 rocket pods (each with six 68 mm rockets) or with 120 or 250 kg (250 and 500 lb) bombs and sometimes also equipped with a photographic reconnaissance pod or 330L fuel tanks. Although the outer pylons were apparently wired for IRMs, there is no evidence that they were carried.

Combat

In the SAAF service, the Impala Mk I and II saw combat in the South African Border War. They flew both daylight and nighttime *Maanskyn* (moonshine) missions.

Argentine CANA MB-326Gs were based on the mainland during the South Atlantic War and did not see combat.

ADCs

- MB-326B
- MB-326E
- MB-326F
- MB-326G
- MB-326H
- MB-326K
- MB-326K (Viper 20-540)
- MB-326L
- MB-326M

See Also

- Aermacchi MB-339

Photo Credit

- Atlas Impala II: Bob Adams (CC BY-SA 2.0)

MB-326B					Crew: Pilot and Observer														
					Maneuver DPs:														
Power APs/DPs: ○					LR/DR	2.0													
CL 1/2 DT Fuel					VR	1.0													
AB	—	—	—	—	Turn DPs:														
M	1.0	0.5	0.5	2.0	CL	1/2	DT												
N	0.0	0.0	0.0	1.0	TT	0.5	0.5	0.5											
I	1.0	1.0	1.0	0.0	HT	0.5	1.0	1.0											
SPBR	1.0	1.0	2.0	—	BT	1.0	1.0	1.5											
Cruise Spd. CL: 4.5 Restr. Arcs: 60–					ET	—	—	—											
Climb Spd.: 3.5 Blind Arcs: 30–																			
Visibility: 5 Internal Fuel: 120																			
Size: +0 AtA Refuel: No																			
Vulnerability: -2 Ejection Seat: Std																			
Speeds and Ceilings						Climb Capabilities													
Alt. Band	Conf. Ceil.	CL 47	1/2 40	DT 35	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth											
EH+	46+	3.0 – 5.0	—	—	6.0	— 0.5	— —	— —	EH+										
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0	— 0.5	— 0.5	— —	VH										
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0	— 0.5	— 0.5	— 0.5	HI										
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0	— 1.0	— 0.5	— 0.5	MH										
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	— 1.0	— 1.0	— 0.5	ML										
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	— 1.0	— 1.0	— 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 : < 4 1/2: < 6														
To Hit:	—	—			Weight Limit: 2,000		DT : ≥ 6												
Ammunition:	—	—			Station 1 and 6 2 and 5 3 and 4		Limit 750 1,000 1,000												
Gunsight:	TT+0/HT+2/BT+3	—			Allowed Loads BB BG RP RK GP EP BB BG RP RK RG GP EP BB BG RP RK RG GP EP PP														
Ranging:	—	—																	
AtA/AtG:	—	—																	
Bomb System: Manual			Load Notes:		1. PP may only be used on station 4.														
Notes:																			
1. The Aermacchi MB-326B is a trainer with a secondary light attack capability. 2. High transonic drag (HTD).																			
VPs: 10/7/3/2							v3 0000000 0000-00-00T00:00:00												

MB-326E					Crew: Pilot and Observer				
					Maneuver DPs:				
Power APs/DPs: ○					LR/DR	2.0			
					VR	1.0			
					Turn DPs:				
					CL	1/2	DT		
					TT	0.5	0.5	0.5	
					HT	0.5	1.0	1.0	
					BT	1.0	1.0	1.5	
					ET	—	—	—	

MB-326F					Crew: Pilot and Observer				
					Maneuver DPs:				
Power APs/DPs: ○					LR/DR	2.0			
					VR	1.0			
					Turn DPs:				
					CL	1/2	DT		
					TT	0.5	0.5	0.5	
					HT	0.5	1.0	1.0	
					BT	1.0	1.0	1.5	
					ET	—	—	—	

MB-326G					Crew: Pilot and Observer				
					Maneuver DPs:				
Power APs/DPs: ○					LR/DR	2.0			
					VR	1.0			
					Turn DPs:				
					CL	1/2	DT		
					TT	0.5	0.5	0.5	
					HT	0.5	1.0	1.0	
					BT	1.0	1.0	1.5	
					ET	—	—	—	

MB-326H					Crew: Pilot and Observer				
					Maneuver DPs:				
Power APs/DPs: ○					LR/DR	2.0			
					VR	1.0			
					Turn DPs:				
					CL	1/2	DT		
					TT	0.5	0.5	0.5	
					HT	0.5	1.0	1.0	
					BT	1.0	1.0	1.5	
					ET	—	—	—	
					Cruise Spd. CL: 4.5	Restr. Arcs: 60-			
					Climb Spd.: 3.5	Blind Arcs: 30-			
					Visibility: 5	Internal Fuel: 120			
					Size: +0	AtA Refuel: No			
					Vulnerability: -2	Ejection Seat: Std			
Speeds and Ceilings									
Alt.	Conf.	CL	1/2	DT	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth	
Band	Band	47	40	35					
EH+	46+	3.0 – 5.0	—	—	6.0	— 0.5	— —	— —	EH+
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0	— 0.5	— 0.5	— —	VH
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0	— 0.5	— 0.5	— 0.5	HI
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0	— 1.0	— 0.5	— 0.5	MH
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	— 1.0	— 1.0	— 0.5	ML
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	— 1.0	— 1.0	— 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 : < 4 1/2: < 6			
To Hit: —						Weight Limit: 2,000 DT : ≥ 6			
Ammunition: —						Station Limit Allowed Loads			
Gunsight: TT+0/HT+2/BT+3						1 and 6	750	BB BG RP RK GP EP	
Ranging: —						2 and 5	1,000	BB BG RP RK RG GP EP FT	
AtA/AtG: —						3 and 4	1,000	BB BG RP RK RG GP EP PP	
Bomb System: Manual						Load Notes:			
Notes:						1. May use 300L FTs. 2. PP may only be used on station 4.			

MB-326K					Crew: Pilot						
					Maneuver DPs:						
Power APs/DPs: ○					LR/DR	2.0					
CL 1/2 DT Fuel					VR	1.0					
AB	—	—	—	—	Turn DPs:						
M	1.5	1.0	1.0	2.0	CL	1/2	DT				
N	0.0	0.0	0.0	1.0	TT	0.5	0.5	0.5			
I	1.0	1.0	1.0	0.0	HT	0.5	1.0	1.0			
SPBR	1.0	1.0	2.0	—	BT	1.0	1.0	1.5			
Cruise Spd. CL: 4.5 Restr. Arcs: 60–					ET	—	—	—			
Climb Spd.: 3.5 Blind Arcs: 30–											
Visibility: 5 Internal Fuel: 145											
Size: +0 AtA Refuel: No											
Vulnerability: -1 Ejection Seat: Std											
Speeds and Ceilings											
Alt.	Conf.	CL	1/2	DT	Dive Speed	CL AB Oth	1/2 AB Oth	DT AB Oth			
Band	Ceil.	47	40	35							
EH+	46+	3.0 – 5.0	—	—	6.0	— 0.5	— —	— —	EH+		
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0	— 0.5	— 0.5	— —	VH		
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0	— 0.5	— 0.5	— 0.5	HI		
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0	— 1.0	— 0.5	— 0.5	MH		
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	— 1.0	— 1.0	— 0.5	ML		
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	— 1.0	— 1.0	— 1.0	LO		
Radar: —					ECM: IFF	Weapon Stations Diagram:					
ECCM: —					RWR: —						
Arcs: —					DDS: —						
Search: —					DJM: —						
Track: —					AJM: —						
Lock-On: —					BJM: —						
Guns: Two 30 mm DEFA					Technology:						
To Hit:	6/3/2	None					Load Point Limits:				
Ammunition:	3.0						CL : < 4				
Gunsight:	TT+0/HT+2/BT+3						1/2: < 6				
Ranging:	—						Weight Limit: 4,000				
AtA/AtG:	6/6						DT : ≥ 6				
Bomb System: Manual					Station Limit Allowed Loads						
					1 and 6	750	BB BG RP RK GP EP IRM				
					2 and 5	1,000	BB BG RP RK RG GP EP FT				
					3 and 4	1,000	BB BG RP RK RG GP EP PP				
Load Notes:											
1. May use 330L FTs. 2. May use AIM-9 and R.550 IRMs 3. PP may only be used on station 4.											
VPs: 12/8/4/2								v3 0000000 0000-00-00T00:00:00			

MB-326K (Viper 20-540)										Crew: Pilot	
Power APs/DPs: ○										Maneuver DPs:	
AB CL 1/2 DT Fuel										LR/DR 2.0	
M 1.0 1.0 1.0 2.0										VR 1.0	
N 0.0 0.0 0.0 1.0											
I 1.0 1.0 1.0 0.0										Turn DPs:	
SPBR 1.0 1.0 2.0 —										CL 1/2 DT	
										TT 0.5 0.5 0.5	
										HT 0.5 1.0 1.0	
										BT 1.0 1.0 1.5	
										ET — — —	

MB-326L					Crew: Pilot and Observer																																																											
					Maneuver DPs:																																																											
Power APs/DPs: ○					LR/DR 2.0 VR 1.0																																																											
<table border="1"> <thead> <tr> <th></th><th>CL</th><th>1/2</th><th>DT</th><th>Fuel</th></tr> </thead> <tbody> <tr> <td>AB</td><td>—</td><td>—</td><td>—</td><td>—</td></tr> <tr> <td>M</td><td>1.5</td><td>1.0</td><td>1.0</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> </tbody> </table>						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	1.0	1.0	1.0	0.0	SPBR	1.0	1.0	2.0	—	<table border="1"> <thead> <tr> <th></th><th>CL</th><th>1/2</th><th>DT</th><th></th></tr> </thead> <tbody> <tr> <td>TT</td><td>0.5</td><td>0.5</td><td>0.5</td><td></td></tr> <tr> <td>HT</td><td>0.5</td><td>1.0</td><td>1.0</td><td></td></tr> <tr> <td>BT</td><td>1.0</td><td>1.0</td><td>1.5</td><td></td></tr> <tr> <td>ET</td><td>—</td><td>—</td><td>—</td><td></td></tr> </tbody> </table>						CL	1/2	DT		TT	0.5	0.5	0.5		HT	0.5	1.0	1.0		BT	1.0	1.0	1.5		ET	—	—	—	
	CL	1/2	DT	Fuel																																																												
AB	—	—	—	—																																																												
M	1.5	1.0	1.0	2.0																																																												
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I	1.0	1.0	1.0	0.0																																																												
SPBR	1.0	1.0	2.0	—																																																												
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TT	0.5	0.5	0.5																																																													
HT	0.5	1.0	1.0																																																													
BT	1.0	1.0	1.5																																																													
ET	—	—	—																																																													
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Cruise Spd. CL:	4.5	Restr. Arcs:	60–																																																													
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Vulnerability:	-2	Ejection Seat:	Std																																																													
					Turn DPs:																																																											

MB-326M					Crew: Pilot and Observer					
					Maneuver DPs:					
Power APs/DPs: ○					LR/DR	2.0				
AB CL 1/2 DT Fuel					VR	1.0				
M	1.0	1.0	1.0	2.0	Turn DPs:					
N	0.0	0.0	0.0	1.0	CL	1/2	DT			
I	1.0	1.0	1.0	0.0	TT	0.5	0.5	0.5		
SPBR	1.0	1.0	2.0	—	HT	0.5	1.0	1.0		
Cruise Spd. CL: 4.5 Restr. Arcs: 60–					BT	1.0	1.0	1.5		
Climb Spd.: 3.5 Blind Arcs: 30–					ET	—	—	—		
Visibility: 5 Internal Fuel: 120										
Size: +0 AtA Refuel: No										
Vulnerability: -2 Ejection Seat: Std										
Speeds and Ceilings										
Alt.	Conf.	CL	1/2	DT	Dive	CL	1/2	DT		
Band	Ceil.	47	40	35	Speed	AB Oth	AB Oth	AB Oth		
EH+	46+	3.0 – 5.0	—	—	6.0	— 0.5	— —	— —	EH+	
VH	36–45	2.5 – 5.0	2.5 – 4.5	—	6.0	— 0.5	— 0.5	— —	VH	
HI	26–35	2.0 – 5.0	2.5 – 5.0	2.5 – 4.5	6.0	— 0.5	— 0.5	— 0.5	HI	
MH	17–25	1.5 – 5.5	2.0 – 5.0	2.0 – 4.5	6.0	— 1.0	— 0.5	— 0.5	MH	
ML	8–16	1.5 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	— 1.0	— 1.0	— 0.5	ML	
LO	0–7	1.0 – 5.5	1.5 – 5.0	1.5 – 4.5	6.0	— 1.0	— 1.0	— 1.0	LO	
Radar: —					ECM: IFF	Weapon Stations Diagram:				
ECCM: —					RWR: —					
Arcs: —					DDS: —					
Search: —					DJM: —					
Track: —					AJM: —					
Lock-On: —					BJM: —					
Guns: —					Technology:					
To Hit: —					None	Load Point Limits:				
Ammunition: —						CL : < 4				
Gunsight: TT+0/HT+2/BT+3						1/2: < 6				
Ranging: —						Weight Limit: 4,000				
AtA/AtG: —						DT : ≥ 6				
Bomb System: Manual					Station Limit Allowed Loads					
					1 and 6	750	BB BG RP RK GP EP			
					2 and 5	1,000	BB BG RP RK GP EP FT			
					3 and 4	1,000	BB BG RP RK GP EP PP			
Notes:					Load Notes:					
1. The Aermacchi MB-326M is a trainer with a secondary light attack capability. It is similar to the MB-326G. In SAAF service it was known as the Impala Mk I. 2. High transonic drag (HTD).					1. May use 330L FTs. 2. PP may only be used on station 4.					
					VPs: 11/7/4/2					
					v3 0000000 0000-00-00T00:00:00					