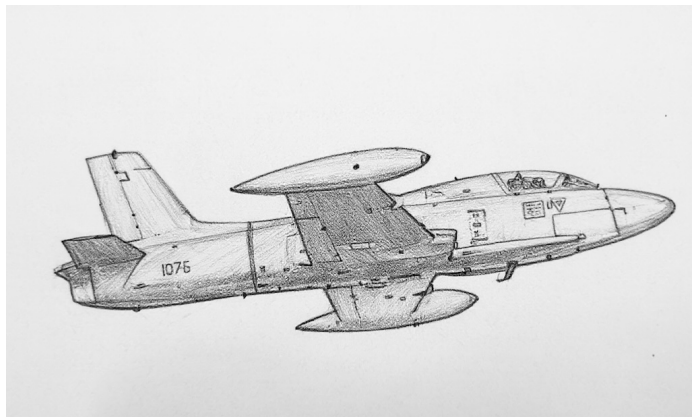


## Aermacchi MB-326



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: 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											
Power APs/DPs: ○ CL 1/2 DT Fuel AB — — — — M 1.0 0.5 0.5 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 —																										
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: — ECCM: — Arcs: — Search: — Track: — Lock-On: —																	ECM: IFF RWR: — DDS: — DJM: — AJM: — BJM: —					Weapon Stations Diagram:				
Guns: — To Hit: — Ammunition: — Gunsight: TT+0/HT+2/BT+3 Ranging: — AtA/AtG: —					Technology: None					Load Point Limits: CL : < 4 1/2: < 6																
Bomb System: Manual										Weight Limit: 2,000 DT : ≥ 6																
										Station Limit Allowed Loads 1 and 6 750 BB BG RP RK GP EP 2 and 5 1,000 BB BG RP RK RG GP EP 3 and 4 1,000 BB BG RP RK RG GP EP PP																
Notes: 1. The Aermacchi MB-326B is a trainer with a secondary light attack capability. 2. High transonic drag (HTD).										Load Notes: 1. PP may only be used on station 4.																
										VPs: 10/7/3/2										v3 0000000 0000-00-00T00:00:00						

MB-326E										Crew: Pilot and Observer									
										Maneuver DPs:									
LR/DR		2.0																	
VR		1.0																	
Power APs/DPs: ○										Turn DPs:									
	CL	1/2	DT	Fuel							CL	1/2	DT						
AB	—	—	—	—						TT	0.5	0.5	0.5						
M	1.0	0.5	0.5	2.0						HT	0.5	1.0	1.0						
N	0.0	0.0	0.0	1.0						BT	1.0	1.0	1.5						
I	1.0	1.0	1.0	0.0						ET	—	—	—						
SPBR	1.0	1.0	2.0	—															
					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										Climb Capabilities									
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: —																			
ECCM: —																			
Arcs: —																			
Search: —																			
Track: —																			
Lock-On: —																			
ECM: IFF																			
RWR: —																			
DDS: —																			
DJM: —																			
AJM: —																			
BJM: —																			
Weapon Stations Diagram:																			
Guns: —																			
To Hit: —																			
Ammunition: —																			
Gunsight: TT+0/HT+2/BT+3																			
Ranging: —																			
AtA/AtG: —																			
Technology:																			
None																			
Load Point Limits: CL : < 4																			
1/2: < 6																			
Weight Limit: 2,000 DT : ≥ 6																			
Station Limit Allowed Loads																			
1 and 6 750 BB BG RP RK GP EP																			
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 300L FTs.																			
2. PP may only be used on station 4.																			
Notes:																			
1. The Aermacchi MB-326E is a trainer with a secondary light attack capability.																			
It is similar to the MB-326B, but has provision for external fuel tanks.																			
2. High transonic drag (HTD).																			
VPs: 10/7/3/2																			
v3 0000000 0000-00-00T00:00:00																			

MB-326F										Crew: Pilot and Observer									
										Maneuver DPs:									
LR/DR		2.0																	
VR		1.0																	
Power APs/DPs: ○										Turn DPs:									
CL		1/2		DT		Fuel		CL		1/2		DT							
AB		—		—		—		TT		0.5		0.5							
M		1.0		0.5		0.5		2.0		HT		0.5							
N		0.0		0.0		0.0		1.0		BT		1.0							
I		1.0		1.0		1.0		0.0		ET		1.5							
SPBR		1.0		1.0		2.0		—											
					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										Climb Capabilities									
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		HI			
MH		17–25		1.5 – 5.5		2.0 – 5.0		2.0 – 4.5		6.0		— 1.0		— 0.5		MH			
ML		8–16		1.5 – 5.5		1.5 – 5.0		1.5 – 4.5		6.0		— 1.0		— 1.0		ML			
LO		0–7		1.0 – 5.5		1.5 – 5.0		1.5 – 4.5		6.0		— 1.0		— 1.0		LO			
Radar: —					ECM: IFF					Weapon Stations Diagram:									
ECCM: —					RWR: —														
Arcs: —					DDS: —														
Search: —					DJM: —														
Track: —					AJM: —														
Lock-On: —					BJM: —														
Guns: —					Technology:					Load Point Limits: CL : < 4									
To Hit: —					None					1/2: < 6									
Ammunition: —										Weight Limit: 2,000 DT : ≥ 6									
Gunsight: TT+0/HT+2/BT+3										Station Limit Allowed Loads									
Ranging: —										1 and 6 750 BB BG RP RK GP EP									
AtA/AtG: —										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									
Bomb System: Manual										Load Notes:									
Notes:					1. The Aermacchi MB-326F is a trainer with a secondary light attack capability. It is similar to the MB-326B, but has provision for external fuel tanks. 2. High transonic drag (HTD).					1. May use 300L FTs.									
										2. PP may only be used on station 4.									
VPs: 10/7/3/2										v3 0000000 0000-00-00T00:00:00									

MB-326G										Crew: Pilot and Observer									
										Maneuver DPs:									
LR/DR		2.0																	
VR		1.0																	
Power APs/DPs: ○										Turn DPs:									
	CL	1/2	DT	Fuel							CL	1/2	DT						
AB	—	—	—	—						TT	0.5	0.5	0.5						
M	1.0	1.0	1.0	2.0						HT	0.5	1.0	1.0						
N	0.0	0.0	0.0	1.0						BT	1.0	1.0	1.5						
I	1.0	1.0	1.0	0.0						ET	—	—	—						
SPBR	1.0	1.0	2.0	—															
					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										Climb Capabilities									
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:		Load Point Limits: CL : < 4													
To Hit:		—		None		1/2: < 6													
Ammunition:		—		Weight Limit: 4,000 DT : ≥ 6															
Gunsight:		TT+0/HT+2/BT+3		Station Limit Allowed Loads															
Ranging:		—		1 and 6 750 BB BG RP RK GP EP															
AtA/AtG:		—		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															
Bomb System: Manual		Load Notes:																	
Notes: 1. The Aermacchi MB-326G is light attack aircraft. Minor versions are the GB and GC. It is derived from the MB-326F, but has the more powerful Viper 20-540 engine in place of the Viper 11 and greater load capacity. In Brazilian service it was known as the AT-26 or RT-26 Xavante. 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									

<div>MB-326H</div>										Crew: Pilot and Observer																			
										Maneuver DPs:																			
										LR/DR		2.0																	
										VR		1.0																	
Power APs/DPs: ○										Turn DPs:																			
CL		1/2		DT		Fuel							CL		1/2		DT												
AB		—		—		—							TT		0.5		0.5		0.5										
M		1.0		0.5		0.5		2.0							HT		0.5		1.0		1.0								
N		0.0		0.0		0.0		1.0							BT		1.0		1.0		1.5								
I		1.0		1.0		1.0		0.0							ET		—		—		—								
SPBR		1.0		1.0		2.0		—																					
					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										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:					Load Point Limits:					CL : < 4									
To Hit:					—					None										1/2: < 6									
Ammunition:					—										Weight Limit:					2,000					DT : ≥ 6				
Gunsight:					TT+0/HT+2/BT+3										Station					Limit					Allowed Loads				
Ranging:					—										1 and 6					750					BB BG RP RK GP EP				
AtA/AtG:					—										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				
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:						
LR/DR		2.0														
VR		1.0														
Turn DPs:																
Power APs/DPs: ○					CL		1/2		DT							
					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		—								
					Cruise Spd. CL:		4.5		Restr. Arcs:		60—					
					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						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:					Two 30 mm DEFA		Technology:				Load Point Limits:					
To Hit:					6/3/2		None				CL : < 4					
Ammunition:					3.0						1/2: < 6					
Gunsight:					TT+0/HT+2/BT+3						Weight Limit:					
Ranging:					—						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.					
Notes:																
1. The Aermacchi MB-326K is a light attack aircraft. It is derived from the MB-326G, but dispenses with the second crew member, has two internal DEFA 30 mm cannon, a more powerful Viper 632-43 engine, and the ability to carry IRMs. In SAAF service it was known as the Impala Mk II.																
2. High transonic drag (HTD).																



<div>MB-326K</div> <div>(Viper 20-540)</div>										Crew: Pilot																
<div>Power APs/DPs:</div> <div><div>CL1/2DTFuel</div><div>AB— — — —</div><div>M1.01.01.02.0</div><div>N0.00.00.01.0</div><div>I1.01.01.00.0</div><div>SPBR1.01.02.0—</div></div>										Maneuver DPs:																
										LR/DR2.0																
										VR1.0																
															Turn DPs:											
<div>CL1/2DT</div>																										
TT0.50.50.5																										
HT0.51.01.0																										
					BT1.01.01.5																					
					ET— — —																					
					Cruise Spd. CL: 4.5 Restr. Arcs: 60–																					
					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										Climb Capabilities																
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:					Two 30 mm DEFA					Technology:					Load Point Limits:					CL : < 4						
To Hit:					6/3/2					None										1/2: < 6						
Ammunition:					3.0										Weight Limit:					4,000 DT : ≥ 6						
Gunsight:					TT+0/HT+2/BT+3										Station					Limit Allowed Loads						
Ranging:					—										1 and 6					750 BB BG RP RK GP EP						
AtA/AtG:					6/6										2 and 5					1,000 BB BG RP RK GP EP FT						
															3 and 4					1,000 BB BG RP RK GP EP PP						
Bomb System:					Manual										Load Notes:											
Notes:															1. May use 330L FTs.											
1. The Aermacchi MB-326K is a light attack aircraft. It is derived from the MB-326G, but dispenses with the second crew member, has two internal DEFA 30 mm cannon, and the ability to carry IRMs. This variant has the older and less powerful Viper 20-540 engine. In SAAF service it was known as the Impala Mk II and in Brazilian service as the AT-26A Xavante.															2. PP may only be used on station 4.											
2. High transonic drag (HTD).																										
																	VPs: 12/8/4/2					v3 0000000 0000-00-00T00:00:00				

<b>Radar:</b> — <b>ECCM:</b> — <b>Arcs:</b> — <b>Search:</b> — <b>Track:</b> — <b>Lock-On:</b> —	<b>ECM:</b> IFF <b>RWR:</b> — <b>DDS:</b> — <b>DJM:</b> — <b>AJM:</b> — <b>BJM:</b> —	<b>Weapon Stations Diagram:</b>												
<b>Guns:</b> — <b>To Hit:</b> — <b>Ammunition:</b> — <b>Gunsight:</b> TT+0/HT+2/BT+3 <b>Ranging:</b> — <b>AtA/AtG:</b> —	<b>Technology:</b> None	<b>Load Point Limits:</b> CL : < 4 1/2: < 6 <b>Weight Limit:</b> 4,000 DT : ≥ 6												
<b>Bomb System:</b> Manual		<table border="1"> <thead> <tr> <th>Station</th> <th>Limit</th> <th>Allowed Loads</th> </tr> </thead> <tbody> <tr> <td>1 and 6</td> <td>750</td> <td>BB BG RP RK GP EP IRM</td> </tr> <tr> <td>2 and 5</td> <td>1,000</td> <td>BB BG RP RK RG GP EP FT</td> </tr> <tr> <td>3 and 4</td> <td>1,000</td> <td>BB BG RP RK RG GP EP PP</td> </tr> </tbody> </table> <b>Load Notes:</b> 1. May use 330L FTs. 2. May use AIM-9 and R.550 IRMs 3. PP may only be used on station 4.	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
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												
<b>Notes:</b> 1. The Aermacchi MB-326L is a trainer with a secondary light attack capability. It is derived from the MB-326K, but reverts to having a second crew member and no internal guns. 2. High transonic drag (HTD).														
<b>VPs:</b> 11/7/4/2		v3 0000000 0000-00-00T00:00:00												

MB-326M										Crew: Pilot and Observer									
										Maneuver 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 — — —									
Power APs/DPs: CL 1/2 DT Fuel AB — — — — M 1.0 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 —																			
															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										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: 4,000 DT : ≥ 6																	
Ammunition: —		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																	
Gunsight: TT+0/HT+2/BT+3																			
Ranging: —																			
AtA/AtG: —																			
Bomb System: Manual		Load Notes: 1. May use 330L FTs. 2. PP may only be used on station 4.																	
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).																			
VPs: 11/7/4/2															v3 0000000 0000-00-00T00:00:00				

## Aermacchi MB-339



The Aermacchi MB-339 is a trainer and light-attack aircraft. It was developed from the MB-326.

### Versions

#### **MB-339A**

The MB-339A was developed from the MB-326K. It gained a new forward fuselage for two crew, with the rear one being elevated to give better visibility, a new tail, and deleted the internal guns. It kept the wing and the 4,000 lbf Viper 632-43 engine. The additional weight of the fuselage modifications reduced the stores capacity to 3,500 lb.

The MB-339A was used by the Italian AMI (one hundred and seven), the Argentine COAN (ten MB-339AA), the Ghanaian Air Force (four), the Malaysian RMAF (thirteen MB-339AN), the Peruvian Air Force (sixteen MB-339AP), and the Nigerian Air Force (twelve MB-339AN), and the UAE Air Force (seventeen).

#### **MB-339C and MB-339CD**

The MB-339C is largely similar to the A, but has updated flight controls and avionics, including a RWR. The CD version also has a

The MB-339C serves with the Italian AMI (thirty MB-339CD), the Eritrean Air Force (six MB-339CE), and the Malaysian RMAF (MB-339CM).

#### **MB-339CB**

The MB-339CB is largely similar to the C, but uses the more powerful 4,440 lbf Viper 680-43 engine.

The MB-339CB served with the RNZAF from 1991 to 2003 and then with the French AA from 2019 for DACT.

### Armament and Stores

The MB-339 can be armed with gun pods (including ones with a 30 mm DEFA cannon and .50 cal machine guns),

rocket pods, bombs, and is wired for AIM-9 Sidewinder and Matra R.550 Magic IRMs. It can use 330L FTs.

In Argentine COAN service, it was typically armed with two gun pods each with a 30 mm DEFA cannon and 120 rounds per gun and then either two LAU-10 RP (each with four Zuni rockets), two Matra-155 RPs (each with twelve 68 mm rockets), or two Mk 81 or Mk 82 BBs. The LAU-10 RPs were favored in the South Atlantic War.

### Combat

Argentine COAN MB-339As saw combat in the 1982 South Atlantic War, flying out of BAM Malvinas (Port Stanley Airport). They were used for armed reconnaissance and close air support. Of the seven deployed to the Islands, one crashed in poor weather, one was shot down by a Blowpipe, two were destroyed on the ground by naval gunfire, one was unable to escape, and two escaped back to the mainland.

Eritrean MB-339Cs saw combat in the 1998-2000 Eritrean–Ethiopian War.

### ADCs

- MB-339A
- MB-339C
- MB-339CD
- MB-339CB

### See Also

- Aermacchi MB-326

### Photo Credit

- MB-339CD: Jim van de Burgt (Public Domain)

MB-339A										Crew: Pilot and Observer				
										Maneuver DPs:				
LR/DR		2.0												
VR		1.0												
Power APs/DPs: ○										Turn DPs:				
CL		1/2		DT	Fuel	CL		1/2		DT				
AB	—		—		—	—	TT	0.5		0.5				
M	1.5		1.0		1.0	2.0	HT	0.5		1.0				
N	0.0		0.0		0.0	1.0	BT	1.0		1.5				
I	1.0		1.0		1.0	0.0	ET	—		—				
SPBR	1.0		1.0		2.0	—								
						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							Climb Capabilities							
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	—	—	—	—	
VH	36–45	2.5 – 5.0		2.5 – 4.5		—	6.0	—	0.5	—	0.5	—	—	
HI	26–35	2.0 – 5.0		2.5 – 5.0		2.5 – 4.5	6.0	—	0.5	—	0.5	—	0.5	
MH	17–25	1.5 – 5.5		2.0 – 5.0		2.0 – 4.5	6.0	—	1.0	—	0.5	—	0.5	
ML	8–16	1.5 – 5.5		1.5 – 5.0		1.5 – 4.5	6.0	—	1.0	—	1.0	—	0.5	
LO	0–7	1.0 – 5.5		1.5 – 5.0		1.5 – 4.5	6.0	—	1.0	—	1.0	—	1.0	
Radar:					—		ECM:		IFF		Weapon Stations Diagram:			
ECCM:					—		RWR:		—					
Arcs:					—		DDS:		—					
Search:					—		DJM:		—					
Track:					—		AJM:		—					
Lock-On:					—		BJM:		—					
Guns:					—		Technology:				Load Point Limits:			
To Hit:					—		None				CL : < 4			
Ammunition:					—						1/2: < 6			
Gunsight:					TT+0/HT+2/BT+3						Weight Limit: 3,500 DT : ≥ 6			
Ranging:					—						Station Limit Allowed Loads			
AtA/AtG:					—						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			
Bomb System:					Manual						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.			
Notes:														
1. The Aermacchi MB-339A is a trainer and light-attack aircraft. It is derived from the MB-326K, but has a new forward cockpit for a second crew member and no internal guns.														
2. High transonic drag (HTD).														

MB-339C										Crew: Pilot and Observer									
										Maneuver 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				
Power APs/DPs: ○																			
	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	—															
Speeds and Ceilings										Climb Capabilities									
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: C														
Arcs: —					DDS: —														
Search: —					DJM: —														
Track: —					AJM: —														
Lock-On: —					BJM: —														
Guns: —					Technology:					Load Point Limits: CL : < 4									
To Hit: —					None					1/2: < 6									
Ammunition: —										Weight Limit: 3,500 DT : ≥ 6									
Gunsight: TT+0/HT+2/BT+3										Station Limit Allowed Loads									
Ranging: —										1 and 6 750 BB BG RP RK GP EP IRM									
AtA/AtG: —										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									
Bomb System: Computed										Load Notes:									
Notes: 1. The Aermacchi MB-339C is a trainer and light-attack aircraft. It is derived from the MB-339A, but has updated avionics and flight controls. 2. High transonic drag (HTD).										1. May use 330L FTs.									
										2. May use AIM-9 and R.550 IRMs									
										3. PP may only be used on station 4.									
VPs: 11/7/4/2										v3 0000000 0000-00-00T00:00:00									

MB-339CD										Crew: Pilot and Observer									
										Maneuver DPs:									
LR/DR		2.0																	
VR		1.0																	
Power APs/DPs: ○										Turn DPs:									
CL		1/2		DT		Fuel		CL		1/2		DT							
AB		—		—		—		TT		0.5		0.5							
M		1.5		1.0		2.0		HT		0.5		1.0							
N		0.0		0.0		1.0		BT		1.0		1.5							
I		1.0		1.0		0.0		ET		—		—							
SPBR		1.0		1.0		—													
					Cruise Spd. CL: 4.5    Restr. Arcs: 60–														
					Climb Spd.: 3.5    Blind Arcs: 30–														
					Visibility: 5    Internal Fuel: 120														
					Size: +0    AtA Refuel: Yes														
					Vulnerability: –2    Ejection Seat: Std														
Speeds and Ceilings										Climb Capabilities									
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: C														
Arcs: —					DDS: —														
Search: —					DJM: —														
Track: —					AJM: —														
Lock-On: —					BJM: —														
Guns: —					Technology:					Load Point Limits: CL : < 4									
To Hit: —					None					1/2: < 6									
Ammunition: —										Weight Limit: 3,500 DT : ≥ 6									
Gunsight: TT+0/HT+2/BT+3										Station Limit Allowed Loads									
Ranging: —										1 and 6 750 BB BG RP RK GP EP IRM									
AtA/AtG: —										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									
Bomb System: Computed										Load Notes:									
Notes: 1. The Aermacchi MB-339CD is a trainer and light-attack aircraft. It is derived from the MB-339C, but is equipped with a fixed refueling probe. 2. High transonic drag (HTD).										1. May use 330L FTs.									
										2. May use AIM-9 and R.550 IRMs									
										3. PP may only be used on station 4.									
VPs: 11/7/4/2										v3 0000000 0000-00-00T00:00:00									

MB-339CB										Crew: Pilot and Observer									
										Maneuver DPs:									
LR/DR		2.0																	
VR		1.0																	
Power APs/DPs: ○										Turn DPs:									
		CL	1/2	DT	Fuel			CL	1/2	DT									
AB	—		—		—	—			TT	0.5	0.5	0.5							
M	1.5		1.5		1.0	2.0			HT	0.5	1.0	1.0							
N	0.0		0.0		0.0	1.0			BT	1.0	1.0	1.5							
I	1.0		1.0		1.0	0.0			ET	—	—	—							
SPBR	1.0		1.0		2.0	—													
						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								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:			C									
Arcs:					—		DDS:			—									
Search:					—		DJM:			—									
Track:					—		AJM:			—									
Lock-On:					—		BJM:			—									
Guns:					—		Technology:			Load Point Limits:					CL : < 4				
To Hit:					—		None			Weight Limit:					3,500		DT : ≥ 6		
Ammunition:					—					Station					Limit		Allowed Loads		
Gunsight:					TT+0/HT+2/BT+3					1 and 6					750		BB BG RP RK GP EP IRM		
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:					Computed					Load Notes:									
Notes:													1. May use 330L FTs.						
1. The Aermacchi MB-339CB is a trainer and light-attack aircraft. It is derived from the MB-339C, but has a more powerful Viper 680-43 engine.													2. May use AIM-9 and R.550 IRMs						
2. High transonic drag (HTD).													3. PP may only be used on station 4.						
VPs: 12/8/4/2													v3 0000000 0000-00-00T00:00:00						