

Henschel Hs126B-1

Country: Germany

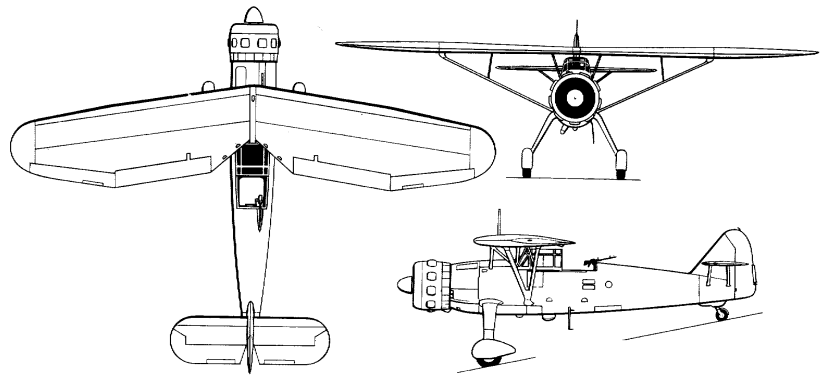
Service Entry Date: July, 1939

A/C Type: Tactical Recon aircraft
 Engine(s): 1x Bramo 323A-1 radial
 Eng. Pwr: 850-hp, air-cooled
 A/C Crew: Pilot, Gunner

Maximum Speed: 221 mph at 9,840 ft.
 Maximum Ceiling: 27,230 / 22,000 ft.
 Defense factor: 5 Size Modifier: +0
 Damage Factor: 7/11 Endurance: 112
 Cockpit View: Good Blind Area: 6-line low
 Protection: Cockpit +0 Fuel +0 Engine +0

Climb Dece/ Dive Accel: 3.0 / 1.0
 Weight and Load Limit: 110 lbs / 2

Wpn Stations	Weight	Allowed Loads
1	110	1x 50kg bomb or 5x 10kg bombs



Class: L

Victory Points: 3-5

AIRCRAFT PERFORMANCE CHART

Altitude Levels	Bands	Minimum Speed	Maximum Speed	Maximum Dive Spd	Min TT(2)	Min HT(3)	Min BT(4)	Min ET(5)	Altitude Levels	Bands	Average Rate of Climb
43+	UH	--	--	--	--	--	--	--	43+	UH	--
37-42	EH	--	--	--	--	--	--	--	37-42	EH	--
31-36	VH	--	--	--	--	--	--	--	31-36	VH	--
25-30	HI	2.5	3.0	6.5	4.0	5.5	6.5	7.5	25-30	HI	400
19-24	MH	2.0	3.5	6.5	3.5	5.0	6.0	7.0	19-24	MH	1,000
13-18	ML	1.5	4.0	7.0	3.0	4.0	5.0	6.0	13-18	ML	1,500
7-12	LO	1.5	4.5	7.0	2.5	3.5	4.5	5.5	7-12	LO	1,800
1-6	VL	1.5	4.0	6.0	2.5	3.0	4.0	5.0	1-6	VL	1,900

FIRE POWER CHART

Guns	Type Weapons	Ammo	Criticals
W1	1x 7.62mm MG17 mg	7	4
W2	1x 7.62mm MG17 mg	7	4
DG	1x 7.62mm MG15 mg	5x3	4

GUN ATTACK FACTORS

Range	N1	N2	DG	Total
0	6	6	4	12
1	4	4	3	8
2	3	3	2	6
3	2	2	1	4
4	1	1	1	2
5	1	1	1	2
6	--	--	--	--
7	--	--	--	--

WEAPON STATION LOCATION

POWER VERSUS SPEED CHART

Levels	Bands	1.0 - 4.5	5.0 - 7.5	8.0 - 9.5	10.0+	Band
43+	UH	--	--	--	--	UH
37-42	EH	--	--	--	--	EH
31-36	VH	--	--	--	--	VH
25-30	HI	1	--	--	--	HI
19-24	MH	2	--	--	--	MH
13-18	ML	3	--	--	--	ML
7-12	LO	3	--	--	--	LO
1-6	VL	3	--	--	--	VL
Banking FPs		2	3	5	8	
Side Slip FPs		2	4	6	9	

NOTES AND VARIANTS

Defensive Gun Coverage

DG: Rear +30, level to high, 6:00 = high only

Henschel Hs126 : Parasol-wing recon and army cooperation aircraft.

Hs126A-1 : Available August 1938. Some served in Spain (5 transferred to Spanish AF). 16 A-1s served Greece with the HAF 1939-1941. About 200 built..

Hs126B-1 : Standard service aircraft 1939-1942. Served over Poland, France, Balkans, Greece, North Africa and Russia. By late 1942, it was replaced in frontline service by FW189 Uhu. By 1944, it was reduced to anti-partisan patrols and glider towing. Some pressed into service 1944 as night ground attack aircraft.

Blohm & Voss Bv 141B-1

Country: Germany

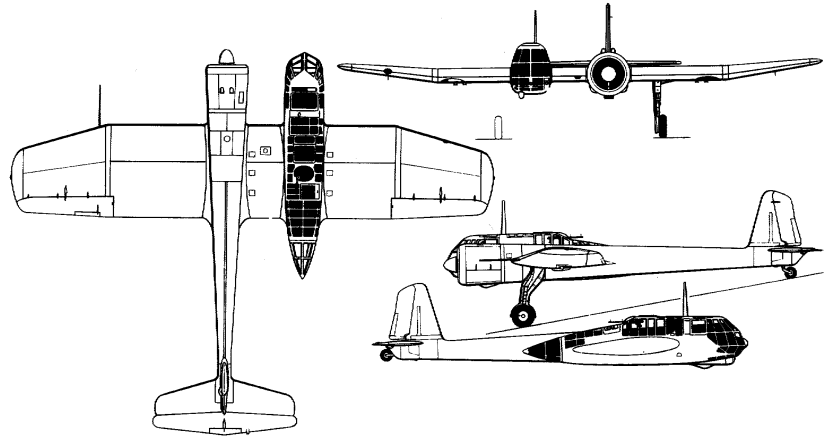
Service Entry Date: Mar 1942

A/C Type: Asymmetric Recon aircraft
 Engine(s): BMW 801A 14-cylinder radial
 Eng. Pwr: 1560 hp, air-cooled
 A/C Crew: Pilot, Gunner, Observer

Maximum Speed: 272 mph at 16,400 ft.
 Maximum Ceiling: 32,700 / 28,000 / 20,500 ft
 Defense factor: 5 Size Modifier: +0
 Damage Factor: 8/12 Endurance: 326
 Cockpit View: Good Blind Area: None
 Protection: Cockpit +0 Fuel +1 Engine +1

Climb Decel/ Dive Accel: 3.0 / 1.0
 Weight and Load Limit: 450 / 1-3

Wpn Stations	Weight	Allowed Loads
1,2,3,4	110	1x 50Kg bombs



Class: L

Victory Points: 4-6

AIRCRAFT PERFORMANCE CHART

Altitude Levels	Bands	Minimum Speed	Maximum Speed	Maximum Dive Spd	Min TT(3)	Min HT(4)	Min BT(5)	Min ET(6)	Altitude Levels	Bands	Average Rate of Climb
43+	UH	--	--	--	--	--	--	--	43+	UH	--
37-42	EH	--	--	--	--	--	--	--	37-42	EH	--
31-36	VH	3.5	4.0	8.0	5.5	7.0	8.5	--	31-36	VH	300
25-30	HI	3.5	4.5	8.5	5.0	6.5	8.0	9.0	25-30	HI	600
19-24	MH	3.0	5.0	8.5	4.5	6.0	7.5	8.5	19-24	MH	800
13-18	ML	2.5	5.5	9.0	4.0	5.5	7.0	8.0	13-18	ML	1,000
7-12	LO	2.5	5.0	8.0	3.5	5.0	6.5	7.5	7-12	LO	1,200
1-6	VL	2.5	4.5	7.0	3.5	5.0	6.0	7.0	1-6	VL	1,200

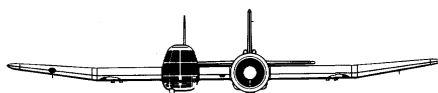
FIRE POWER CHART

Guns	Type Weapons	Ammo	Criticals
W1	1x 7.62mm MG17 mg	7	4
W2	1x 7.62mm MG17 mg	7	4
DG	1x 7.62mm MG15 mg	5x3	4
TG	1x 7.62mm MG15 mg	5x3	4

GUN ATTACK FACTORS

Range	W1	W2	DG	TG	Total
0	6	6	4	4	12
1	4	4	3	3	8
2	3	3	2	2	6
3	2	2	1	1	4
4	1	1	1	1	2
5	1	1	1	1	2
6	--	--	--	--	--
7	--	--	--	--	--

WEAPON STATION LOCATION



1,2

3,4

POWER VERSUS SPEED CHART

Levels	Bands	1.0 - 4.5	5.0 - 7.5	8.0 - 9.5	10.0+	Band
43+	UH	--	--	--	--	UH
37-42	EH	--	--	--	--	EH
31-36	VH	1	--	--	--	VH
25-30	HI	1	--	--	--	HI
19-24	MH	2	--	--	--	MH
13-18	ML	3	--	--	--	ML
7-12	LO	5	--	--	--	LO
1-6	VL	5	--	--	--	VL
Banking FPs		3	4	6	9	
Side Slip FPs		4	5	7	10	

NOTES AND VARIANTS

Defensive Gun Coverage

DG: Rear, high

TG: Rear, level but no left level

Blohm & Voss Bv141 : First successful asymmetric aircraft. While not a military success, it was an interesting research

breakthrough. Bv141 went through a lengthy process before production approval, but by then, most of B&V's factories were tied to different projects.

Bv141A-0 : Avail Nov. 1939. First model was smaller and underpowered - but handled much better: 960 hp BMW 132 N 9-cyl radial. -.5 to min & max speeds; -200 roc; max speed 248 mph; Ceiling = 29, 500 ft. Turn decel = 2-3-4-5; -1 to all turn speeds; -1 for Bank and Slip requirement. End = 233. 8 built.

Bv141B-0 : Available March, 1942. Few used on eastern front. 5 built.

Focke-Wulf FW189A Uhu

Country: Germany

Service Entry Date: Nov 1940

A/C Type: Recon & ground support bomber
 Engine(s): 2 Argus As410A-1radial
 Eng. Pwr: 2x 465-hp, air-cooled
 A/C Crew: Pilot, Observer, Gunner

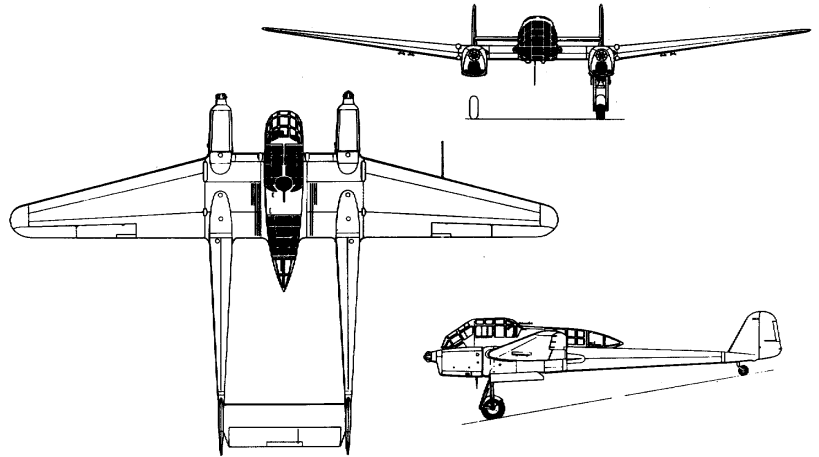
Maximum Speed: 214 mph @ 8,200 ft
 Maximum Ceiling: 22,966 ft

Defense factor: 5 Size Modifier: +0
 Damage Factor: 9/13 Endurance: 178
 Cockpit View: Good Blind Area: None

Protection: Cockpit +0 Fuel +1 Engine+1

Climb Dece/ Dive Accel: 3.0 / 1.0
 Weight and Load Limit: 450 / 1-2

Wpn Stations	Weight	Allowed Loads
1,2	220	2x 50 kg bombs



Class: L

Victory Points: 4-6

AIRCRAFT PERFORMANCE CHART

Altitude Levels	Bands	Minimum Speed	Maximum Speed	Maximum Dive Spd	Min TT(3)	Min HT(4)	Min BT(5)	Min ET(6)	Altitude Levels	Bands	Average Rate of Climb
43+	UH	--	--	--	--	--	--	--	43+	UH	--
37-42	EH	--	--	--	--	--	--	--	37-42	EH	--
31-36	VH	--	--	--	--	--	--	--	31-36	VH	--
25-30	HI	--	--	--	--	--	--	--	25-30	HI	--
19-24	MH	2.5	3.5	6.5	4.0	5.5	6.5	7.5	19-24	MH	600
13-18	ML	2.5	4.0	7.0	3.5	5.0	6.0	7.0	13-18	ML	800
7-12	LO	2.0	4.0	6.5	3.5	4.5	5.5	6.5	7-12	LO	1,000
1-6	VL	2.0	4.0	6.0	3.0	4.0	5.0	6.5	1-6	VL	1,000

FIRE POWER CHART

Guns	Type Weapons	Ammo	Criticals
W1	1x 7.62mm MG17 mg	7	4
W2	1x 7.62mm MG17 mg	7	4
W3	1x 20mm MG-FF cannon	4	2
W4	1x 20mm MG-FF cannon	4	2
DG	1x 7.62mm MG15 mg	5x3	4
TG	1x 7.62mm MG15 mg	5x3	4

GUN ATTACK FACTORS

Rng	W1	W2	W3	W4	DG	TG	Total
0	6	6	11	11	4	4	12/22
1	4	4	9	9	3	3	8/18
2	3	3	6	6	2	2	6/12
3	2	2	4	4	1	1	4/8
4	1	1	3	3	1	1	2/6
5	1	1	2	2	1	1	2/4
6	--	--	--	--	--	--	--
7	--	--	--	--	--	--	--

WEAPON STATION LOCATION

1

2

POWER VERSUS SPEED CHART

Levels	Bands	(per engine)				Band
		1.0 - 4.5	5.0 - 7.5	8.0 - 9.5	10.0+	
43+	UH	--	--	--	--	UH
37-42	EH	--	--	--	--	EH
31-36	VH	--	--	--	--	VH
25-30	HI	--	--	--	--	HI
19-24	MH	1.0	--	--	--	MH
13-18	ML	1.5	--	--	--	ML
7-12	LO	2.0	--	--	--	LO
1-6	VL	2.0	--	--	--	VL
Banking FPs		3	4	6	8	
Side Slip FPs		4	5	7	9	

NOTES AND VARIANTS

FW189 Uhu (Owl): Twin-boom, well-glazed, FW189 slowly replaced the Hs126 in front line service on Eastern front between late 1940 and 1942. As the Soviet fighters improved, its effectiveness shrank and it was reassigned to night ground attack, aerial ambulance and other such missions. A few served in North Africa in a mixed staffel with Bf110s. In 1942, 14 FW189A-1s given the Slovakian Air Force. 850 built (mostly A-1). A-1 had W1&W2 only.

FW189A-2: Available September, 1942. MG15s replaced by MG81Z mounts. In late 1942, about a dozen FW189 A-2s given to the Hungarian 3/1 Short Range Recon sqdn, which was deployed in Russia March 1943 near Kharkov.

FW189A-4: Available Jan 43. Ground support version. 20mm MG-FF cannon vice MG17s in wing roots (W3&W4, total right of slash); additional armor: Engines +1 Fuel +1. (few built; 9+ on a D10.)

Heinkel He59B-2

Country: Germany

Service Entry Date: 1932

A/C Type: Recon Seaplane
 Engine(s): 2 BMW VI 6,32 V-12 engines
 Eng. Pwr: 2x 660-hp, liquid-cool
 A/C Crew: Pilot, Radio op/Gunner, 2 Gunners
 Passenger space

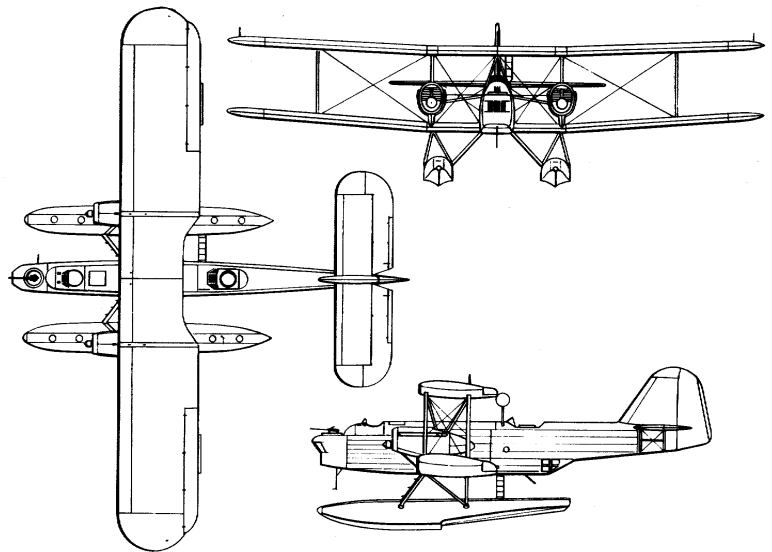
Maximum Speed: 150 mph @ Sea Level
 Maximum Ceiling: 11,480 / 8,000 / 5,000 ft

Defense factor: 6 Size Modifier: +1
 Damage Factor: 11/17 Endurance: 310
 Cockpit View: Good Blind Area: None

Protection: Cockpit +0 Fuel +0 Engine +0

Climb Dece/ Dive Accel: 2.0 / 1.0
 Weight and Load Limit: 2200 / 3-6

Wpn Stations	Weight	Allowed Loads
1	2200	Torpedo or mines



Class: M

Victory Points: 4-6

AIRCRAFT PERFORMANCE CHART

Altitude Levels	Bands	Minimum Speed	Maximum Speed	Maximum Dive Spd	Min TT(2)	Min HT(3)	Min BT(-)	Min ET(-)	Altitude Levels	Bands	Average Rate of Climb
43+	UH	--	--	--	--	--	--	--	43+	UH	--
37-42	EH	--	--	--	--	--	--	--	37-42	EH	--
31-36	VH	--	--	--	--	--	--	--	31-36	VH	--
25-30	HI	--	--	--	--	--	--	--	25-30	HI	--
19-24	MH	--	--	--	--	--	--	--	19-24	MH	--
13-18	ML	--	--	--	--	--	--	--	13-18	ML	--
7-12	LO	1.5	3.0	5.0	2.5	3.0	--	--	7-12	LO	700
1-6	VL	1.5	3.0	4.5	2.0	2.5	--	--	1-6	VL	700

FIRE POWER CHART

Guns	Type Weapons	Ammo	Criticals
FG	1x 7.62mm MG17	mg 5x3	4
TG	1x 7.62mm MG17	mg 5x3	4
VG	1x 7.62mm MG17	mg 5x3	4

GUN ATTACK FACTORS

Range	FG	TG	VG
0	4	4	3
1	3	3	2
2	2	2	1
3	1	1	1
4	1	1	1
5	1	1	1
6	--	--	--
7	--	--	--

WEAPON STATION LOCATION

POWER VERSUS SPEED CHART

Levels	Bands	(per engine)				Band
		1.0 - 4.5	5.0 - 7.5	8.0 - 9.5	10.0+	
43+	UH	--	--	--	--	UH
37-42	EH	--	--	--	--	EH
31-36	VH	--	--	--	--	VH
25-30	HI	--	--	--	--	HI
19-24	MH	--	--	--	--	MH
13-18	ML	--	--	--	--	ML
7-12	LO	0.5	--	--	--	LO
1-6	VL	0.5	--	--	--	VL
Banking FPs		3	4	--	--	
Side Slip FPs		4	5	--	--	

NOTES AND VARIANTS

All He59 : Large sea biplane. Slow and ungainly, it patrolled and bombed during the Spanish Civil War. It patrolled, performed SAR, and laid mines in the North and Baltic Seas. 10 He59s landed 60 men in the River Maas to capture Rotterdam bridge in May, 1940. Biplane. Fixed gear (floats). Open cockpit.

He59B-2 : Main production version.

He59B-3 : Long-range patrol version. Delete VG. End = 280.

He59C-2 : Unarmed SAR aircraft. Delete all weapons. Add boarding ladder.