

# Fokker C.X

Country: Finland

Service Entry Date: January 1937

A/C Type: Army Recon / Close Support Plane  
 Engine(s): Bristol Pegasus XXI, (No F.I.)  
 Eng. Pwr: 650 - 830 HP Radial Air Cooled  
 A/C Crew: Pilot, Observer/Gunner

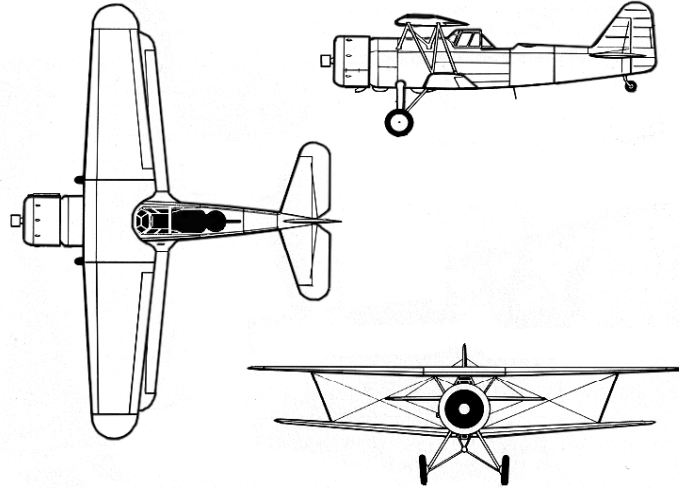
Max Speed: 209 MPH at 6,100 Feet  
 Max Ceiling: 26,200 / 21,200 / 15,000 Feet

Defense Factor: 5      Size Modifier: + 0  
 Damage Factor: 5 / 8      Endurance: 200  
 Cockpit View: Fair      Blind Area: 6:00 line low

Protection: Cockpit +0      Fuel +0      Engine +0

Climb Decel / Dive Accel: 2.0 / 1.0  
 Weight and Load Limit: 1,100 / 2 - 5

Wpn. Stations	Weight	Allowed Loads
1, 6	110	Bombs, Flares
2, 3, 4, 5	220	Bombs



Class: L

Victory Points: 3 - 5

## AIRCRAFT PERFORMANCE CHART

Altitude Levels	Band	Minimum Speed	Maximum Speed	Maximum Dive Spd.	Min. TT (1)	Min. HT (1)	Min. BT (2)	Min. ET (2)	Altitude Band	Levels	Average Rate Of Climb
43+	UH	—	—	—	—	—	—	—	UH	43+	—
37 - 42	EH	—	—	—	—	—	—	—	EH	37 - 42	—
31 - 36	VH	—	—	—	—	—	—	—	VH	31 - 36	—
25 - 30	HI	2.0	2.5	6.0	2.5	3.5	4.5	5.0	HI	25 - 30	300
19 - 24	MH	1.5	3.0	6.0	2.5	3.0	4.0	4.5	MH	19 - 24	600
13 - 18	ML	1.5	3.5	6.0	2.0	3.0	3.5	4.0	ML	13 - 18	900
7 - 12	LO	1.5	4.0	5.5	2.0	2.5	3.5	4.0	LO	7 - 12	1,400
1 - 6	VL	1.0	4.0	5.0	1.5	2.5	3.0	3.5	VL	1 - 6	2,000

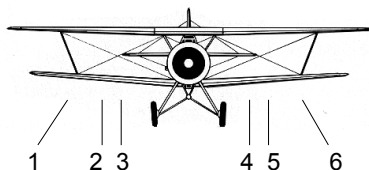
## FIRE POWER CHART

Gun	Type Weapons	Ammo	Criticals
N1	One 7.7mm Browning	14	4
N2	One 7.7mm Browning	14	4
DG	One 7.62mm L-33	6 x 3	4

## GUN ATTACK FACTORS

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

## WEAPON STATIONS



## POWER VERSUS SPEED CHART

Levels	Band	1.0 - 4.5	5.0 - 7.5	8.0 - 9.5	10.0 +	Band
37 - 42	EH	—	—	—	—	EH
31 - 36	VH	—	—	—	—	VH
25 - 30	HI	0.5	—	—	—	HI
19 - 24	MH	1.0	—	—	—	MH
13 - 18	ML	2.0	—	—	—	ML
7 - 12	LO	2.5	—	—	—	LO
1 - 6	VL	3.0	—	—	—	VL
Banking FPs:		1	3	6	—	
Side Slip FPs:		2	4	6	—	

## NOTES & VARIANTS

**Fokker C.X:** Known simply as the "Franz-Kalle" (F-K), Finland bought four Fokker C.Xs from Holland in 1936 and license built another 30 prior to the *Winter War*. Twenty-nine were still in service at the start of the war and almost half of them were lost in action, a testimony to their constant and active use. The survivors continued to serve into 1944. Fixed landing gear. May be equipped with skis for winter operations from snow covered fields. No Flaps. Ring and bead gunsight.

**Loads:** Stations 1 and 6 can each carry two 55 lb. bombs or two parachute flares (may be dropped singly). Stations 2, 3, 4, and 5 can carry one bomb of up to 220 lbs., or each pair of stations can carry one larger bomb of up to 440 lbs. Parachute supply containers of similar size can be carried in place of bombs.

## DEFENSIVE GUN ARCS

**DG:** 03 - 09, 6+ to 6- except 6:00 line = 6+ to AC.

# Fokker D.XXI (*Wasp*)

Country: Finland

Service Entry Date: April 1941

A/C Type: Single Engine Day Fighter  
 Engine(s): Pratt & Whitney R-1535, (No F.I.)  
 Eng. Pwr: 750 - 825 HP, Radial Air Cooled  
 A/C Crew: Pilot

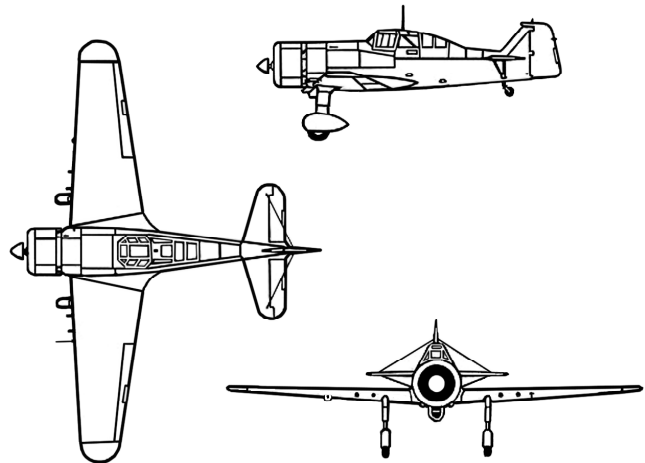
Maximum Speed: 234 MPH at 6,600 Feet  
 Maximum Ceiling: 31,500 / NA / NA Feet

Defense Factor: 5      Size Modifier: + 0  
 Damage Factor: 6 / 9      Endurance: 140  
 Cockpit View: Fair      Blind Area: Rear-Low

Protection: Cockpit +1      Fuel +1      Engine +0

Climb Decel / Dive Accel: 3.0 / 1.0  
 Weight and Load Limit: NA

Wpn. Stations	Weight	Allowed Loads
None	NA	NA



Class: F

Victory Points: 3 - 6

## AIRCRAFT PERFORMANCE CHART

Altitude Levels	Band	Minimum Speed	Maximum Speed	Maximum Dive Spd.	Min. TT (2)	Min. HT (3)	Min. BT (4)	Min. ET (5)	Altitude Band	Levels	Average Rate Of Climb
43+	UH	—	—	—	—	—	—	—	UH	43+	—
37 - 42	EH	—	—	—	—	—	—	—	EH	37 - 42	—
31 - 36	VH	2.5	3.0	10.0	4.0	5.5	6.5	7.5	VH	31 - 36	200
25 - 30	HI	2.5	3.5	10.5	3.5	5.0	6.0	7.0	HI	25 - 30	400
19 - 24	MH	2.0	4.0	10.5	3.0	4.5	5.5	6.0	MH	19 - 24	700
13 - 18	ML	2.0	4.0	10.5	3.0	4.0	5.0	5.5	ML	13 - 18	1,100
7 - 12	LO	2.0	4.5	9.5	2.5	3.5	4.5	5.0	LO	7 - 12	1,700
1 - 6	VL	1.5	4.5	8.5	2.5	3.5	4.0	4.5	VL	1 - 6	2,000

## FIRE POWER CHART

Guns	Type Weapons	Ammo	Criticals
W1-L	One 7.7mm FN Br.	7	4
W2-L	One 7.7mm FN Br.	7	4
W3-R	One 7.7mm FN Br.	7	4
W4-R	One 7.7mm FN Br.	7	4

## GUN ATTACK FACTORS

Range	W1	W2	W3	W4	(Total)
0	7	7	7	7	28
1	5	5	5	5	20
2	3	3	3	3	12
3	2	2	2	2	8
4	1.5	1.5	1.5	1.5	6
5	1	1	1	1	4
6	—	—	—	—	—
7	—	—	—	—	—

## WEAPON STATIONS



## POWER VERSUS SPEED CHART

Levels	Band	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	1.0	—	—	—	VH
25 - 30	HI	2.0	—	—	—	HI
19 - 24	MH	3.0	—	—	—	MH
13 - 18	ML	4.0	—	—	—	ML
7 - 12	LO	6.0	—	—	—	LO
1 - 6	VL	6.0	—	—	—	VL
Banking FPs:		1	2	3	5	
Side Slip FPs:		2	3	4	6	

## NOTES & VARIANTS

**Fokker D.XXI (series IV & V):** These were the last 55 license built D.XXIs which used surplus Pratt & Whitney "Wasp" engines. Larger and heavier than the original Mercury engine, the American engines left no room for nose guns. Instead, all guns were wing mounted. The airframe and tail were also strengthened and rear windows were added to improve visibility. Being heavier, performance was less than for earlier models. The type was not popular with its pilots and served mainly in second line duties. Flaps have only up or landing settings. Fixed landing gear (snow skis in winter).

**High "G" Stalls:** Prone to turn stalls at high G force rates. If any ET rate used, or BT rate with > 60° of facing or > two steps of transition used, roll D10 at end of move, before combat. A roll of 1 = *Turn Stall*. No shots allowed, do *Turn Stall* move next turn. Veteran pilots and gifted pilots of any quality ignore this rule.

# Finnish Bf 109G-2 "Gustav"

A/C Type: Standard Day Fighter  
 Engine(s): One Daimler-Benz DB 605A  
 Eng. Pwr: 1355-1475 HP, Liquid Cooled  
 A/C Crew: Pilot

Max Speed: 399 MPH at 19,700 Feet  
 Max Ceiling: 39,400 / 31,500 / NA Feet

Defense Factor: 5      Size Modifier: +0  
 Damage Factor: 8 / 12      Endurance: 65  
 Cockpit View: Poor      Blind Area: Rear

Protection: Cockpit +2      Fuel +1      Engine +0

Climb Decel / Dive Accel: 3.0 / 1.0

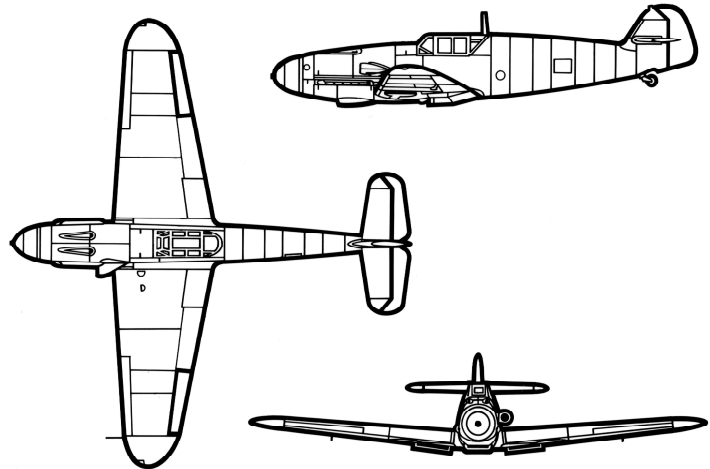
Weight and Load Limit: 550 / 2 - NA

Wpn. Stations      Weight      Allowed Loads

1	550	Fuel Tank
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Country: Finland (Germany)

Service Entry Date: June 1942



Class: F

Victory Points: 5 - 9

## AIRCRAFT PERFORMANCE CHART

Altitude Levels	Minimum Band	Maximum Speed	Maximum Speed	Min. Dive Spd.	Min. TT (4)	Min. HT (5)	Min. BT (6)	Min. ET (7)	Altitude Band	Average Levels	Rate Of Climb
43+	UH	—	—	—	—	—	—	—	UH	43+	—
37 - 42	EH	4.0	6.5	10.0	5.5	7.5	9.0	—	EH	37 - 42	800
31 - 36	VH	3.5	7.0	10.5	4.5	7.0	8.0	—	VH	31 - 36	1,500
25 - 30	HI	3.0	7.5	10.5	4.0	6.0	7.0	8.5	HI	25 - 30	2,200
19 - 24	MH	2.5	8.0	11.0	4.0	5.5	6.5	7.5	MH	19 - 24	3,000
13 - 18	ML	2.5	7.5	11.0	3.5	5.0	6.0	7.0	ML	13 - 18	3,600
7 - 12	LO	2.5	7.0	10.5	3.0	4.5	5.5	6.5	LO	7 - 12	4,300
1 - 6	VL	2.0	7.0	9.5	3.0	4.0	5.0	5.5	VL	1 - 6	4,500

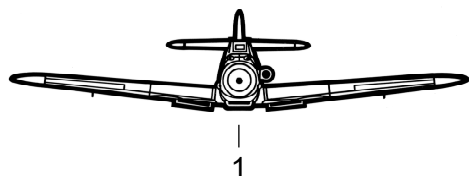
## FIRE POWER CHART

Guns	Type Weapons	Ammo	Criticals
N1	One 7.9mm MG-17	15	4
N2	One 7.9mm MG-17	15	4
N3	One 20mm MG-151	6	2

## GUN ATTACK FACTORS

Range	N1	N2	N3	(Total)
0	6	6	26	38
1	4	4	20	28
2	3	3	13	19
3	2	2	9	13
4	1	1	6	8
5	1	1	4	6
6	—	—	3	3
7	—	—	—	—

## WEAPON STATIONS



## POWER VERSUS SPEED CHART

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

## NOTES & VARIANTS

**Finnish Bf 109G-2:** Germany sold or supplied over 160 G-2s and G-6s to Finland during 1943 and 1944. The G-2 fighters were meticulously maintained by the *FAF* and all unnecessary items were removed. As a result, they were lighter than German G-2s and had slightly better performance. The option to add station 1 for a drop tank was included but seldom fitted. To conserve engine life the emergency power option was disabled. Hard to land (+10LH to landing attrition rolls). Slatted wings.

**Notes:** Finnish Bf 109Gs earned a 13-1 kill ratio. Below is a summary of Finnish Bf 109G claims, including those made by the later G-6 models:

- LLV34 (Mar. 43) Claimed 345 kills for 18 combat losses, 12 operational losses.
- LLV30 (Feb. 44) Claimed 3 kills for 2 combat losses (only had eight 109s).
- LLV24 (Apr. 44) Claimed 304 kills for 14 total losses.
- LLV28 (Jul. 44) Claimed 15 kills for 0 combat losses, 13 operational losses.