

Aichi B7A2 Ryusei

Country: japan (IJN)

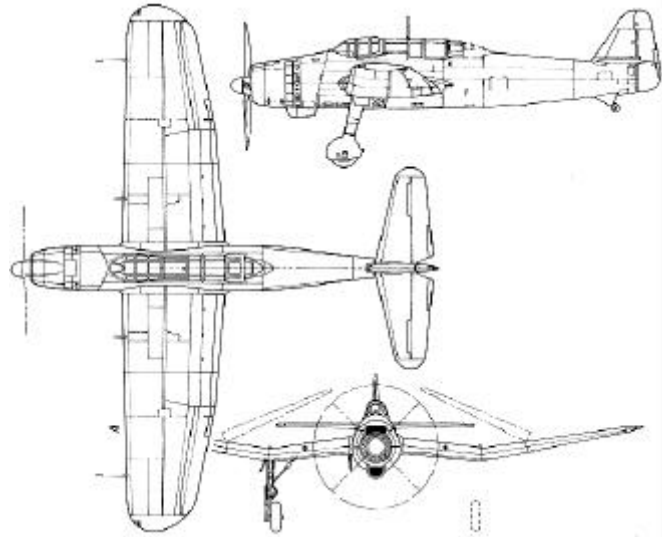
Service Entry Date: September, 1944

A/C Type: Carrier-borne Torpedo bomber
 Engine(s): Nakajima NK9H-S Homare 23 rad.
 Eng. Pwr: 1670-hp, air-cooled
 A/C Crew: Pilot

Maximum Speed: 346 mph at 21,491 ft.
 Maximum Ceiling: 36,910 /31,000 /21,000 ft.
 Defense factor: 5 Size Modifier: +0
 Damage Factor: 10/15 Endurance: 160
 Cockpit View: Good Blind Area: Rear
 Protection: Cockpit +2 Fuel +1 Engine +0

Climb Dece/ Dive Accel: 3.0 / 1.0
 Weight and Load Limit: 1760 lbs / 4-6

Wpn Stations	Weight	Allowed Loads
1	1760	1 torpedo or
2 (bombbay)	1100	2x 250-kg or bombs



Class: LD

Victory Points: 7-14

AIRCRAFT PERFORMANCE CHART

Altitude Levels	Bands	Minimum Speed	Maximum Speed	Maximum Dive Spd	Min TT(4)	Min HT(5)	Min BT(6)	Min ET(7)	Altitude Levels	Bands	Average Rate of Climb
43+	UH	--	--	--	--	--	--	--	43+	UH	--
37-42	EH	--	--	--	--	--	--	--	37-42	EH	--
31-36	VH	3.0	6.0	10.0	5.0	7.0	8.5	9.5	31-36	VH	600
25-30	HI	2.5	6.5	10.5	5.0	6.5	8.0	9.0	25-30	HI	1,000
19-24	MH	2.5	7.0	10.5	4.5	6.5	7.5	8.5	19-24	MH	1,400
13-18	ML	2.0	6.5	10.0	4.5	6.0	7.0	8.0	13-18	ML	1,700
7-12	LO	2.0	6.5	9.5	4.0	5.5	6.5	7.5	7-12	LO	1,900
1-6	VL	2.0	6.0	8.5	2.5	3.5	4.5	5.5	1-6	VL	2,100

FIRE POWER CHART

Guns	Type Weapons	Ammo	Criticals
N1	1x 20mm Type 99-2 can	8	2
N2	1x 20mm Type 99-2 can	8	2
DG1	1x 7.92mm Type 1 MG		4
DG2	1x 13.2mm Type 3 MG		3

GUN ATTACK FACTORS

Range	N1	N2	DG1	DG2	Total
0	19	19	4	3	38
1	15	15	3	2	30
2	11	11	2	2	22
3	7	7	2	1	14
4	4	4	1	1	8
5	3	3	1	1	6
6	--	--	1	--	--
7	--	--	--	--	--

WEAPON STATION LOCATION



1,2

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	3	1	--	--	VH
25-30	HI	4	1	--	--	HI
19-24	MH	5	3	--	--	MH
13-18	ML	6	4	--	--	ML
7-12	LO	6	4	--	--	LO
1-6	VL	6	4	--	--	VL
Banking FPs		3	4	5	7	
Side Slip FPs		4	5	6	8	

NOTES AND VARIANTS

Aichi B7A Ryusei: This carrier-borne attack bomber was designed to replace both the B6N torpedo bomber and the D4Y dive-bomber; it could perform both missions. It was one of the fastest light bombers of the war, but became available too late to be of much consequence. By the time it entered production, Japan no longer operated carriers. Those that were produced were used from shore bases. Code-named "Grace" by US Naval intelligence. Dive brakes. 105 built.

DG: Late production models carried DG2 vice DG1 (1-3 on 1D10).

Kyushu J7W1 Shinden

Country: Japan (IJN)

Service Entry Date: Aug 1945

A/C Type: Interceptor
 Engine(s): 1 Mitsu Ha-43 (MK9D) 18 cyl radial
 Eng. Pwr: 2000-2130 hp, air-cooled
 A/C Crew: Pilot

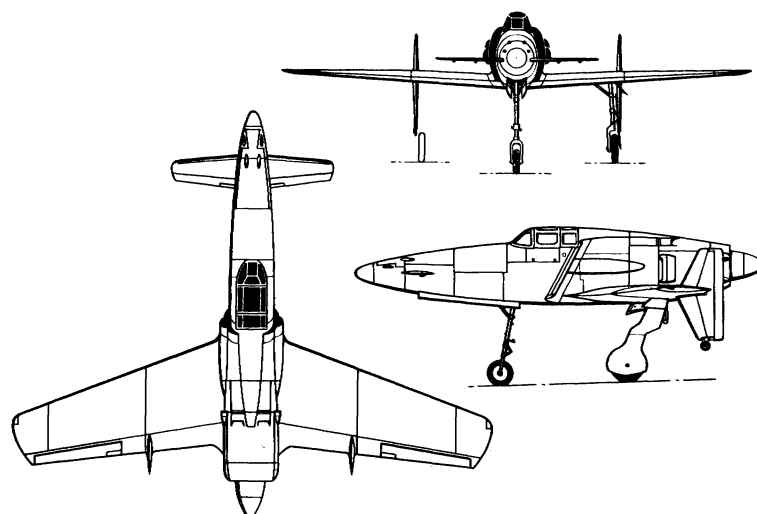
Maximum Speed: 458 mph @ 28,544 ft
 Maximum Ceiling: 39,370 ft
 Defense factor: 5 Size Modifier: +0
 Damage Factor: 9/13 Endurance: 75
 Cockpit View: Fair Blind Area: Rear

Protection: Cockpit +0 Engines +0 Fuel +0

Climb Dece/ Dive Accel: 3.0 / 1.5*

Weight and Load Limit: 265 / 1-2

Wpn Stations	Weight	Allowed Loads
1,2,3,4	132 lbs	1 bomb



Class: F

Victory Points: 7-13

AIRCRAFT PERFORMANCE CHART

Altitude Levels	Bands	Minimum Speed	Maximum Speed	Maximum Dive Spd	Min TT(5)	Min HT(6)	Min BT(7)	Min ET(8)	Altitude Levels	Bands	Average Rate of Climb
43+	UH	--	--	--	--	--	--	--	43+	UH	--
37-42	EH	4.0	7.5	11.5	6.0	8.0	10.0	12.0	37-42	EH	500
31-36	VH	3.5	8.5	12.0	5.5	7.5	9.5	11.5	31-36	VH	1,200
25-30	HI	3.0	9.0	12.0	5.0	7.0	8.5	10.0	25-30	HI	1,800
19-24	MH	3.0	8.5	12.0	4.5	6.0	7.5	9.0	19-24	MH	2,200
13-18	ML	2.5	8.0	11.5	4.0	4.5	6.5	8.0	13-18	ML	2,500
7-12	LO	2.5	7.5	10.5	3.5	5.0	6.0	7.0	7-12	LO	2,800
1-6	VL	2.5	7.0	9.5	3.5	4.5	5.5	6.5	1-6	VL	3,000

FIRE POWER CHART

Guns	Type Weapons	Ammo	Criticals
N1	2x 30mm Type 5 cannon	3.5	1.5
N2	2x 30mm Type 5 cannon	3.5	1.5

GUN ATTACK FACTORS

Range	N1	N2	Total
0	50	50	100
1	37	37	74
2	25	25	50
3	18	18	36
4	12	12	24
5	8	8	16
6	6	6	12
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	2	1	--	--	EH
31-36	VH	4	2	1	--	VH
25-30	HI	5	3	1	--	HI
19-24	MH	7	5	3	--	MH
13-18	ML	8	6	4	--	ML
7-12	LO	8	6	--	--	LO
1-6	VL	8	6	--	--	VL
Banking FPs		2	3	5	7	
Side Slip FPs		3	5	7	9	

NOTES AND VARIANTS

Kyushu J7W1 Shinden: The most original Japanese aircraft of the war, The *Shinden's* main wing was in the rear, with a forward canard. Suffered from strong torque to the right: +1 turn decel for turns to the left; +1 to left banks, slips, and skids; +0.5 minspeed for left turns. Pusher aircraft: +2 on bail out roll. Test flights went surprisingly well, and was ordered into production well before test program was complete. Reverse critical hit modifiers for arc, as with Me163. 2 prototypes built (1 flown) before the war ended.

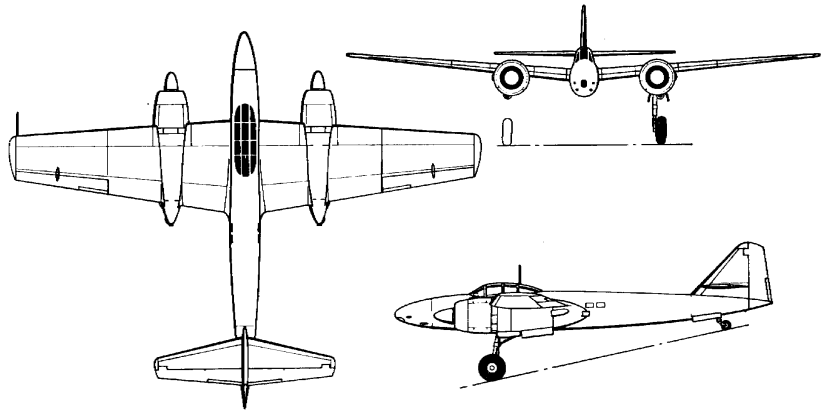
Mitsubishi Ki.83

A/C Type: Long-range Escort Fighter
 Engine(s): 2x Mitsu Ha-211 Ru 18-cyl radial
 Eng. Pwr: 1860-4400 hp, air-cooled
 A/C Crew: Pilot, Navigator

Maximum Speed: 438 mph @ 29,530 ft
 Maximum Ceiling: 41,535 ft.
 Defense factor: 5 Size Modifier: +0
 Damage Factor: 12/18 Endurance: 260
 Cockpit View: Good Blind Area: Rear,low
 Protection: Cockpit +2 Engines +1 Fuel +1
 Climb Dece/ Dive Accel: 3.0 / 1.0
 Weight and Load Limit: 220 / 2-NA
Wpn Stations Weight Allowed Loads
 1 bombbay 220 lbs 2x 50 kg bombs

Country: Japan (IJA/JAF)

Service Entry Date: May 1945



Class: F

Victory Points: 7-14

AIRCRAFT PERFORMANCE CHART

Altitude Levels	Bands	Minimum Speed	Maximum Speed	Maximum Dive Spd	Min TT(5)	Min HT(6)	Min BT(7)	Min ET(8)	Altitude Levels	Bands	Average Rate of Climb
43+	UH	--	--	--	--	--	--	--	43+	UH	--
37-42	EH	3.5	7.5	11.5	5.5	7.0	8.5	9.5	37-42	EH	1,000
31-36	VH	3.0	8.0	12.0	5.0	6.5	8.0	9.0	31-36	VH	1,800
25-30	HI	2.5	8.5	12.0	4.5	6.0	7.5	8.5	25-30	HI	2,400
19-24	MH	2.0	8.5	11.5	4.0	5.5	6.5	7.5	19-24	MH	2,800
13-18	ML	2.0	8.0	11.5	3.5	5.0	6.0	7.0	13-18	ML	3,200
7-12	LO	1.5	7.5	10.5	3.0	4.5	5.5	6.5	7-12	LO	3,500
1-6	VL	1.5	7.0	9.5	3.0	4.0	5.0	6.0	1-6	VL	3,500

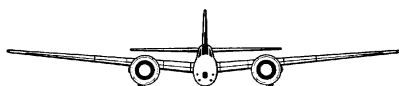
FIRE POWER CHART

Guns	Type Weapons	Ammo	Criticals
N1	Two 30mm Ho-105 can	3	1.5
N2	Two 20mm Ho-5 cannon		2

GUN ATTACK FACTORS

Range	N1	N2	Total
0	50	52	102
1	37	38	75
2	25	25	50
3	18	18	6
4	12	12	4
5	8	8	3
6	6	6	2
7	--	--	--

WEAPON STATION LOCATION



1

POWER VERSUS SPEED CHART (per engine)

Levels	Bands	1.0 - 4.5	5.0 - 7.5	8.0 - 9.5	10.0+	Band
43+	UH	--	--	--	--	UH
37-42	EH	1/2	0.5/1.0	--	--	EH
31-36	VH	2/3	1/1.5	0.5/-	--	VH
25-30	HI	3/4	2.0/2.5	1.0/1.5	--	HI
19-24	MH	3.5/4.5	2.5/3.5	1.5/2.0	--	MH
13-18	ML	4/5	3/3.5	1.5/2.0	--	ML
7-12	LO	4/5	3/3.5	--	--	LO
1-6	VL	4/5	3/3.5	--	--	VL
Banking FPs		2	3	5	7	
Side Slip FPs		3	4	6	8	

NOTES AND VARIANTS

Ki.83: This twin-engine fighter had an exceptionally clean design. It not only exceeded its required maximum speed, test flights also showed exceptional handling. Production was delayed due to US bombing. 4 prototypes flew between Nov-44 and Aug-45. Included as a what if.

Nakajima G8N1 Renzan

Country: Japan (IJN)

Service Entry Date: May 1945

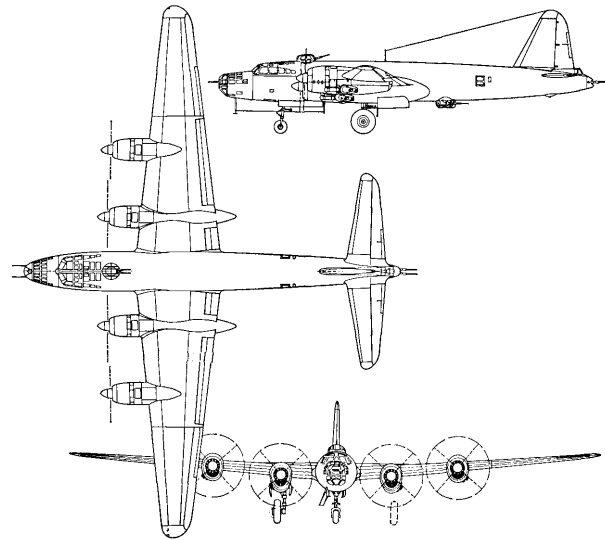
A/C Type: Heavy bomber
 Engine(s): 4x Nak, NK9K-L Homare 24 radial
 Eng. Pwr: 7400-8000 hp, air-cooled
 A/C Crew: Pilot, Copilot, Navigator, Radio-op, Bombadier, 5 gunners

Maximum Speed: 368 mph @ 26,245 ft
 Maximum Ceiling: 33,645 / 24,400 / 20,000 ft.
 Defense factor: 7 Size Modifier: +2
 Damage Factor: 16/24 Endurance: 500
 Cockpit View: Good Blind Area: None
 Protection: Cockpit +2 Engines +1 Fuel +1

Climb Dece/ Dive Accel: 2.0 / 1.0

Weight and Load Limit: 8,820 / 10-15

Wpn Stations	Weight	Allowed Loads
1 bombbay	8,820	2-4 large bombs
2 external	8,820	Okha Mod 42



Class: H

Victory Points: 10-20

AIRCRAFT PERFORMANCE CHART

Altitude Levels	Bands	Minimum Speed	Maximum Speed	Maximum Dive Spd	Min TT(5)	Min HT(6)	Min BT(-)	Min ET(-)	Altitude Levels	Bands	Average Rate of Climb
43+	UH	--	--	--	--	--	--	--	43+	UH	--
37-42	EH	--	--	--	--	--	--	--	37-42	EH	--
31-36	VH	3.0	6.5	10.0	--	--	--	--	31-36	VH	500
25-30	HI	2.5	7.0	10.0	4.5	6.0	--	--	25-30	HI	900
19-24	MH	2.5	7.0	10.0	4.0	5.5	--	--	19-24	MH	1,200
13-18	ML	2.0	6.5	9.0	3.5	5.0	--	--	13-18	ML	1,500
7-12	LO	2.0	6.0	8.5	3.0	4.5	--	--	7-12	LO	1,800
1-6	VL	2.0	6.0	8.0	3.0	4.0	--	--	1-6	VL	1,800

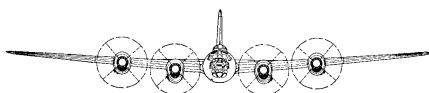
FIRE POWER CHART

Guns	Type Weapons	Ammo	Criticals
FG	Two 13mm Type 2 mg		3
LG	One 13mm Type 2 mg		3
RG	One 13mm Type 2 mg		3
TT	Two 20mm Type 99	4	2
BT	Two 20mm Type 99	4	2
TG	Two 20mm Type 99	4	2

GUN ATTACK FACTORS

Range	FG	LG	RG	TT	BT	TG
0	19	5	5	22	20	22
1	13	3	3	14	13	14
2	9	2	2	10	9	10
3	6	2	2	6	6	6
4	4	1	1	4	4	4
5	3	1	1	3	3	3
6	2	1	1	2	2	2
7	--	--	--	--	--	--

WEAPON STATION LOCATION



1,2

POWER VERSUS SPEED CHART (per engine)

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	.25/.5	0.25	--	--	VH
25-30	HI	.25/.5	0.25	--	--	HI
19-24	MH	.75/1.0	.25/.5	--	--	MH
13-18	ML	1.0/1.25	.5/.75	--	--	ML
7-12	LO	1.0/1.25	.5/.75	--	--	LO
1-6	VL	1.0/1.25	.5/.75	--	--	VL
Banking FPs		4	5	--	--	
Side Slip FPs		5	6	--	--	

NOTES AND VARIANTS

Defensive Gun Coverage

FG: Front, hi to low
 L/RG: L/R rear, level to low
 TT: All, level to hi; 6:00 hi only
 BT: All, level to low
 TG: Rear +30, Hi to low

Nakajima G8N1: The best of a few true heavy bomber projects. The Japanese realized the need for a heavy bomber in 1943. Among the potential loads was a larger version of the MXV-7 *Okha*. Four prototypes completed and

flown between October 1944 and June 1945. Development and plans for production were hampered by US bombing - including the destruction of the third prototype by US bombing. The critical shortage of material cancelled the program despite satisfactory flight tests. Included as a what-if aircraft.

Nakajima Kikka

Country: Japan (IJN)

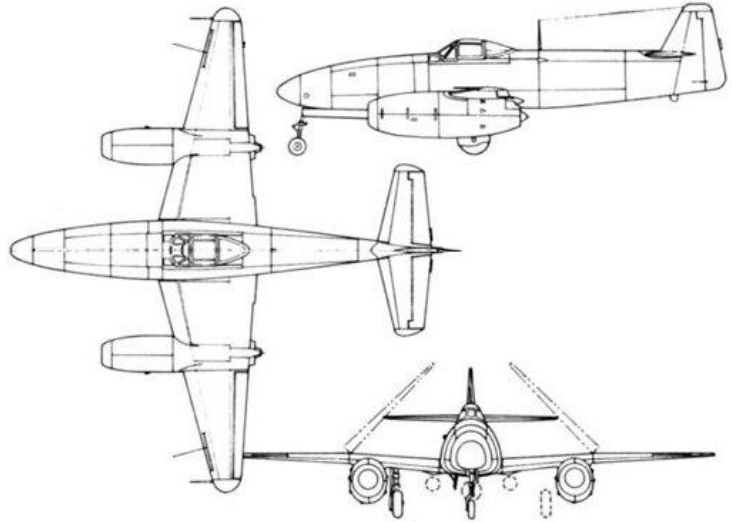
Service Entry Date: Feb 1946

A/C Type: Light jet bomber
 Engine(s): Two Ne-20 turbojets
 Eng. Pwr: 950 kg turbojet thrust
 A/C Crew: Pilot

Maximum Speed: 435 mph @ 32,800 ft
 Maximum Ceiling: 39,500 / 32,800 / 22,000 ft.
 Defense factor: 5 Size Modifier: +0
 Damage Factor: 8/12 Endurance: 60
 Cockpit View: Good Blind Area: Rear,low
 Protection: Cockpit +1 Engines -1 Fuel +0

Climb Dece/ Dive Accel: 3.0 / 1.5
 Weight and Load Limit: 1,764 / 10-15

Wpn Stations	Weight	Allowed Loads
2	1764	1x 800 bomb or 1x 500 kg bomb
1,3		RATOG units



Class: L

Victory Points: 10-20

AIRCRAFT PERFORMANCE CHART

Altitude Levels	Bands	Minimum Speed	Maximum Speed	Maximum Dive Spd	Min TT(5)	Min HT(6)	Min BT(7)	Min ET(-)	Altitude Levels	Bands	Average Rate of Climb
43+	UH	--	--	--	--	--	--	--	43+	UH	--
37-42	EH	--	8.0	--	--	--	--	--	37-42	EH	--
31-36	VH	3.0	8.5	10.0	--	--	--	--	31-36	VH	500
25-30	HI	2.5	8.5	10.0	4.5	6.0	--	--	25-30	HI	900
19-24	MH	2.5	8.0	10.0	4.0	5.5	--	--	19-24	MH	1,200
13-18	ML	2.0	8.0	9.0	3.5	5.0	--	--	13-18	ML	1,500
7-12	LO	2.0	7.5	8.5	3.0	4.5	--	--	7-12	LO	1,800
1-6	VL	2.0	7.5	8.0	3.0	4.0	--	--	1-6	VL	2,800

FIRE POWER CHART

Guns Type Weapons Ammo Criticals

GUN ATTACK FACTORS

Range	--	--	--	--	--	--
0	--	--	--	--	--	--
1	--	--	--	--	--	--
2	--	--	--	--	--	--
3	--	--	--	--	--	--
4	--	--	--	--	--	--
5	--	--	--	--	--	--
6	--	--	--	--	--	--
7	--	--	--	--	--	--

WEAPON STATION LOCATION



1

POWER VERSUS SPEED CHART (per engine)

Levels	Bands	1.0 - 4.5	5.0 - 7.5	8.0 - 9.5	10.0+	Band
43+	UH	--	--	--	--	UH
37-42	EH	1.5	0.5	0.5	--	EH
31-36	VH	2.0	1.0	0.5	--	VH
25-30	HI	2.5	1.5	0.5	--	HI
19-24	MH	2.5	1.5	0.5	--	MH
13-18	ML	2.5	1.5	0.5	--	ML
7-12	LO	2.5	1.5	--	--	LO
1-6	VL	2.5	1.5	--	--	VL
Banking FPs		3	4	5	7	
Side Slip FPs		4	5	6	8	

NOTES AND VARIANTS

Nakajima Special Attack Aircraft Kikka: "Available" Feb-46. Japan began its jet development late - not until it had seen a test of an Me-262 in late 1943. By then, the technical aid that Germany could supply was limited. The major hold-up was a workable jet engine. All the Japanese scientists had were a few descriptions by non-technicians and a few photographs. The Ne-20 was the third engine tried on Kikka - and it only succeeded in becoming airborne if aided by two drop-off RATOG units under the inner wing. The first prototype flew 7-Aug-45.