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WAR DEPARTMENT

BASIC FIELD MANUAL

## MILITARY INTELLIGENCE

IDENTIFICATION OF JAPANESE AIRCRAFT

March 16, 1942

### BASIC FIELD MANUAL

## MILITARY INTELLIGENCE

# IDENTIFICATION OF JAPANESE AIRCRAFT

Prepared under direction of the Chief of Staff



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Major General,

The Adjutant General.

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(For explanation of symbols see FM 21-6.)

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#### BASIC FIELD MANUAL

#### MILITARY INTELLIGENCE

#### IDENTIFICATION OF JAPANESE AIRCRAFT

(This manual supersedes FM 30-38, March 10, 1941.)

The following illustrations with explanatory data relative to Japanese aircraft are published for distribution. They will be used for instruction of officers and men in appearance and general characteristics of Japanese aircraft.

The Japanese airplane markings are as shown below:



WING Shaded area indicates red



TAIL

JAPANESE ARMY

#### JAPANESE ARMY



#### FIGHTER BFW. MESSERSCHMITT 109

Description: Tapered, square tip, low-wing monoplane.

All metal, single motor, pointed nose, inclosed cockpit, and retractable landing

gear.

One. Crew:

Armament: Four machine guns, and two 20-mm

cannon.

Ammunition: 2,000 rounds machine-gun; 120 rounds

20-mm.

Bomb load:

Radio: VT.

Armor:

1,100-horsepower, 601A, liquid-cooled. Motors:

354 miles per hour. Maximum speed:

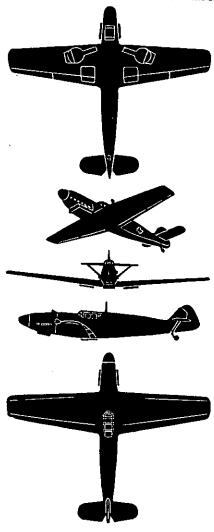
To 13.120 feet in 3.8 minutes. Rate of climb:

Service ceiling: 36.080 feet.

Maximum range: 620 miles at 298 miles per hour.

Remarks:

## Fighter BFW MESSERSCHMITT 109



#### JAPANESE ARMY

#### KAWASAKI 92 FIGHTER

(Obsolescent)

Description:

Crew: One.

Armament: Ammunition: Bomb load: Radio: Armor:

Motors: One 500-horsepower Kawasaki (BMW).

Maximum speed: 205 miles per hour.

Rate of climb: Service ceiling: Maximum range:

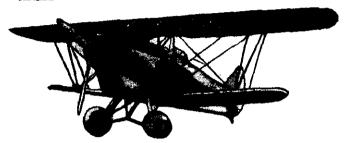
Wing span:

33 feet,

Remarks:

Fighter KAWASAKI 92

#### JAPANESE ARMY



#### KAWASAKI 95 FIGHTER (Obsolescent)

Description: Straight, round tip, staggered biplane of

unequal span. Single engine, tapered nose, open cockpit, and fixed landing

gear.

Crew:

Armament: Two machine guns.

One.

Ammunition:

Bomb load: One 77-pound.

Radio: Armor:

Motors: One 550-horsepower Kotobuki.

Maximum speed: 155 miles per hour.

Rate of climb: 15,000 feet in 6 minutes.

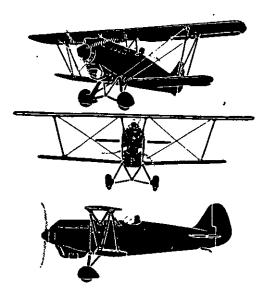
Service ceiling: 33,000 feet.

Maximum range: 300 miles.

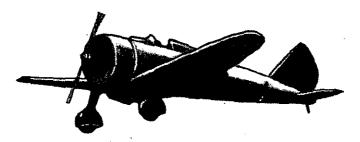
Wing span: 33 feet.

Remarks: Copy of early Curtiss Hawk biplane.

Fighter KAWASAKI 95



#### JAPANESE ARMY



#### KAWASAKI 97 FIGHTER

Description: Slightly tapered, round tip, dihedral, low-

wing monoplane. Single engine, short blunt nose, inclosed cockpit, and fixed

landing gear.

Crew: One.

Armament: Four machine guns. Ammunition: 550 rounds per gun.

Bomb load: Radio: Armor:

Motors: One 850-horsepower Kawasaki 102.

Maximum speed: 300 miles per hour at 15,000 feet.

Rate of climb: 15,000 feet in 51/2 minutes.

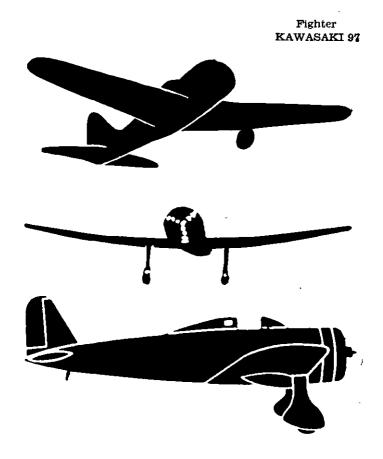
Service ceiling: 32,000 feet.

Maximum range: 335 miles; with extra fuel tank can be

increased to 1,000 miles.

Wing span: 36 feet.

Remarks:



#### JAPANESE ARMY

#### (KAWASAKI KAWA 102) 98 FIGHTER

Description: Straight, round tip, staggered biplane of

unequal span. Single engine, long pointed nose, open cockpit, and fixed

landing gear.

Crew: One.

Armament: Two machine guns and two 20-mm Hotch-

kiss cannon.

Ammunition: Bomb load:

Radio: Armor:

Motors: One 820-horsepower Kawasaki, liquid-

cooled.

Maximum speed: 270 miles per hour at 10,000 feet.

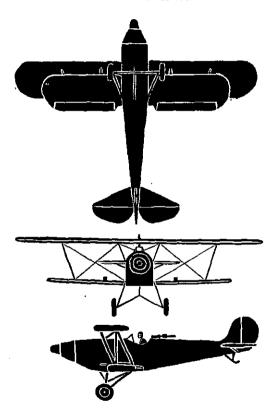
Rate of climb: Service ceiling: Maximum range:

Wing span:

29 feet.

Remarks:

Fighter (KAWASAKI KAWA 102) 98



#### JAPANESE ARMY

### MITSUBISHI 96 FIGHTER (Obsolescent)

Description:

Crew: One.

Armament: Bomb load: Radio:

Armor:

Motors: One 550-horsepower Nakajima Jupiter.

Maximum speed: 279 miles per hour.

Rate of climb: Service ceiling: Maximum range:

Wing span: 33 feet.

Remarks:

Fighter • MITSUBISHI 96

#### JAPANESE ARMY

#### MITSUBISHI 97 FIGHTER

Description: Swept-back, tapered, round tip, dihedral,

low-wing monoplane. Single engine,

short blunt nose, inclosed cockpit, and

fixed landing gear.

Crew: One.

Armament: Four machine guns.

Ammunition:

Bomb load: Radio:

Armor:

Motors: One 650-horsepower Mitsu 109 Hispano

Suiza.

Maximum speed: 265 miles per hour.

Rate of climb: 15,000 feet in 7½ minutes.

Service ceiling: 29,000 feet.

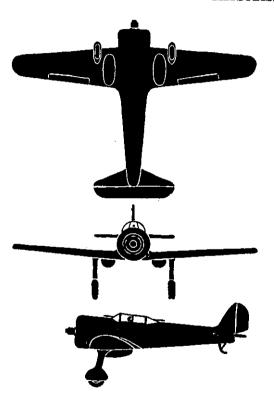
Maximum range: 375 miles.

Wing span: 36 feet.

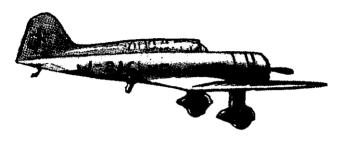
Remarks: Range can be increased to 1.070 miles by

adding two belly fuel tanks.

Fighter MITSUBISHI 97



#### JAPANESE ARMY



#### MITSUBISHI 98 (KARIGANE II)

Description: Tapered, dihedral, low-wing monoplane.

Single engine, short blunt nose, inclosed

cockpit, and fixed landing gear.

Crew: Two.

Armament:
Ammunition:
Bomb load:

Radio:

Motors: One 800-horsepower Mitsubishi A-14.

Maximum speed: 310 miles per hour

Rate of climb: Service ceiling: Maximum range:

Wing span: 39 feet.

Remarks: Resembles Northrop A-17.

## Fighter MITSUBISHI 98 (KARIGANE II)

#### JAPANESE ARMY

## MITSUBISHI ZERO FIGHTER (Also called Type 00 Model 1 Sento Ki)

Description:

Eiliptical wing, round tip, dihedral, lowwing monoplane. Single engine, short blunt nose, inclosed cockpit, and retractive landing gear. General short,

stubby appearance.

Crew:

One.

Armament:

Two 20-mm cannon and two machine

guns.

Ammunition:

Bomb load:

Radio:

Motors:

One Junkers 800-horsepower (some have

Nakajima Sakai 12). 298 miles per hour.

Maximum speed: Rate of climb:

Service ceiling:

39,300 feet.

Maximum range: 2,000 miles (approximate).

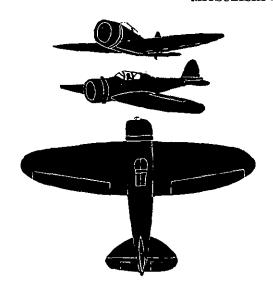
Wing span:

37 feet.

Remarks:

Has detachable belly tank.

#### Fighter MITSUBISHI ZERO



#### JAPANESE ARMY

#### NAGOYA ZERO FIGHTER

Description: Tapered, swept-back, round tip, slightly

> dihedral, all metal, low-wing monoplane. Single engine, blunt nose, inclosed cockpit, and retractable landing

gear.

Crew:

One.

Armament: Two 20-mm cannon wing guns: two fixed

machine guns.

Ammunition:

500 rounds each machine gun.

Bomb load:

Radio:

Two-way radiotelephone and code.

Armor: Motors:

Single, 840-horsepower Nakajima NK-1. 14-cylinder, twin-row, radial air-cooled

engine.

Maximum speed:

344 miles per hour.

Rate of climb: Service ceiling:

32.810 feet.

Fast

Maximum range: 6 to 8 hours endurance with use of belly

tank. 150 gallons auxiliary. Total gasoline capacity, 1,200 liters or 324 gal-

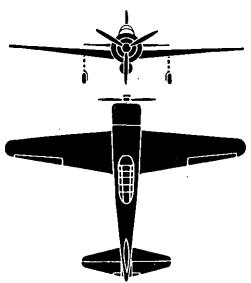
lons.

Remarks:

Employs dive tactics but avoids use of

acrobatics. Can operate from carrier.

#### Fighter NAGOYA ZERO



#### JAPANESE ARMY

#### NAKAJIMA 91 FIGHTER

(Obsolescent)

Description:

Crew: One.

Armament: Ammunition: Bomb load: Radio:

Armor: Motors:

One 450-horsepower Nakajima Jupiter.

Maximum speed: 201 miles per hour.

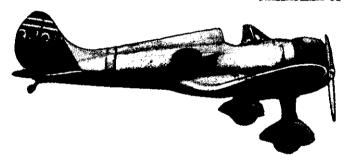
Rate of climb: Service ceiling:

Maximum range: 400 miles (approximate).

Wing span: 36 feet.

Remarks: Resembles Nieuport-Delage.

#### Fighter NAKAJIMA 91



(1936)

#### JAPANESE ARMY

#### NAKAJIMA 96 FIGHTER

Description: Slightly swept-back, dihedral, round tip,

low-wing monoplane. Fixed landing

gear. Single seat.

Crew: Single seat.

Armament: Four 7.7-mm machine guns; some firing

through air screw.

Ammunition: 500 rounds per gun.

Bomb load; Radio:

Armor:

Motors: Single, Mitsubishi, 730-horsepower, Kin-

sei, air-cooled.

Maximum speed: 240 miles per hour at 7,000 feet.

Rate of climb: 5,000 feet in 6 minutes.

Service ceiling: Critical altitude, 13,000 feet.

Maximum range: 312 miles with military load.

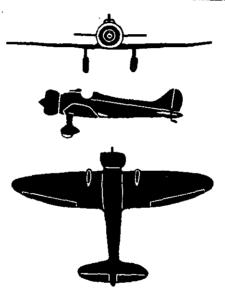
Wing span: 28 feet.

Remarks: Good climbing ability, small turning circle

but fragile. 96 1 Kotobuki, 9-cylinder; 96 2A Hikari; 96 2B Jupiter 6-cylinder, air-cooled motors are those reported used. This appears to be a more recent model of the 96 fighter, Resembles

Boeing P26A.

Fighter NAKAJIMA 96



(1937)

#### JAPANESE ARMY



#### NAKAJIMA 97 FIGHTER

Description: Swept-back, tapered, round tip, cantilever.

low-wing, blunt nose monoplane. Monocoque construction in rear of cockpit. Streamlined, divided, single strut, non-

retractable landing gear.

Crew: Single seat.

Armament: Three machine guns firing forward (two

of these in wings).

Ammunition: 500 rounds per gun.

Bomb load:

Radio: Armor:

Motors: Single, Nakajima, 750-horsepower, Hikari,

air-cooled motor.

Maximum speed: 280 miles per hour, critical altitude. 240

miles per hour, sea level.

Rate of climb:

Service ceiling: 33,000 feet.
Maximum range: 389 miles.

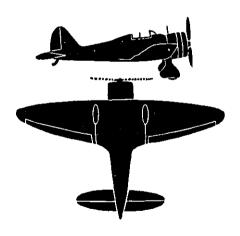
Remarks: Slightly larger than 96 Nakajima Fighter.

Some models fitted with retractable

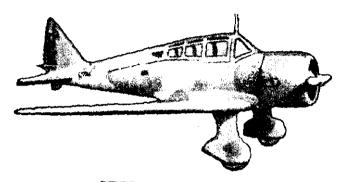
landing gear.

Fighter NAKAJIMA 97





#### JAPANESE ARMY



#### SEVERSKY 98 FIGHTER

Description: Nonretractable and retractable landing

gear.

Crew: Two seat.

Armament: Two 7.7-mm wing machine guns, and

20-mm wing cannon.

Ammunition:

Bomb load:

500 pounds (reduces range slightly).

Radio: Armor:

Motors:

Twin-row, air-cooled, radial engines.

Maximum speed: 280 miles per hour.

Rate of climb:

Estimated at 3,500 feet in 1 minute.

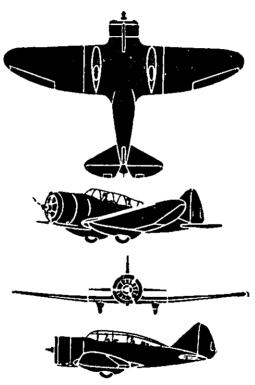
Service ceiling:

Maximum range: 2,600 miles.

Remarks: Airplance of

Airplanes are equipped with nonretractable and retractable landing gears. Appears to be a copy of a Seversky Fighter.

Fighter SEVERSKY 98



# **JAPANESE** ARMY

#### MITSUBISHI CENTURY FIGHTER

Description:

Crew:

Armament:

Two 27-mm cannon.

Ammunition: Bomb load:

Radio: Armor: Motors:

Two Nakajima Nk-1, 14-cylinder, radial.

Maximum speed: 350 miles per hour.

Rate of climb:

Service ceiling: 31,000 feet.

Maximum range: 840 miles with ample margin for combat.

Wing span:

Remarks: Range can be increased to 8 hours by addi-

tion of belly tanks.

# Fighter MITSUBISHI CENTURY

# JAPANESE ARMY

# AICHI CLOCK AICHI DIVE BOMBER

Description:

Crew:

Two.

Armament:

Three machine guns (one similar to

Lewis).

Ammunition:

Bomb load:

550 pounds.

Radio:
Armor:

Motors:

One 1,400-horsepower Kinsei 44 twin-row

radial.

Maximum speed:

Rate of climb:

Service ceiling:

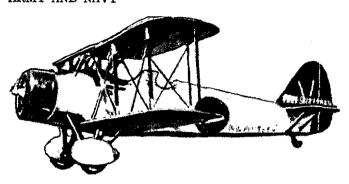
23,000 feet.

Maximum range:

Wing span: Remarks:

Dive Bomber AICHI CLOCK AICHI

# JAPANESE ARMY AND NAVY



## DIVE BOMBER 96

Description: Straight wing, round tip conventional

type, blunt nose biplane with interwing bracing. Fixed landing gear with wheel fairings. Also has arresting gear

and probably floating gear.

Crew: Three place (2 seat).

Armament: Two fixed and one flexible 7.7-mm ma-

chine guns.

Ammunition: 500 rounds per fixed, 700 rounds per flex-

ible machine gun.

Bomb load: Maximum 1,100 pounds. Carries bombs

or torpedo.

Radio: CW telegraph.

Armor:

Motors: Single Hikari (Nakajima), 9-cylinder, ra-

dial air-cooled motor. BWM 12-cylin-

der, 700-horsepower also used.

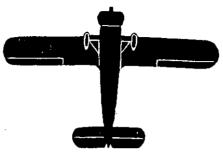
Maximum speed: 174 miles per hour; 241 miles per hour.

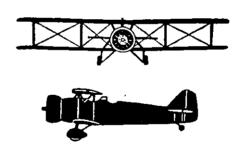
Rate of climb: Service ceiling:

Maximum range: Radius of action, 250 miles.

Remarks:

Dive Bomber 96





# JAPANESE ARMY

### KAWASAKI 97 LIGHT BOMBER.

Description: Swept-back, tapered, round tip, low-wing

monoplane. Single engine, long tapered nose, inclosed cockpit, and fixed

landing gear.

Crew: Two.

Armament: Three machine guns.

Ammunition:

Bomb load: 800 pounds.

Radio: Armor:

One 900-horsepower Kawa BMW liquid-Motors:

cooled.

236 miles per hour. Maximum speed:

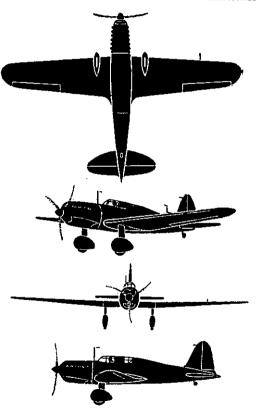
Rate of climb:

Service ceiling: 25.000 feet. Maximum range: 490 miles. 48 feet.

Wing span:

Remarks:

Light Bomber KAWASAKI 97



# JAPANESE ARMY

## MITSUBISHI DARAI 108 (TYPE 97) LIGHT BOMBER

Description:

Slightly swept-back, tapered, round tip, midwing monoplane. Twin engine, ta-

pered nose, inclosed cockpit, and re-

tractable landing gear.

Crew: Five.

Armament:

Two cannon and two machine guns.

Ammunition:

Bomb load:

1,230 pounds.

Radio:

Armor;

Motors:

Two 350-horsepower Darai 108 Diesel.

Maximum speed; 175 miles per hour.

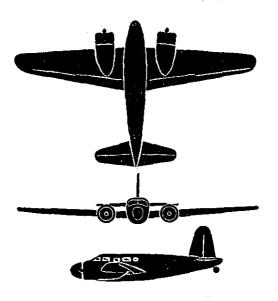
Rate of climb:

Service ceiling: 20,000 feet.

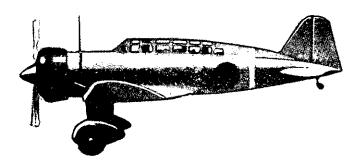
Maximum range: 500 miles.

Wing span: Remarks: 48 feet.

Light Bomber MITSUBISHI DARAI 108 (TYPE 97)



## JAPANESE ARMY



# MITSUBISHI KAMIKAZI LIGHT BOMBER 97

Description:

Slightly dihedral swept-back, round tip, cantilever, low-wing monoplane. Fixed

and streamlined landing gear.

Crew:

Twn

Armament:

Three machine guns.

Ammunition: Bomb load:

300 kilograms or 661.3 pounds.

Radio:

Armor:

Motors:

Single 800-horsepower, Kotobuki.

Maximum speed:

260 miles per hour.

Rate of climb:

Service ceiling:

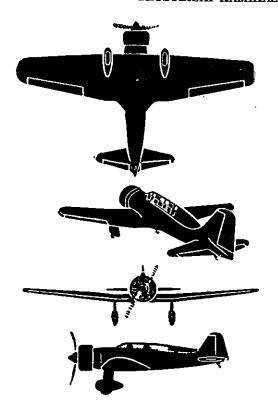
30,000 feet. 450 miles.

Maximum range: Wing span:

40 feet.

Remarks:

# Light Bomber MITSUBISHI KAMIKAZI 97



# JAPANESE ARMY

## MITSUBISHI MITSU 103 LIGHT BOMBER

Description:

Crew:

Armament: Three machine guns.

Ammunition: 540 rounds per machine gun.

Bomb load: 1,000 pounds.

Radio: Armor:

Motors: One 900-horsepower Mitsu.

Maximum speed: 260 miles per hour.

Rate of climb:

Service ceiling: 27,000 feet. Maximum range: 790 miles.

Wing span:

Remarks: Sometimes used as a reconnaissance-dive

bomber.

Light Bomber MITSUBISHI MITSU 103

## JAPANESE ARMY

## MITSUBISHI MITSU 104 (TYPE 98) LIGHT BOMBER

Description: Swept-back, round tip, slightly dihedral,

low-wing monoplane. Single engine, blunt nose, inclosed cockpit, and fixed

landing gear.

Crew: Two or three.

Armament: Three machine guns.

Ammunition:
Bomb load: 3,300 pounds.

Radio:

Motors: One Mitsu, air-cooled.

Maximum speed: 250 miles per hour.

Rate of climb:

Service ceiling: 25,000 feet.

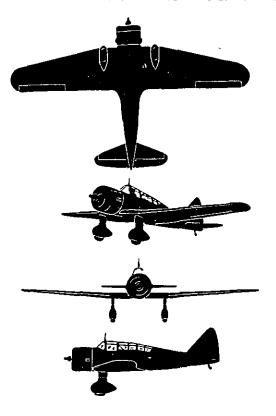
Maximum range: 260 miles.

Wing span: 46 feet.

Remarks:

Armor:

Light Bomber
MITSUBISHI MITSU 104 (TYPE 98)



# JAPANESE ARMY



# LIGHT BOMBER 97

Description: Low-wing monoplane. Fixed and stream-

lined landing gear.

Crew: Two seat.

Armament: Ammunition: Bomb load: Radio:

Armor:

Motors: Single BMW IV, 12-cylinder, water-cooled

engine.

Maximum speed: 280 miles per hour.

Rate of climb: Service ceiling: Maximum range:

Remarks: A model of this type is reported with

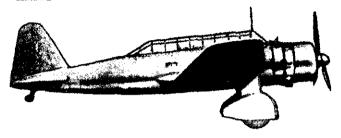
retractable landing gear, split flaps,

arresting and flotation gears.

Light Bomber 97



# JAPANESE ARMY



## LIGHT BOMBER 98

Description:

Round tip, midwing monoplane. Fixed

and streamlined landing gear.

Crew:

Two.

Armament:

Machine guns and bombs.

Ammunition:

Bomb load:

Radio:

Armor:

Motors:

Twin-row, radial air-cooled. Probably

Hikari. Radial engine.

Maximum speed:

Rate of climb: Service ceiling:

16.200 feet.

Maximum range:

Remarks:

Same as type 97 except it has a radial

engine.

Light Bomber 98





# JAPANESE ARMY AND NAVY

## LIGHT BOMBER 99

Description: Conventional type low-wing monoplane

with hooded cockpit and nonretract-

able landing gear.

Crew: Two place.

Armament: Two fixed and one flexible 7.7-mm ma-

chine guns.

Ammunition:

Bomb load: 620 kilograms or 1,364 pounds of bombs

or one 60-kilogram or 137-pound bomb under each wing and 500 kilograms or 1.100 pounds of bombs under fuselage.

Radio: Type unknown.

Armor:

Motors: Single, 14-cylinder, twin-row, 900- to 950-

horsepower, radial air-cooled engine.

Maximum speed: 256 miles per hour (222 knots).

Rate of climb: Fair.

Service ceiling: Maximum ceiling, 8,000 meters or 4.6

miles.

Maximum range: Endurance, 6 hours.

Remarks: Flotation gear when operating from car-

rier.

Light Bomber 99

# JAPANESE ARMY

## SHÖWA SHÖ 98 FIGHTER-BOMBER

Description: Swept-back, tapered, round tip, dihedral,

low-wing monoplane. Single engine, long blunt nose, inclosed cockpit, and

retractable landing gear.

Crew: Two or three.

Armament: Two cannon and two machine guns.

Ammunition:
Bomb load: 2,280 pounds.

Radio: Armor:

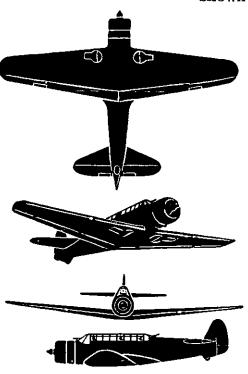
Motors: One 850-horsepower Shōwa. Maximum speed: 225 miles per hour.

Rate of climb:

Service ceiling:
Maximum range: 950 miles.
Wing span: 50 feet.

Remarks:

Fighter-Bomber SHŌWA SHŌ 98



# JAPANESE ARMY

# KAWASAKI 88 RECONNAISSANCE-BOMBER (Obsolescent)

Description:

Crew:

Armament:

Ammunition:

Bomb load:

Radio:

Armor:

Motors:

One 450-horsepower Kawasaki BMW.

Maximum speed: 143 miles per hour.

Rate of climb: Service ceiling: Maximum range:

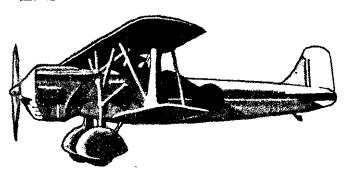
Wing span:

50 feet.

Remarks:

Reconnaissance-Bomber KAWASAKI 88

# JAPANESE ARMY



# KAWASAKI 93 RECONNAISSANCE-BOMBER (Obsolescent)

Description: Slightly swept-back, round tip, cut-out,

staggered biplane of unequal span. Single engine, blunt nose, open cockpit,

and fixed landing gear.

Crew: Two.

Armament:
Ammunition:

Bomb load: 2,200 pounds.

Radio: Armor:

Motors: One 600-horsepower Kawasaki BMW.

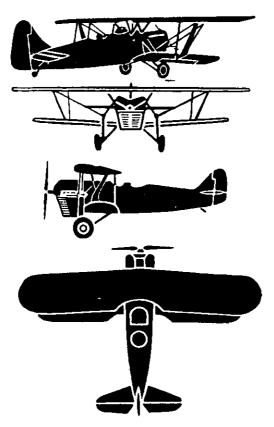
Maximum speed: 162 miles per hour.

Rate of climb: Service ceiling:

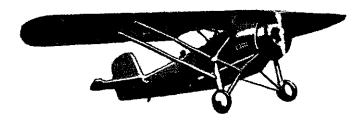
Maximum range: 620 miles. Wing span: 43 feet.

Remarks:

# Reconnaissance-Bomber KAWASAKI 93



# JAPANESE ARMY



# MITSUBISHI 92 RECONNAISSANCE-BOMBER (Obsolescent)

Description: Slightly swept-back, round tip, cut-out,

parasol type, high-wing monoplane. Single engine, short blunt nose, open

cockpit, and fixed landing gear.

Crew: Two.

Armament: Three machine guns.

Ammunition:

Bomb load: 620 pounds.

Radio: Armor:

Motors: 420-horsepower Mitsubishi Jaguar.

Maximum speed: 155 miles per hour.

Rate of climb:

Service ceiling: 20,000 feet.

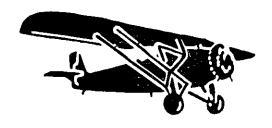
Maximum range: 370 miles.

Wing span: 43 feet.

Remarks: Resembles Mureaux.

# Reconnaissance-Bomber MITSUBISHI 92





## JAPANESE ARMY



# MITSUBISHI 93A RECONNAISSANCE-BOMBER (Obsolescent)

Description: Low-wing monoplane. Twin engine, in-

closed cockpit, fixed landing gear, and

twin rudders.

Crew:

Armament: Ammunition: Bomb load: Radio: Armor:

Motors: Two 700-horsepower Mitsubishi or Kawa-

saki.

Maximum speed: 137 miles per hour.

Rate of climb: Service ceiling: Maximum range:

Wing span: 89 feet.

Remarks: Resembles Junkers K-37.

Reconnaissance-Bomber MITSUBÌSHI 93A

# JAPANESE ARMY



# MITSUBISHI 93B RECONNAISSANCE-BOMBER (Obsolescent)

Description: Midwing monoplane. Twin engine, in-

closed cockpit, fixed landing gear, and

twin rudders.

Crew:

Armament: Ammunition: Bomb load:

Radio:

Armor: Motors:

Two 450-horsepower Nakajima Jupiter.

Maximum speed: 155 miles per hour.

Rate of climb: Service ceiling: Maximum range:

Wing span: 66 feet.

Remarks: Resembles Junkers K-46.

Reconnaissance-Bomber MITSUBISHI 93B

# JAPANESE ARMY

### MITSUBISHI 98 RECONNAISSANCE-BOMBER

Description:

Swept-back, slightly tapered, square tip, dihedral, low-wing monoplane. Single engine, blunt nose, inclosed cockpit, and

fixed landing gear.

Crew:

Armament:

Ammunition:

Bomb load:

Radio:

Armor: Motors:

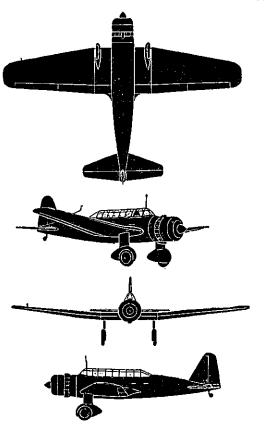
Maximum speed:

Rate of climb: Service ceiling:

Maximum range:

Wing span: Remarks:

# Reconnaissance-Bomber MITSUBISHI 98



## JAPANESE ARMY



#### NAKAJIMA 94 RECONNAISSANCE-BOMBER

Description: Round tip, cut-out, dihedral, slightly

staggered biplane of unequal span. Single engine, long blunt nose, open

cockpit, and fixed landing gear.

Crew: Two.

Armament: Two machine guns.

Ammunition:

Bomb load: 660 pounds.

Radio: Armor:

Motors: One 200-horsepower Taishahova (Diesel),

Maximum speed: 175 miles per hour.

Rate of climb:

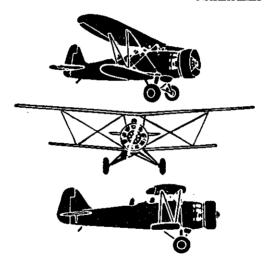
Service celling; 23,000 feet.

Maximum range: 470 miles.

Wing span; 39 feet.

Remarks: Resembles Chance-Vought.

# Reconnaissance-Bomber NAKAJIMA 94



# **JAPANESE** ARMY

#### OSAKA 97 RECONNAISSANCE-BOMBER

Slightly swept-back, tapered, tapered tip, Description:

high-wing monoplane. Single engine, blunt nose, inclosed cockpit, and fixed

landing gear.

Crew: Two.

Armament: One machine gun.

Ammunition:

Bomb load: 200 pounds.

Radio: Armor:

Motors: One 200-horsepower Taishahova (Diesel).

Maximum speed: 162 miles per hour.

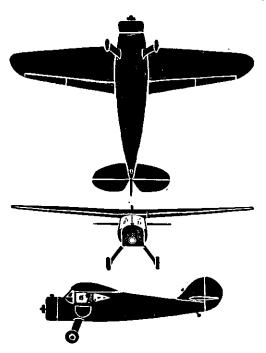
Rate of climb:

Service ceiling: 14.000 feet. Maximum range: 870 miles.

Wing span:

34 feet. Remarks:

# Reconnaissance-Bomber OSAKA 97



# JAPANESE ARMY

## MEDIUM BOMBER 98 (MITSUBISHI 104)

Description:

Low-wing monoplane.

Crew:

Two to three.

Armament:

Two 20-mm cannon firing forward; 2 dor-

sal machine guns.

Ammunition:

Bomb load:

Radio:

Armor:

Motors: Single, Mitsubishi, 900-horsepower, air-

cooled.

Maximum speed: 299 miles per hour, critical altitude.

277 miles per hour, sea level.

Rate of climb: Service ceiling:

Maximum range:

Medium Bomber 98 (MITSUBISHI 104)

## JAPANESE ARMY



#### KAWASAKI (KAWA 95) TYPE 97 HEAVY BOMBER

Tapered, round tip, dihedral, midwing Description:

monoplane. Twin engine, long, rounded, transparent nose, inclosed cockpit, and

retractable landing gear.

Crew: Three to five.

Armament: Two 25-mm cannon and four machine

guns.

Ammunition:

Bomb load:

4,400 pounds.

Radio: Armor:

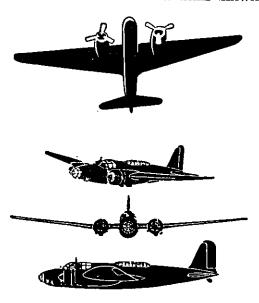
Motors:

Two Kawasaki 98. Maximum speed: 245 miles per hour,

Rate of climb:

Service ceiling: 24.500 feet. Maximum range: 1,250 miles. Wing span: 75 feet.

# Heavy Bomber KAWASAKI (KAWA 95) 97



# JAPANESE ARMY

# MITSUBISHI 92 HEAVY BOMBER

Description:

Crew:

Armament: Ammunition:

Bomb load:

Radio:

Armor:

Motors: Four 800-horsepower Mitsubishi A14.

Maximum speed: Rate of climb: Service ceiling: Maximum range:

Wing span: 144 feet.

Remarks: Resembles Junkers G-38.

# Heavy Bomber MITSUBISHI 92



# JAPANESE ARMY

#### MITSUBISHI 97 HEAVY BOMBER

Description:

Crew:

Five to seven.

Armament:

Four machine guns.

Ammunition:

Bomb load:

4,400 pounds.

Radio:

Armor: Motors:

Two 870-horsepower Kinsei.

Maximum speed: 220 miles per hour.

Rate of climb:

Service ceiling: 22.000 feet. Maximum range: 1,180 miles.

Wing span: Remarks:

72 feet.

Heavy Bomber MITSUBISHI 97

## JAPANESE ARMY

### MITSUBISHI 98 (MITSU 106) HEAVY BOMBER

Description: Swept-back, square tip, dehedral, low-

wing monoplane. Twin engine, long, rounded, transparent nose with transparent hemispherical turret, engine nacelles below wing, inclosed cockpit, twin rudders, and retractable landing

gear.

Crew: Five.

Armament: One cannon and four machine guns.

Ammunition:

Bomb load; 2,200 pounds.

Radio: Armor:

Motors: Two 750-horsepower Mitsu.

Maximum speed: 220 miles per hour.

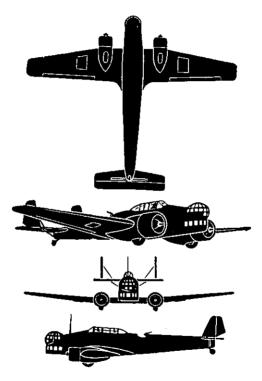
Rate of climb:

Service ceiling: 23,000 feet.

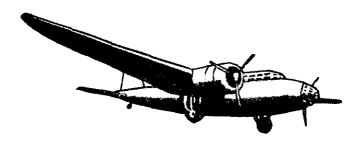
Maximum range: 1,180 miles.

Wing span: 75 feet.

# Heavy Bomber MITSUBISHI 98 (MITSU 106)



## JAPANESE ARMY



# NAKAJIMA 19 BOMBER-TRANSPORT

Description:

Tapered, round tip, midwing monoplane. Twin engine, long, pointed, transparent nose, engine nacelles below wing, inclosed cockpit, and retractable landing

gear.

Crew:

Armament: Ammunition: Bomb load: Radio:

Armor:

Motors: Two.

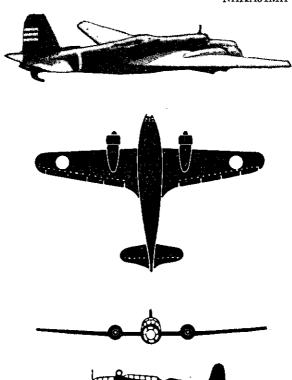
Maximum speed: 217 miles per hour.

Rate of climb: Service ceiling: Maximum range:

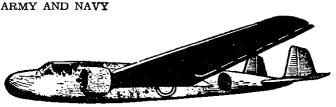
Wing span:

72 feet.

# Bomber-Transport NAKAJIMA 19



# JAPANESE ARMY AND NA**VY**



#### HEAVY BOMBER 96

Description: Considerably swept-back tapered tip, can-

tilever, monoplane. Twin rudder tail section. Similar to Junkers Ju 86. Landing gear is retractable into engine nacelle leaving lower half of wheels

protruding.

Crew: Seven men.

Armament: Five 7.7-mm flexible machine guns in four

turrets; twin mounts in rear; single mount in nose above center and tunnel gun in rear of pilot. 20-mm cannon

reported used.

Ammunition: 300 to 700 rounds per gun.

Bomb load: 2.200 pounds.

Radio: Directional radio, radiotelephone, blind

flying instruments.

Motors: Twin, Mitsubishi, Minsei, 800-horsepower,

14-cylinder, radial air-cooled engines.

Total horsepower 1,600.

Maximum speed: 217 to 266 miles per hour at sea level.

Rate of climb:

Service ceiling: 22,600 feet.

Maximum range: 750 miles radius of action; endurance, 10

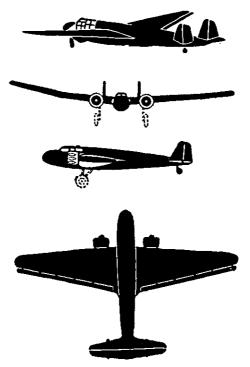
to 12 hours; 725 miles with maximum

load.

Remarks:

Armor:

Heavy Bomber 96



# JAPANESE ARMY



# HEAVY BOMBER 97 (Modified)

Description: Slightly swept-back, round tip, low-wing,

> cantilever, monoplane, Alloy coque smooth skin. Flush riveting construction. Retractable landing gear into

wing.

Crew: Seven men

Armament. Four flexible 7.7-mm machine guns (one

in nose, one in forward turret, one in after turret, one in lower fuselage trap door). Some machine guns are replaced

by 20-mm Oerlikon cannon.

300 to 700 rounds per gun. Ammunition:

Bomb load:

3.000 pounds.

Radio:

Armor' Armored seats.

Motors: Twin Mitsubishi, Kinsei, 900-horsepower,

14-cylinder, twin-row, air-cooled engines. Total horsepower, 1,800. Also uses Mitsubishi Jaguar 1,000-horsepower, 14-cylinder, two-row radial, aircooled motor. Also BMW IV water-

cooled engine.

230 miles per hour, critical altitude. Maximum speed:

miles per hour, cruising speed.

Rate of climb: Service ceiling:

1.000 meters in 2.11 minutes.

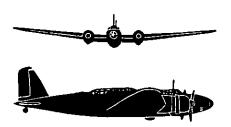
Maximum range: Endurance 12 hours at 150 miles per hour. Remarks:

Self-sealing gas tanks, Also oxygen

tanks

Heavy Bomber 97 (Modified)





## JAPANESE ARMY



**HEAVY BOMBER 98** (FIAT B. R. 20, 1937) (Also called "Mikado")

Description: Low-wing cantilever, metal monoplane.

Full retractable landing gear and wing

flans.

Crew: Seven

Armament: Three flexible, 12.7-mm Breds and 7.7-mm

Safat machine guns forward (one in nose, one dorsal, and one belly gun).

Breda. 700 rounds. Safat, 900 rounds.

Ammunition: Bomb load: 3.000 kilograms or 6.613.8 pounds.

Radio: One, type unknown.

Armor:

Motors: Twin, Fiat, 1,000-horsepower, 18-cylinder,

4-80 RC 41 Star Model, air-cooled mo-

tors; total horsepower, 2,000.

252 miles per hour, sea level. 281 miles Maximum speed:

per hour, critical altitude. Cruising speed, 235 miles per hour at 13,400 feet.

2.000 meters in 6 minutes and 3 seconds. Rate of climb:

5.000 meters in 18 minutes.

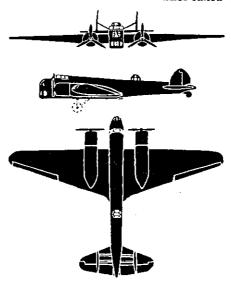
Service ceiling: Maximum ceiling, 9,000 meters, Maximum range: 2,200 pound load, 2,400 miles.

Medium load, 1.553 miles.

Wing span: 71 feet.

Remarks: Copy of Italian B. R. 20.

Heavy Bomber 98 (FIAT B. R. 20, 1937) (Also called "Mikado")



## JAPANESE Commercial



## AIRSPEED ENVOY TRANSPORT

Description: Low-wing monoplane.

Crew: One. Passengers, five.

Armament: Ammunition: Bomb load: Radio:

Armor:

Motors: Twin 480-horsepower, air-cooled motor.

Total horsepower, 960.

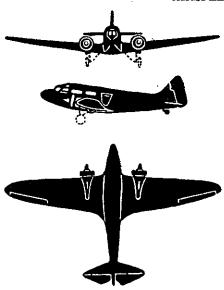
Maximum speed: 280 kilometers or 173.9 miles per hour.

Rate of climb:

Service ceilng: Maximum ceiling, 5,020 meters.

Maximum range: Endurance, 4 hours.

# Transport AIRSPEED ENVOY







#### DOUGLAS DC-2 TRANSPORT

Description: Swept-back, round tip, low-wing mono-

plane.

Crew: Three, Passengers, 14.

Armament: Ammunition:

Bomb load: Radio:

Armor: Motors:

Twin air-cooled motors.

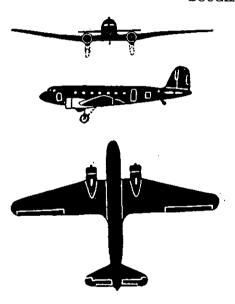
Maximum speed: 343 kilometers or 213.1 miles per hour.

Rate of climb:

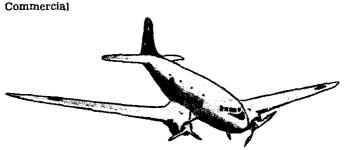
Service ceiling: Maximum ceiling, 7.200 meters.

Maximum range: Endurance, 6 to 7 hours.

# Transport DOUGLAS DC-2



# JAPANESE



#### DOUGLAS DC-3 TRANSPORT

Description:

Decided swept-back, round tip, dihedral, low-wing monoplane. Twin engine, long elliptical nose, inclosed cabin, and retractable landing gear.

Crew:

Armament:
Ammunition:
Bomb load:
Radio:
Armor:

Motors:

Two.

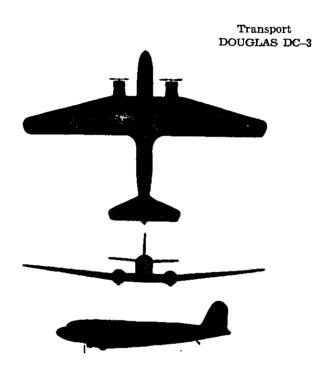
Maximum speed;

212 miles per hour.

Rate of climb: Service ceiling: Maximum range:

Wing span:

95 feet.



# JAPANESE Commercial



#### FOKKER TRANSPORT

Description: High-wing monoplane.

Crew: Two. Passengers, eight.

Ammunition: Bomb load:

Radio: Armor:

Motors: Triple 750-horsepower, air-cooled motors,

Total horsepower, 2,250.

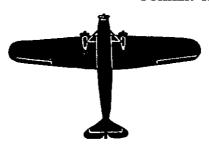
Maximum speed: 190 kilometers or 118 miles per hour.

Rate of climb:

Service ceiling: Maximum ceiling, 4,500 meters.

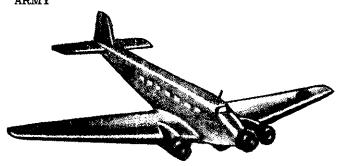
Maximum range: Endurance, 6 hours.

# FOKKER TRANSPORT





## **JAPANESE** ARMY



#### JUNKERS JU 52 TRANSPORT

Swept-back, tapered, slightly raked tip, Description:

dihedral, low-wing monoplane. Three engines, long tapered nose, engine nacelles under wing, inclosed cabin, and

fixed landing gear.

Crew:

Armament: Two machine guns.

Ammunition: Bomb load:

Radio:

Armor:

Three.

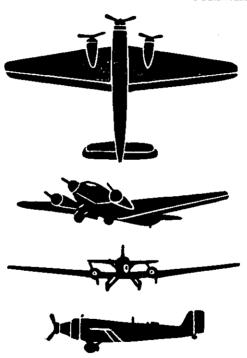
Motors: Maximum speed: 180 miles per hour.

Rate of climb: Service ceiling: Maximum range:

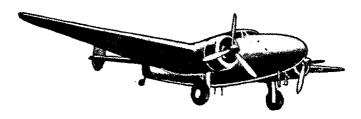
Wing span:

96 feet.

Transport JUNKERS JU 52



## JAPANESE Commercial



#### "LOCKHEED 14" TRANSPORT

Description: Swept-back, tapered wing, middle-wing

monoplane.

Crew: Four. Passengers, 10.

Armament:
Ammunition:
Bomb load:
Radio:
Armor:

Maximum speed: 426 kilometers or 264.7 miles per hour.

Rate of climb:

Service ceiling: Maximum ceiling, 8,000 meters.

Maximum range: Endurance, 7 to 9 hours.

Remarks:

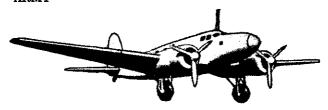
Motors:

Transport
"LOCKHEED 14"





## JAPANESE ARMY



#### MITSUBISHI MC-20 TRANSPORT

Description: Swept-back, tapered, round tip, dihed-

ral, low-wing monoplane. Twin engine, long tapered nose, inclosed cabin, and

retractable landing gear.

Crew:

Armament:

Ammunition:

Troop load: 11 passengers.

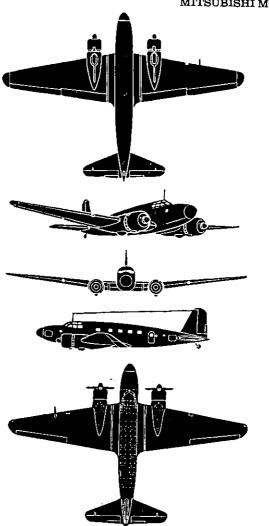
Radio: Armor: Motors:

Maximum speed: Rate of climb: Service ceiling:

Maximum range:

Wing span: 74 feet.

Transport
MITSUBISHI MC-20



## JAPANESE Commercial



## NAKAJIMA A. T. TRANSPORT

Description:

Swept-back, round tip, low-wing mono-

plane.

Crew:

Two. Passengers, eight.

Armament:

Ammunition: Bomb load:

Radio;

Motors: Twin air-cooled, 900-horsepower motors.

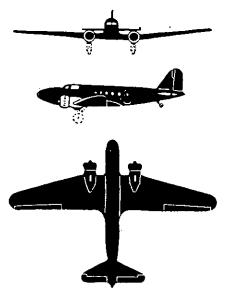
Maximum speed: 370 kilometers or 229.9 miles per hour.

Rate of climb:

Service ceiling: Maximum ceiling, 9,000 meters.

Maximum range:

# Transport NAKAJIMA A. T.



## JAPANESE ARMY

## TATIKAWA 95-1 TRAINER

Description:

Crew:

Armament: Ammunition: Bomb load:

Radio: Armor:

Motors:

One 350-horsepower type 95.

Maximum speed: 143 miles per hour.

Rate of climb: Service ceiling: Maximum range:

Wing span:

33 feet.

Remarks:

Resembles Curtiss.

Trainer TATIKAWA 95-1

## JAPANESE ARMY

#### TATIKAWA 95-3 TRAINER

Description:

Crew:

Armament: Ammunition:

Bomb load: Radio:

Armor:

Armor: Motors:

One 150-horsepower type 95.

Maximum speed: 106 miles per hour.

Rate of climb: Service ceiling: Maximum range:

Wing span:

33 feet.

Trainer
TATIKAWA 95-3

JAPANESE NAVY

## JAPANESE NAVÝ

#### MITSUBISHI 96 FIGHTER

Description:

Elliptical wing, dihedral, low-wing monoplane. Single engine, short blunt nose,

open cockpit, and fixed landing gear.

Crew:

Armament:

Two or four Vickers machine guns.

Ammunition:

500 rounds per machine gun.

Bomb load: Radio:

Armor:

Motors:

One 730-horsepower Kinsei.

Maximum speed: 250 miles per hour.

Rate of climb:

Service ceiling: Maximum range: 440 miles.

31 000 feet.

Wing span:

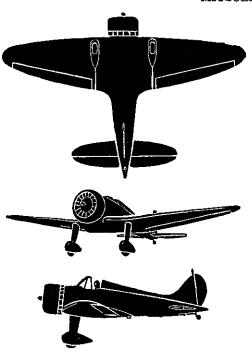
36 feet.

Remarks:

Range can be increased to 840 miles by

addition of a belly tank.

# Fighter MITSUBISHI 96



## JAPANESE NAVY

#### MITSUBISHI 97 FIGHTER

Description:

Crew:

Armament:

Two machine guns.

Ammunition:

500 rounds per machine gun.

Bomb load:

Radio: Armor:

Motors:

One 650-horsepower air-cooled.

Maximum speed:

265 miles per hour.

Rate of climb:

Service celling:

30.000 feet. Maximum range: 590 miles.

Wing span: Remarks:

Fighter MITSUBISHI 97

## JAPANESE NAVY

## MITSUBISHI 97 FIGHTER, OI MODIFICATION

Description:

Orange, all metal, low-wing monoplane.

Single engine and retractable landing

gear.

Crew:

One.

Armament:

Two 20-mm cannon and two machine

guns.

Ammunition:

Bomb load:

Radio:

Armor: Motors:

One Mitsubishi twin-row, radial.

Maximum speed: Rate of climb:

Service ceiling: Maximum range:

Wing span:

37 feet.

Remarks:

Ship borne; arresting gear and flotation

gear carried.

# Fighter MITSUBISHI 97, O1 MODIFICATION

## JAPANESE NAVY

# NAKAJIMA 90 FIGHTER

(Obsolescent)

Description:

Crew:

One.

Armament:

Ammunition: Bomb load:

Radio:

Armor:

Motors: One 450-horsepower Kotobuki (Bristol).

Maximum speed: 174 miles per hour.

Rate of climb: Service ceiling: Maximum range:

Wing span:

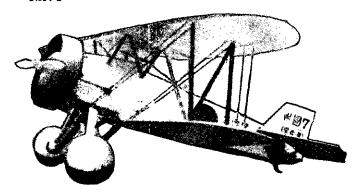
31 feet.

Remarks:

Resembles Curtiss.

Fighter NAKAJIMA 90

#### JAPANESE NAVY



#### NAKAJIMA 95 FIGHTER

Description:

Straight, round tip, staggered biplane.

Single engine, short blunt nose, open cockpit, and fixed landing gear.

Crew:

One.

Armament:

Ammunition:

Bomb load: Radio:

Armor:

Motors:

One 550-horsepower Kotobuki (Bristol).

Maximum speed: 214 miles per hour.

Rate of climb: Service ceiling: Maximum range:

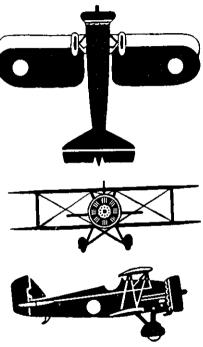
Wing span:

33 feet

Remarks:

Resembles Curtiss Hawk.

Fighter NAKAJIMA 95



## JAPANESE NAVY

## NAKAJIMA 97 FIGHTER

Description:

Crew: One.

Armament: Two Vickers machine guns.

Ammunition: 550 rounds per machine gun.

Bomb load:

Radio: Armor:

Motors: One 800-horsepower Hikari.

Maximum speed: 270 miles per hour.

Rate of climb:

Service ceiling: 33,000 feet.

Maximum range: 340 miles.

Wing span: 36 feet.

Remarks: Range can be increased to 950 miles by

adding two belly tanks.

Fighter NAKAJIMA 97

## JAPANESE NAVY

## NAKAJIMA 97 (NAKA 93) FIGHTER (Floatplane)

Description: Straight wing, round tip, midwing mon-

oplane. Single engine, blunt nose, open cockpit, and fixed with twin floats.

Crew: Two.

Four machine guns. Armament:

Ammunition: Bomb load: Radio:

Armor:

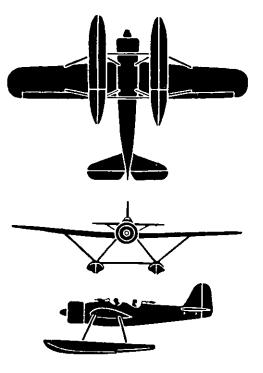
Motors: One 750-horsepower Nakajima.

220 miles per hour. Maximum speed:

Rate of climb:

Service ceiling: 27,000 feet. Maximum range: 325 miles. Wing span: 37 feet.

Fighter NAKAJIMA 97 (NAKA 93)



## JAPANESE NAVY

## NAKAJIMA 97 (NAKA 97) FIGHTER

Description:

Crew:

One.

Armament:

Three machine guns.

Ammunition: Bomb load: Radio:

Radio:

Motors: One 750-horsepower Nakajima.

Maximum speed:

270 miles per hour.

Rate of climb: Service ceiling:

Service ceiling: 32,000 feet.

Maximum range: 460 miles.

Wing span: 35 feet.

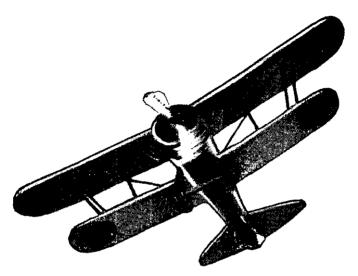
Remarks:

Range can be increased to 1,150 miles by

adding two belly tanks.

Fighter NAKAJIMA 97 (NAKA 97)

## JAPANESE NAVY



#### NUMBER 95 CARRIER FIGHTER

Description: Straight wing, round tip, cut-out, stag-

gered biplane of unequal span. Single engine, short blunt nose, open cockpit,

and fixed landing gear.

Crew: One.

Armament: Two Vickers machine guns.

Ammunition: Bomb load: Radio: Armor:

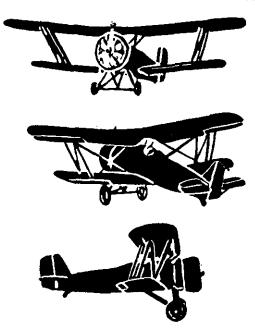
Motors: One 600-horsepower Hikari.

Maximum speed: 210 miles per hour.

Rate of climb: Service ceiling:

Maximum range: 490 miles. Wing span: 33 feet.

Carrier Fighter 95



### JAPANESE NAVY

# AICHI 99 DIVE BOMBER (BAKU GEKI KI) (Also Mitsubishi with Kinsei Motor)

Description: Elliptical wing, elliptical tip, dihedral, low-

wing monoplane. Single engine, long blunt nose, inclosed cockpit, and fixed

landing gear.

Crew: Two.

Armament: Three machine guns (two fixed).

Ammunition:

Bomb load: 1,100 pounds.

Radio: Armor:

Motors: One 990-horsepower Kaishin or Kinsei 44.

Maximum speed: 236 miles per hour.

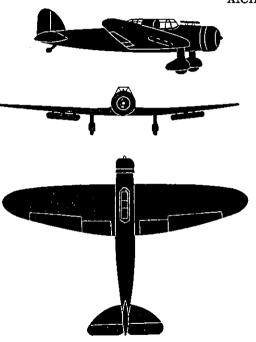
Rate of climb: Service ceiling:

Service ceiling: 26,000 feet.

Maximum range: 450 miles.

Wing span: 47 feet.

Dive Bomber AICHI 99



# JAPANESE NAVY

#### MITSUBISHI 96 DIVE BOMBER

Description: Straight wing, round tip, slightly staggered

biplane. Single engine, blunt nose, and

fixed landing gear.

Crew: Two.

Armament: Two machine guns.

Ammunition: Bomb load: Radio:

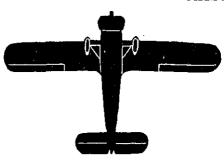
Motors: One 730-horsepower Kinsei.

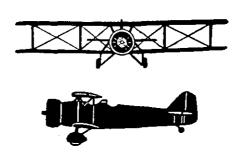
Maximum speed: 180 miles per hour. Service ceiling:

Maximum range:

Wing span: 38 feet.

# Dive Bomber MITSUBISHI 96





## JAPANESE NAVY

#### DIVE BOMBER 97

(Also called Deck Type Reconnaissance)

Description:

Wing flared at fuselage, cantilever, lowwing monoplane with retractable undercarriage. Retractable landing gear, single strut, also shock absorbent legs.

Copy Douglas TBD-1.

Crew:

Three (pilot, second pilot, and radioman).

Armament:

Ammunition: Bomb load: Radio: Armor:

Motors:

Single, air-cooled, radial motor.

Maximum speed:

200 miles per hour, sea level. 150 miles

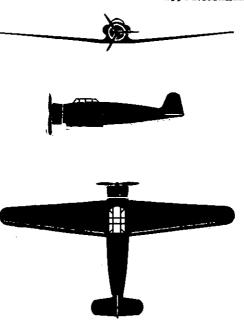
per hour, cruising speed.

Rate of climb: Service ceiling: Maximum range:

Remarks:

97-VIB. Light dive bomber. Has an approximate wing span of 45 feet. Length over all is approximately 26 feet.

Dive Bomber 97 (Also called Deck Type Reconnaissance)



## JAPANESE NAVY

## AICHI 92 RECONNAISSANCE (Obsolescent)

Description:

Crew:

Armament:

Ammunition: Bomb load:

Radio:
Armor:

Motors:

One 500-horsepower Mitsubishi (Hispano

S) or one 600-horsepower Nakajima

(Lorraine).

Maximum speed: Rate of climb: Service ceiling: Maximum range:

Wing span:

45 feet.

Reconnaissance AICHI 92

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## JAPANESE NAVY

#### AICHI TOKEI 97 A. I. 92 RECONNAISSANCE

Description: Straight wing, round tips, staggered

biplane of unequal span. Single engine, long tapered nose, open cockpit,

and fixed with twin floats.

Crew: Two.

Armament: Two machine guns.

Ammunition:
Bomb load:
Radio:
Armor:

Motors: One 770-horsepower Aichi.

Maximum speed: 180 miles per hour.

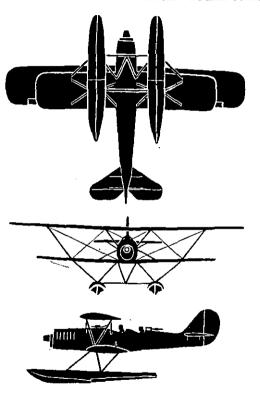
Rate of climb:

Service ceiling: 30,000 feet.

Maximum range: 410 miles.

Wing span: 43 feet.

Reconnaissance AICHI TOKEI 97 A. I. 92



# JAPANESE NAVY

# KAWANISHI 93 RECONNAISSANCE.

(Obsolescent)

 ${\bf Description:}$ 

Crew:

Armament: Ammunition:

Bomb load: Radio:

Armor:

Motors: One 450-horsepower Nakajima (Jupiter).

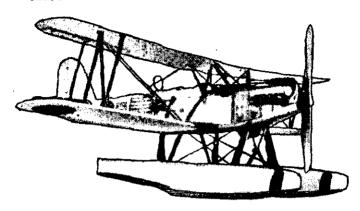
Maximum speed: Rate of climb: Service ceiling: Maximum range:

Wing span:

48 feet.

Reconnaissance KAWANISHI 93

## JAPANESE NAVY



# KAWANISHI 94 RECONNAISSANCE-BOMBER

Description: Straight wing, round tip, cut-out, staggered

biplane. Single engine, long tapered nose, open cockpit, and fixed with twin

floats.

Crew: Three.

Armament: Two machine guns.

Ammunition:

Bomb load: 500 pounds.

Radio: Armor:

Motors: One 600-horsepower Hiro 91.

Maximum speed: 140 miles per hour.

Rate of climb:

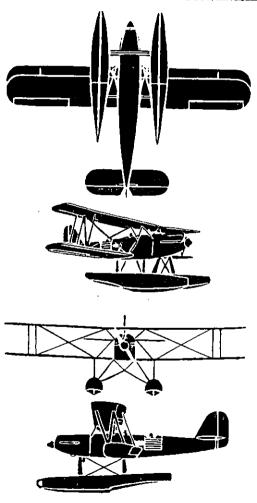
Service ceiling: 18,000 feet.

Maximum range: 550 miles.

Wing span: 46 feet.

Remarks: Resembles Heinkel.

# Reconnaissance-Bomber KAWANISHI 94



# JAPANESE NAVY

# NAKAJIMA 90-2 RECONNAISSANCE-BOMBER (Obsolescent)

Description:

Crew: Two.

Armament: Ammunition: Bomb load: Radio:

Armor: Motors:

Motors: One 450-horsepower Nakajima (Jupiter).

Maximum speed: 168 miles per hour,

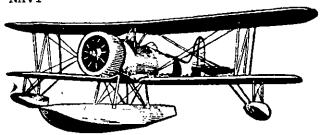
Rate of climb: Service ceiling: Maximum range:

Wing span: 40 feet.

Remarks: Resembles Chance-Vought Corsair.

Reconnaissance-Bomber NAKAJIMA 90-2

## JAPANESE NAVY



#### RECONNAISSANCE-BOMBER 95

Description: Round tip, straight wing biplane with

pick-up fittings. Convertible to landplane. One large center and two small

wing floats.

Crew: Two or three.

Armament: Two machine guns.

Ammunition: Bomb load:

220 pounds.

Radio: Armor: Motors:

One 600-horsepower Kotobuki.

Maximum speed: 160 miles per hour.

Rate of climb:

Service ceiling: 18,000 feet.

Maximum range: 500 miles.

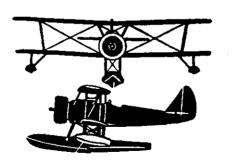
Wing span: 36 feet.

wing span; 36 feet

Remarks: Resembles Curtiss Hawk.

Reconnaissance-Bomber 95





# JAPANESE NAVY

#### RECONNAISSANCE 97 (DIVINE WIND)

Description: Straight wing, round tip, slightly dihedral,

midwing monoplane. Single engine, short blunt nose, open cockpit, and fixed

with twin floats.

Crew:

Armament: Ammunition: Bomb load: Radio:

Armor: Motors:

Maximum speed: 298 miles per hour.

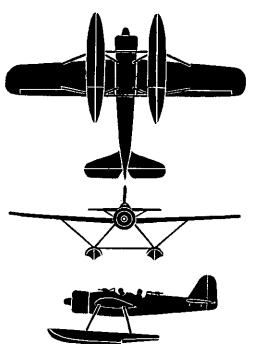
Rate of climb:

Service ceiling: 29,500 feet.

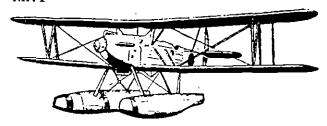
Maximum range:

Wing span: Remarks:

Reconnaissance 97 (DIVINE WIND)



### JAPANESE NAVY



#### KAWANISHI 97 (KAWA 94) TORPEDO BOMBER

Description: Straight wing, round tip, slightly di-

hedral biplane. Twin floats.

Crew: Two or three.

Armament: One fixed forward, and one flexible dorsal

machine gun.

Ammunition: 500 rounds per fixed gun. 700 rounds per

flexible mounted gun.

Bomb load: Largest bomb, 500 pounds.

Radio: CW telegraph,

Armor:

Motors: Single, Kawanishi, 650-horsepower, Hi-

ronai, 12-cylinder, W-type, water-cooled engine. Also Mitsubishi Junkers, V-type, water-cooled. 800 horsepower.

Maximum speed: 155 miles per hour.

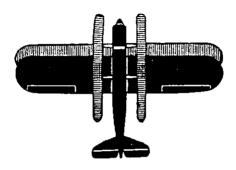
Rate of climb:

Service ceiling: 20,000 feet.

Maximum range: 450 miles.

Wing span: 46 feet.

# Torpedo Bomber KAWANISHI 97 (KAWA 94)





### JAPANESE NAVY

#### MITSUBISHI 97 TORPEDO BOMBER

Description: Tapered, round tip, dihedral, low-wing

monoplane. Single engine, blunt nose,

and retractable landing gear.

Crew: Three.

Armament: Three machine guns.

Ammunition:

Bomb load: 1,500-pound torpedoes or 1,100-pound

bombs.

Radio:

Motors: One 900-horsepower Kinsei.

Maximum speed: 195 miles per hour.

Rate of climb:

Service ceiling: 23,000 feet.

Maximum range: 470 miles.

Wing span: 50 feet.

Torpedo Bomber MITSUBISHI 97



## JAPANESE NAVY



#### NAKAJIMA 96 TORPEDO BOMBER

Description: Straight wing, round tip, staggered bi-

plane. Single engine, long blunt nose, inclosed cockpit, and fixed landing

gear.

Crew: Three.

Armament: One machine gun.

Ammunition:

Bomb load: 1,500-pound torpedoes.

Radio: Armor:

Motors: One 600-horsepower Kotobuki.

Maximum speed: 168 miles per hour.

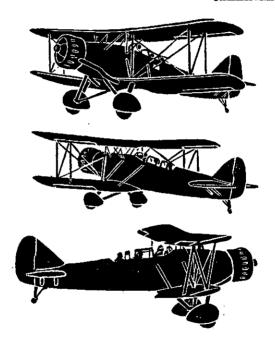
Rate of climb:

Service-ceiling: 20,000 feet.

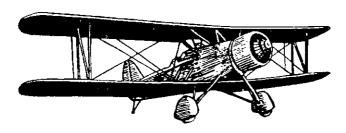
Maximum range: 425 miles.

Wing span: 49 feet.

# Torpedo Bomber NAKAJIMA 96



## JAPANESE NAVY



#### TORPEDO BOMBER 96

Description: Biplane, nonretractable, streamlined.

Crew: Three seater.

Armament: Five machine guns.

Ammunition:

Bomb load: 1 500-pound torpedo

Bomb load: 1,500-pound torpedo or bombs. Radio: Armor:

Motors: Single, Hikari, 600-horsepower, air-cooled engine for light bomber. Probably 800-horsepower, air-cooled engine for tor-

pedo bomber.

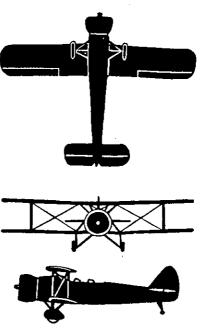
Maximum speed: 300 kilometers or 186.4 miles per hour.

Rate of climb: Service ceiling: Maximum ceiling, 7,600 meters.

Maximum range: Five hours at 140 miles per hour with

load.

Torpedo Bomber 96



## JAPANESE NAVY

#### AICHI AI 104 BOMBER

Description: Swept-back, round tip, dihedral, mid-

wing monoplane. Three engines, long blunt nose, blunt engine nacelles set into wing, inclosed cockpit, and fitted

with twin floats.

Crew: Five.

Armament: Two 37-mm cannon and four machine

guns.

Ammunition:

Bomb load: 2,200 pounds.

Radio: Armor:

Motors: Three 770 Aichi.

Maximum speed:

230 miles per hour.

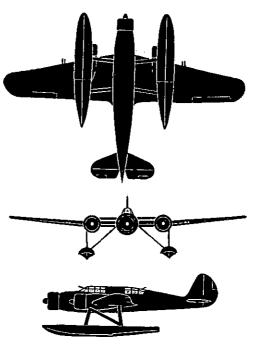
Rate of climb:

Service ceiling: 24,000 feet.

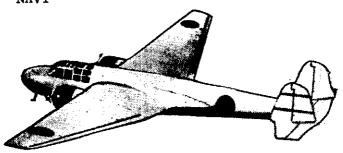
Maximum range: 1,000 miles.

Wing span: 87 feet.

Bomber AICHI AI 104



## JAPANESE NAVY



## MITSUBISHI 96 MK. III BOMBER

Description: Swept-back, tapered, square tip, slightly

dihedral, midwing monoplane. Twin engine, long rounded nose, engine nacelles below wing, inclosed cockpit, twin rudders, and retractable landing gear.

Crew: Seven.

Armament: Eight machine guns.

Ammunition:

Bomb load: 2,200 pounds.

Radio:

Motors: Two 840-horsepower Mitsubishi.

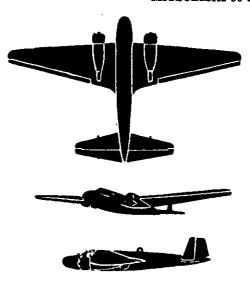
Maximum speed: 210 miles per hour.

Rate of climb: Service ceiling: Maximum range:

Wing span: 82 feet.

Remarks: Resembles Junkers Ju 86K.

# Bomber MITSUBISHI 96 MK. III



# JAPANESE NAVY

# MITSUBISHI 96 MK. IV BOMBER (Similar in appearance to Mk. III)

Description:

Crew: Seven.

Armament: Six machine guns.

Ammunition:

Bomb load: 2,200 pounds.

Radio: Armor: Motors:

Motors: Two 1,000-horsepower Mitsubishi.

Maximum speed: 230 miles per hour.

Rate of climb: Service ceiling: Maximum range:

Wing span: 82 feet.

Remarks: Resembles Junkers Ju 86K.

Bomber MITSUBISHI 96 MK. IV

## JAPANESE NAVY



# MITSUBISHI 96 (OTORI) BOMBER

Description:

Crew:

Armament: Ammunition:

Bomb load:

Radio:

Armor:

Motors: Two 550-horsepower Nakajima (Jupiter).

Maximum speed: 239 miles per hour.

Rate of climb: Service ceiling:

Maximum range:

Wing span: Remarks:

# Bomber MITSUBISHI 96 (OTORI)

## **JAPANESE** NAVY



#### HIRO 91-1 FLYING BOAT

Description: Swept-back, tapered, round tip, dihedral,

> parasol type, high-wing monoplane flying boat. Twin engine, long elliptical nose, engine nacelles mounted above wing, inclosed cabin, and twin rudders.

Crew: Eight.

Armament: Two machine guns.

Ammunition: Bomb load: Radio: Armor:

Motors: Two 600-horsepower Hiro.

Maximum speed: 130 miles per hour.

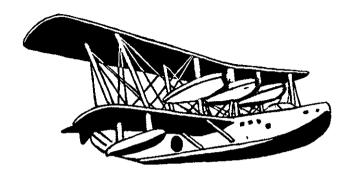
Rate of climb:

Service ceiling: 13.000 feet. Maximum range: 600 miles. Wing span: 77 feet.

Flying Boat HIRO 91-1



### JAPANESE NAVY



## KAWANISHI 90-2 FLYING BOAT

Description: Straight wing, square tip, dihedral, biplane

of unequal span, fitted as flying boat. Three engines mounted between wings, long pointed nose, inclosed cabin, and

small twin wing floats.

Crew: Six to eight.

Armament: Four machine guns.

Ammunition:
Bomb load:

Motors: Three 955-horsepower R. R. Buzzard.

Maximum speed: 140 miles per hour.

Rate of climb:

Radio:

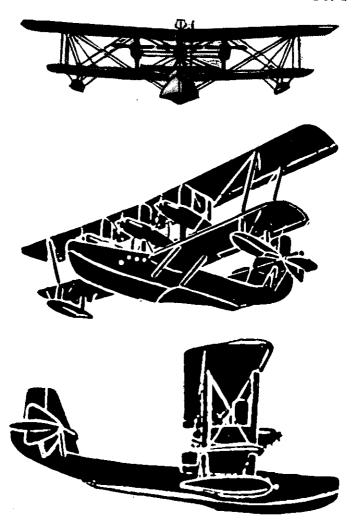
Service ceiling: 13,000 feet.

Maximum range: 980 miles.

Wing span: 102 feet.

Remarks: Resembles Short K. F. I, "Rangoon."

# Flying Boat KAWANISHI 90–2



## JAPANESE NAVY

## KAWANISHI 97 FLYING BOAT

Slightly swept-back, trailing edge tapered to root and tip, round tip, parasol type, high-wing monoplane fitted as a flying boat. Four engines, nacelles placed into wing, long rounded nose, inclosed cabin, small wing floats, and twin rudders.

Crew:

Armament: Ammunition: Bomb load: Radio:

Armor:

Motors: Fo

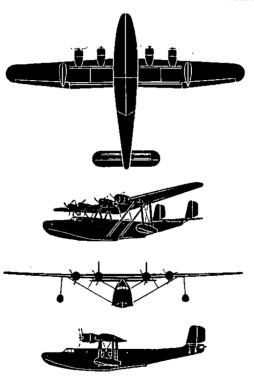
Four 800-horsepower Cyclone.

Maximum speed: 190 miles per hour.

Rate of climb:

Service ceiling: 19,000 feet. Maximum range: 1,750 miles. Wing span: 131 feet.

Flying Boat KAWANISHI 97



## **JAPANESE** NAVY

## MITSUBISHI 96 (MITSU 95) FLYING BOAT

Description:

Straight wing, square tip, biplane of unequal span. Three engines with nacelles between planes, fitted as flying boat, inclosed, long tapered body, and two

wing floats

Crew:

Six.

Armament:

One Hotchkiss cannon and four machine

guns.

Ammunition:

Bomb load:

1.980 pounds.

Radio:

Armor:

Motors:

Three 900-horsepower Mitsubishi

Maximum speed: Rate of climb:

145 miles per hour.

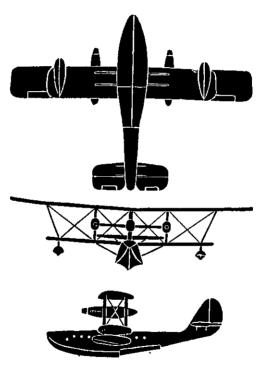
Service ceiling:

13,000 feet. Maximum range: 1,400 miles.

Wing span:

97 feet.

Flying Boat MITSUBISHI 96 (MITSU 95)



## JAPANESE NAVY



# FLYING BOAT 97 (Copy of Sikorsky 5-42)

Description:

Swept-back, round tip, high-wing monoplane with twin rudders. Center float with two small wing floats.

Crew:

Armament: Ammunition; Bomb load; Radio:

Armor:

Motors: Four air-cooled motors mounted in wings, Maximum speed: Cruising speed, 180 miles per hour.

Rate of climb:

Service ceiling: Maximum range:

Wing span:

120 feet.

Flying Boat 97 (Copy of Sikorsky 5–42)

