

Aircraft Combat Rules for *GODLIKE*

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Does your Super-fast flyer want to go toe-to-toe with a Messerschmitt Bf 109 over war-torn England, or do you want to pilot a P-38 on a patrol over the Solomon Islands? No problem, aircraft combat in *GODLIKE* is simple, but there are some basic concepts we should get out of the way before you take to the air to tangle with the enemy...

Aircraft Types

There are many different types of aircraft, from the devastatingly swift and agile Mitsubishi Zero to the clumsy Fairey Swordfish—not all airplanes are the same. Some are easier to fly than others, while some are faster than others. To reflect this, each aircraft has a Flight Speed rating, measuring its top airspeed, and a Difficulty Rating, reflecting how easy (or hard) it is to fly.

Flight Speed Ratings

The top speed of an aircraft is represented by a number of dice (up to 10) indicating how fast that particular plane can travel. The Flight Speed ratings listed below are exactly the same as the Talent power Super Speed, so if you want to know if your Talent flyer is faster than an enemy aircraft, just compare the two scores.

# of Dice	Top Flight Speed (Example Aircraft)
2	150 MPH (Fairey Swordfish)
3	225 MPH (Fairey Barracuda, Junkers Ju 88)
4	300 MPH (Boeing B-17 Flying Fortress, Junkers Ju 87 “Stuka”)
5	375 MPH (Mitsubishi A6M Zero-Sen, Supermarine Spitfire)
6	457 MPH (Focke Wulf Fw 190, North American P-51 Mustang)
7	540 MPH (Dornier Do 335 Pfeil, Messerschmitt Me 262)
8	620 MPH (Messerschmitt Me 163 Komet)
9	700 MPH (<i>Wasserfall</i> Anti-Aircraft Rocket)
10	Beyond 785 MPH (Bell X-1)

Difficulty Rating

The Difficulty Rating indicates how easy it is for a skilled pilot to fly a particular aircraft, as well as indicating the limits of its maneuverability. Heavy or cumbersome aircraft like bombers have a high Difficulty Rating, while agile fighters have a low Difficulty Rating. Difficulty Ratings range from 0 (the best) to 6 (the worst.)

To successfully perform a combat maneuver in an aircraft, the pilot must roll his Coordination+Piloting and beat the listed Difficulty Rating. On a failure, the maneuver fails.

Maneuvers are covered in more detail below, but basically, flying in bad weather, attacking or dodging in an aircraft all require a successful roll against the planes' Difficulty Rating. Taking off and landing also require rolls, but the Difficulty Rating does not apply unless there are unusually difficult circumstances – landing a damaged plane or taking off under enemy fire, for example.

Under normal circumstances, a pilot with a Piloting Pool equal to his planes' Difficulty Rating does not need to roll at all, except when in combat or under stressful conditions. In other words, if your Coordination+Piloting skill is equal or greater than the Difficulty Rating of the aircraft you're piloting, you don't need to roll when taking off or landing, unless under extraordinary circumstances—you're that good.

Difficulty Ratings also indicate the maximum amount of dice a pilot can throw in his Coordination+Piloting dice pool when flying that particular aircraft. This reflects the fact that even if you're an amazing pilot, you can't make a B-17 do a snap roll. For example, even if you

have a 10d Coordination+Piloting dice pool, you're only permitted to throw 6 of those 10d in a B-17, because the plane is just not responsive enough to match your skill. To determine the maximum number of dice you can roll in an aircraft, subtract its Difficulty Rating from 10. For example, a Spitfire has a Difficulty Rating of 2, (10-2=8) so you can throw a maximum Coordination+Piloting dice pool of 8d when piloting a Spitfire—even if you have a dice pool of 10d.

Those who have the unfortunate luck to find themselves behind the joystick of a plane without a Piloting skill at all, must beat a Difficulty Rating of 7 to complete *any* maneuver.

Airplane Type	Difficulty Rating (Maximum Number of Dice)	Example of Aircraft
Nimble Fighter	0 (10d)	Mitsubishi Zero-sen
Fast Fighter	2 (8d)	Spitfire, P-51 Mustang
Fighter/Bomber	3 (7d)	de Havilland Mosquito
Light Bomber	4 (6d)	Junkers Ju 88
Bomber	4 (6d)	Ilyushin Il-4
Heavy Bomber	4 (6d)	Avro 683 Lancaster
Glider	5 (5d)	Airspeed Horsa
Heavy Glider	6 (4d)	Gotha-242

Armor and Structure

Some planes are made of thick aluminum plate, and others have only cloth and plywood between the pilot and certain death. To reflect this, all aircraft have a Heavy Armor rating from 0 to 3. Heavy Armor reduces the width of all attacks by its value—any attack reduced by Heavy Armor to width 1, fails to injure the aircraft.

Airplane	Heavy Armor Rating
Mitsubishi A6M Zero-Sen	0 (36 Structural Points)
Supermarine Spitfire	1 (48 Structural Points)
P-51 Mustang	2 (60 Structural Points)
Junkers Ju 88	3 (66 Structural Points)
Vickers Wellington	3 (78 Structural Points)
B-29 Superfortress	3 (90 and up in multiples of 6)

Structural points are the hit location boxes of an aircraft that absorb damage. There are two types of Structural Damage—Superficial (the aircraft equivalent of Shock damage) and Structural (the aircraft equivalent of Killing damage.) Each Structural point can absorb 2 Superficial hits before it becomes a Structural hit. If a location fills with Structural hits, it is destroyed.

Blow off a wing, and the plane obviously plummets, shoot up the engine and you get the same result, hit the pilot and the plane probably crashes as well. To determine the hit location of an attack on an aircraft consult the following chart—the height of the attack roll indicates the hit location.

Basic Aircraft Hit Location Table

Roll	Hit Location
1	Left tail
2	Right tail
3-4	Left wing
5-6	Right wing
7-9	Crew Compartment or crewman
10	Engine

Location Hit	Effects of Damage	Location Filled
Left Tail	Lose all bonuses	-1d to all actions
Right Tail	Lose all bonuses	-1d to all actions
Left Wing	Lose all bonuses, -1d to all actions, 1/2 weapons value	Crash
Right Wing	Lose all bonuses, -1d to all actions, 1/2 weapons value	Crash
Crew Compartment	Weapons hit crewman directly	Crash
Engine	1/2 Speed and double Difficulty Rating	Crash*

*Note that most bombers can fly with only one or two engines.

Attack Pool

Some planes have rockets, others machine guns, others still a whole slew of weaponry, but instead of detailing every available weapon on every type of aircraft; we've abstracted them into several different weapons types. Simply multiply the number of weapons on an aircraft by its qualities to find out its Attack Pool (up to a maximum of 10d and 10 Penetration.)

There are two basic types of weapons—fixed and turreted. Fixed weapons are those mounted in a fixed location on the aircraft, such as forward facing machine guns fixed in the wing. Fixed weapons are fired by the pilot—as such, they can only fire at targets in front of the aircraft. Turreted weapons are those mounted on blisters on the aircraft, and are able to swivel to target locations below or to the rear of the aircraft—a separate gunner usually mans these weapons. To successfully hit a target with fixed weaponry, the pilot must get the upper hand in combat (see Maneuvering, below) and make a successful roll his aircraft's Attack Pool (which beats the Difficulty Rating of his aircraft.) If he fails, or fails to beat the Difficulty Rating, the target is missed.

Turreted weapons work differently—they can fire at targets either in front or to the rear of the aircraft. Each round they get to roll their Attack Pool. If they succeed, and beat their aircraft's Difficulty Rating, they hit their target.

Every point of width on a successful Attack Pool roll inflicts 2 points of Superficial damage and Structural damage on the enemy aircraft. Area attacks (like rockets) inflict 3 Superficial and Structural points of damage per die thrown, but are only thrown after a successful hit. If that damage hits a crewman, it does the equivalent damage in Killing and Shock damage.

Weapon Configurations

Machine gun (fixed)
Machine gun (turret)
Cannon (fixed)
Cannon (turret)
Rocket

Damage and Effect

1d per machine gun*
2d per machine gun
2d per cannon Penetration 2
3d per cannon Penetration 2
3d+2d Area per rocket Penetration 4

*2d is the minimum Attack Pool

Dogfights

When two planes tangle in the air, it's called a dogfight. There are four movements possible in aircraft combat you can choose when you're involved in a dogfight; they are Maneuver, Dodge, Attack and Pursuit. Otherwise combat works exactly as in *GODLIKE*. You choose a type of movement, everyone rolls the appropriate dice pool, the round is resolved in width order, and it all starts again.

Each of these maneuvers requires not only a success, but a success high enough to beat the Difficulty Rating of the plane piloted.

Maneuver

This is the majority of a dogfight—maneuvering to get the upper hand in combat. This is a dynamic contest between you and the other pilot, unless he's trying to flee combat (see below). Roll your Coordination+Piloting against your enemies' Coordination+Piloting.

If you succeed and beat your Difficulty Number, you swing around behind your enemy and can let him have it the next round with an attack. If you both fail, neither of you get the upper hand. If he succeeds and you fail, he exploited your misstep and got the upper hand, and he can attack next round!

Example: Bob is flying a P-51 Mustang (Difficulty Rating of 2) and the enemy is flying a Mitsubishi G4M Bomber (Difficulty Rating of 4.) Bob has a Coordination of 3, a Piloting skill of 3, so he rolls 6d.

Bob rolls a 3x10, easily beating his Difficulty Rating, and the Bomber pilot rolls his Coordination+Piloting trying to beat the bomber's 4 Difficulty Rating and gets a 9, 7, 4, 2, 8, and 1, failing. The P-51 easily swings in behind the bomber and can attack the next round.

Pushing the Limits

Skilled pilots can force their aircraft to the very limits of its endurance, squeezing every ounce of maneuverability and speed out of the design without causing the plane to structurally fail. To attempt this, a pilot must have at least a Piloting skill of 2, and must make a successful Piloting roll with a Difficulty of 4, plus the normal Difficulty Rating of the aircraft. On a success, the aircraft gains a +1 width to all rolls for width number of rounds.

On a failure, the plane suffers 5 Structural and 10 Superficial hits to each wing, and loses all bonuses until it can be repaired. If the wings fail, the plane buckles and crashes...

Flogging your plane like this requires a combat action. You can't do this *and* attack or maneuver, unless you use a multiple action.

Dodge

This move gets the guy off your tail. It works just like normal dodging in *GODLIKE*. Roll your Coordination+Piloting, beat the Difficulty Rating of your aircraft, and gobble out of your enemies' attacking set—if you beat his width that is. If you successfully dodge, the next round you can choose to Maneuver or Flee. If you fail and he succeeds, you're hit...

Example: Captain Richards has an Messerschmitt Bf 109 on the tail of his Spitfire. He has a Coordination+Piloting of 6d and a Difficulty Rating of 2. He rolls a 2x7, beating his Difficulty Rating. His attacker rolls his Bf 109 Attack Pool 6d, and gets a 2x6, beating his Difficulty Rating—but Richards roll is faster. Richards gobbles a 6 out his attacker's set, canceling it, and skillfully rolls his Spitfire at the last moment, dodging the cannon blast.

Attack

If you get the upper hand in combat by successfully completing a Maneuver, (or you have an aircraft that has turreted weapons,) you can choose to attack the enemy aircraft. Roll your Attack Pool (beating the Difficulty Rating of the aircraft,) on a successful hit, you inflict two points of Superficial and Structural points per point of width on the enemy aircraft.

Example: Captain Richards swings in behind the Bf 109 and blasts away. The Spitfire has an Attack Pool of 8d and a Difficulty Rating of 2. He rolls a 3x7 (beating his Difficulty Rating)—usually he would cause 6 Superficial Points and Structural Points of damage, but the Heavy Armor of the Bf 109 eats up 1 point of width. So the attack does 4 Superficial and Structural points to the crew compartment of the Bf 109—hitting the pilot as well, who takes 4 Killing and 4 Shock points to his torso.

Attacking Ground Targets

Many aircraft are designed for a ground-attack role—strafing infantry, knocking out tanks, and blowing up command bunkers with bombs, rockets and cannons. The Attack Pool statistics above are given for air-to-air combat, so how do you handle attacks on ground targets? Easy, all damage from aircraft becomes the equivalent amount of Killing and Shock damage to a human target.

In addition, armored vehicles attacked from the air only have the protection of their *lowest* Heavy Armor value.

Example: Captain Richards spies two Panther V heavy tanks creeping through the Bocage as he flies his P-38 over Normandy. He swings around and strafes one of the tanks with his Attack Pool of 6d (Penetration 2), rolling a 2x3. The Panther has a Heavy Armor rating of 7 to 2, so the attack is counted against HAR 2 (the weakest point on the Panther.) Richards' cannon rounds punch a hole straight through the top of the Panther's turret.

The second Panther fires back with a machine gun, rolling a 2x3 and 2x5. Since they have no Penetration value, the machine gun rounds bounce harmlessly off the armored hull of the P-38, as it turns around for another pass...

Pursuit

Trying to hightail it out of the dogfight is a viable strategy, provided your aircraft is faster than the enemy... Roll your Flight Speed dice+Piloting in a gobble contest against the enemies Attack, Maneuver or Pursuit. If you win, you outdistance him. If he wins, he catches up and can attack the next round.

If you successfully escape from a dogfight from an aircraft that has a lower Flight Speed than your aircraft, they can't Pursue you. Once you're free and clear of the dogfight, you can beat it back to base without fear of them catching up.

If your aircraft's Flight Speed is equal or greater than the enemy and they're fleeing, you can choose to Pursue them. Roll your Flight Speed+Piloting in a contest against the enemies' Flight Speed+Piloting—beat them, and you can engage them the next round with an Attack.

Example: The Bf 109 has had enough of their little encounter, and tries to flee. Its pilot rolls his Flight Speed (5d) +Piloting (3d) and gets a 3x6 (beating his Difficulty Rating). Captain Richards pursues in his Spitfire, which has a Flight Speed (5d)+Piloting (3d) and gets a 3x9, (beating his Difficulty Rating) and successfully catching up with the Bf 109. Richards swings the Spitfire in behind the Bf 109 and lines him up for an attack in the next round.

Talents in the Air

Flying Talents almost always have the advantage in the air over conventional aircraft—planes are cumbersome, and even the most agile aircraft requires hundreds of yards to perform a “tight turn.” Talents can often turn on a dime with no ill effects, and travel at speeds that beat even the fastest aircraft—even worse, they are tiny targets, difficult to get into the gun-sights. As such, flying Talents automatically have the following bonuses when involved in air-to-air combat:

- Talent fliers always have a Difficulty Rating of 0.
- If you want to fire at a Talent from a conventional aircraft, you need to make a successful Sense+Sight roll before you can attempt to Maneuver to gain the upper hand on them.
- Fliers with *No Gs* who are dodging impose a Difficulty equal to their Flight skill on attacks against them. (That is, I've got “No Gs” and I'm dodging with Flight 3. You have to beat Difficulty 3 to hit me.)

Talent Attacks Against Aircraft

Flying Talents have the upper hand in any aerial combat against conventional aircraft—and many exploit it in interesting ways. There are several special attacks certain types of Flying Talents can attempt on enemy aircraft, they are covered in detail below...

Landing on the Aircraft

Talents who are used to flying at high-speed, and who have a higher Flight Speed rating than the aircraft they're attacking can attempt to land on the aircraft. If the Talent successfully beats the enemy aircraft two Maneuvers in a row, they can land on it wherever they choose.

Super-strong Talents may then begin ripping the aircraft to pieces, while more sly ones may place explosive devices on vital machinery. The crew can do little about such developments, since most airplanes are equipped with weapons that are configured to fire away from the aircraft.

Ramming the Aircraft

Talents who can both fly and are super-resistant to damage may ram the aircraft directly—using their body as a blunt missile to destroy vital machinery or crewmen. In these contests, the combatant with the *lower* Heavy Armor score takes much more damage – so only do this if you're sure you're tougher than the plane! The Talent inflicts damage on the aircraft as if he was a weapon with the Attack Pool equal to his Flight or Super Speed dice pool, whichever is higher, and inflicts an additional 1 Structural point of damage per Heavy Armor point he possesses. Called shots on particular portions of the aircraft are handled just like normal called shots.

The ramming Talent takes shock damage equal to the Structural damage he inflicts on the plane. This damage is spread out between any impact surfaces – usually arms or legs. Given the prevalence of Heavy Armor, this is usually negligible. However, if the Talent misjudges and attacks a plane with more armor than he has, he still inflicts Structural damage to the plane equal to the Killing damage the plane inflicts on him. Cold comfort, but there it is.

A Talent with lower Heavy Armor takes the damage he would have inflicted if his armor had been higher.

Example: Captain Mercer of the Flying Bricks Talent air combat wing has Flight at 6d, Super-Speed at 8d and Heavy Armor of 5. He wants to ram an Messerschmitt Bf 110 two-seat fighter in the cockpit (hit locations 7-9,) so he drops a die out of his Super Speed pool, places another at 7, and rolls the remaining dice, getting an 7, 3, 3, 2 and a 1. Since he was aiming for hit location 7, he has a 2x7 match, and a successful hit to the cockpit.

He causes 4 Superficial and 4 Structural points of damage with his Super Speed, and an additional 5 Structural Points of damage with his Heavy Armor, for a total of 9 Structural and 4 Superficial points of damage to the Crew Compartment. The cockpit is ripped straight through and the pilot is instantly killed with 9 points of Killing and 4 points of shock to his torso. Captain Mercer takes 9 points of shock, but since he's got Heavy Armor 5, it's reduced 4 points. He takes two on each arm – no sweat. The plane rolls and smashes into the ground a minute later. Chalk one up for the good-guys!

Aircraft Listings

Allied Fighters: Australia

Commonwealth Boomerang

Flight Speed: 4d (Top Speed ~296 MPH)

Difficulty Rating: 0

Heavy Armor: 1 (48 Structural Points)

Weapons: Four fixed machine guns and two fixed cannon (8d, Pen 4)

Roll	Hit Location (Number of Structural Points)
1	Left tail (1)
2	Right tail (1)
3-4	Left wing (10)
5-6	Right wing (10)
7-9	Crew Compartment or crewman (13)
10	Engine (7)

Allied Fighters: China

Dewoitine D510 (manufactured in France)

Flight Speed: 4d (Top Speed ~249 MPH)

Difficulty Rating: 2

Heavy Armor: 0 (36 Structural Points)

Weapons: Two fixed machine guns and two fixed cannon (6d, Pen 4)

Roll	Hit Location (Number of Structural Points)
1	Left tail (2)
2	Right tail (2)
3-4	Left wing (9)
5-6	Right wing (9)
7-9	Crew Compartment or crewman (8)
10	Engine (6)

Allied Fighters: UK

Hawker Hurricane

Flight Speed: 5d (Top Speed ~336 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Eight fixed machine guns (8d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (11)
5-6	Right wing (11)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Supermarine Spitfire

Flight Speed: 5d (Top Speed ~374 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Eight fixed machine guns (8d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (11)
5-6	Right wing (11)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Allied Fighters: USA

Bell P-39 Airacobra

Flight Speed: 6d (Top Speed ~399 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Six fixed machine guns and one fixed cannon (8d, Pen 2)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (11)
5-6	Right wing (11)
7-9	Crew Compartment or crewman (13)
10	Engine (9)

Curtiss P-40 Warhawk

Flight Speed: 5d (Top Speed ~378 MPH)

Difficulty Rating: 2

Heavy Armor: 2 (60 Structural Points)

Weapons: Six fixed machine guns (6d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (16)
10	Engine (10)

Lockheed P-38 Lightning

Flight Speed: 6d (Top Speed ~414 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (66 Structural Points)

Weapons: Four fixed machine guns and one fixed cannon (6d, Pen 2)

Roll Hit Location (Number of Structural Points)

1	Left tail (5)
2	Right tail (5)
3-4	Left wing (11)
5-6	Right wing (11)
7-9	Crew Compartment or crewman (16)
10	Engine (9) (9)

North American P-51 Mustang

Flight Speed: 6d (Top Speed ~437 MPH)

Difficulty Rating: 2

Heavy Armor: 2 (60 Structural Points)

Weapons: Six fixed machine guns (6d)

Roll Hit Location (Number of Structural Points)

1	Left tail (4)
2	Right tail (4)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (14)
10	Engine (10)

Republic P-47 Thunderbolt

Flight Speed: 6d (Top Speed ~428 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Eight fixed machine guns (8d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (16)
10	Engine (12)

Allied Fighters: USSR

Lavochkin LaGG-3

Flight Speed: 5d (Top Speed ~357 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed machine guns and one fixed cannon (4d, Pen 2)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (10)
10	Engine (8)

Lavochkin La-5 and La-7

Flight Speed: 6d (Top Speed ~402 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed cannon (4d, Pen 4)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (10)
5-6	Right wing (10)
7-9	Crew Compartment or crewman (12)
10	Engine (10)

Mikoyan-Gurevich MiG-3

Flight Speed: 6d (Top Speed ~398 MPH)

Difficulty Rating: 3

Heavy Armor: 1 (48 Structural Points)

Weapons: Three fixed machine guns (3d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (11)
5-6	Right wing (11)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Polikarpov I-16

Flight Speed: 4d (Top Speed ~288 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed machine guns and two fixed cannon (6d, Pen 4)

Roll	Hit Location (Number of Structural Points)
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1	Left tail (3)
2	Right tail (3)
3-4	Left wing (11)
5-6	Right wing (11)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Yakovlev Yak-3

Flight Speed: 6d (Top Speed ~404 MPH)

Difficulty Rating: 0

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed machine guns and one fixed cannon (4d+2d, Pen 2)

Roll	Hit Location (Number of Structural Points)
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1	Left tail (3)
2	Right tail (3)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (11)
10	Engine (7)

Allied Carrier Fighters: UK

Fairey Fulmar

Flight Speed: 4d (Top Speed ~272 MPH)

Difficulty Rating: 3

Heavy Armor: 1 (48 Structural Points)

Weapons: Eight fixed machine guns (8d)

Roll	Hit Location (Number of Structural Points)
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1	Left tail (3)
2	Right tail (3)
3-4	Left wing (11)
5-6	Right wing (11)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Hawker Sea Hurricane

See "Hawker Hurricane" above.

Supermarine Seafire

Flight Speed: 5d (Top Speed ~374 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Four fixed cannon (8d+1d, Pen 8)

Roll	Hit Location (Number of Structural Points)
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1	Left tail (3)
2	Right tail (3)
3-4	Left wing (11)

5-6	Right wing (11)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Allied Carrier Fighters: USA

Brewster F2A Buffalo

Flight Speed: 4d (Top Speed ~300 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Four fixed machine guns (4d)

Roll	Hit Location (Number of Structural Points)
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1	Left tail (3)
2	Right tail (3)
3-4	Left wing (11)
5-6	Right wing (11)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Grumman F4F Wildcat

Flight Speed: 5d (Top Speed ~318 MPH)

Difficulty Rating: 2

Heavy Armor: 2 (60 Structural Points)

Weapons: Six fixed machine guns (6d)

Roll	Hit Location (Number of Structural Points)
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1	Left tail (3)
2	Right tail (3)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (18)
10	Engine (10)

Grumman F6F Hellcat

Flight Speed: 5d (Top Speed ~375 MPH)

Difficulty Rating: 2

Heavy Armor: 2 (60 Structural Points)

Weapons: Six fixed machine guns (6d)

Roll	Hit Location (Number of Structural Points)
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1	Left tail (3)
2	Right tail (3)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (18)
10	Engine (10)

Vought F4U Corsair

Flight Speed: 6d (Top Speed ~417 MPH)

Difficulty Rating: 2

Heavy Armor: 2 (60 Structural Points)

Weapons: Six fixed machine guns (6d)

Roll	Hit Location (Number of Structural Points)
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1	Left tail (2)
2	Right tail (2)

3-4	Left wing (18)
5-6	Right wing (18)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Allied Night Fighters: UK

Boulton Paul Defiant

Flight Speed: 4d (Top Speed ~303 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Four turreted machine guns (8d)

Roll	Hit Location (Number of Structural Points)
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1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

de Havilland Mosquito

Flight Speed: 5d (Top Speed ~407 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed cannon (8d, Pen 8)

Roll	Hit Location (Number of Structural Points)
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1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (12)
10	Engine (10) (10)

Allied Night Fighters: USA

Northrop P-61 Black Widow

Flight Speed: 5d (Top Speed ~366 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed cannon (8d, Pen 8)

Roll	Hit Location (Number of Structural Points)
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1	Left tail (4)
2	Right tail (4)
3-4	Left wing (10)
5-6	Right wing (10)
7-9	Crew Compartment or crewman (12)
10	Engine (10) (10)

Allied Ground Attack Aircraft: UK

Bristol Beaufighter

Flight Speed: 4d (Top Speed ~303 MPH)

Difficulty Rating: 4

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed cannon (8d, Pen 2) and one turreted machine gun (2d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (12)
10	Engine (9) (9)

Fairey Battle

Flight Speed: 4d (Top Speed ~241 MPH)

Difficulty Rating: 4

Heavy Armor: 1 (48 Structural Points)

Weapons: One fixed machine gun (2d) and one turreted machine gun (2d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (10)
10	Engine (8)

Hawker Typhoon

Flight Speed: 6d (Top Speed ~405 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed cannon (8d, Pen 8) and eight rockets (3d+2d Area per rocket, Pen 4)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (15)
5-6	Right wing (15)
7-9	Crew Compartment or crewman (16)
10	Engine (10)

Westland P-9 Whirlwind

Flight Speed: 5d (Top Speed ~360 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed cannon (8d, Pen 8)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (16)
10	Engine (10)

Allied Ground Attack Aircraft: USA

Douglas A-20 Havoc

Flight Speed: 5d (Top Speed ~339 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (66 Structural Points)

Weapons: Eight fixed machine guns (8d) and two rear turreted machine guns (4d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (16)
5-6	Right wing (16)
7-9	Crew Compartment or crewman (17)
10	Engine (11)

Douglas A-26 Invader

Flight Speed: 5d (Top Speed ~355 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (66 Structural Points)

Weapons: Six fixed machine guns (6d) and two turreted machine guns (4d.)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (14)
10	Engine (10) (10)

Vultee Vengeance

Flight Speed: 4d (Top Speed ~279 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed machine guns (4d) and rear turreted twin machine guns (4d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (15)
5-6	Right wing (15)
7-9	Crew Compartment or crewman (14)
10	Engine (10)

Allied Ground Attack Aircraft: USSR

Ilyushin Il-2 "Shturmovik"

Flight Speed: 3d (Top Speed ~241 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Two fixed machine guns and two fixed cannon (6d, Pen 4) and one turreted machine gun (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (16)
10	Engine (10)

Sukhoi Su-2

Flight Speed: 4d (Top Speed ~302 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed machine guns (4d) and one turreted machine gun (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (15)
10	Engine (11)

Allied Carrier Dive Bombers: UK

Fairey Albacore

Flight Speed: 3d (Top Speed ~161 MPH)

Difficulty Rating: 3

Heavy Armor: 1 (48 Structural Points)

Weapons: One fixed machine gun (2d) and twin turreted machine gun (4d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (11)
5-6	Right wing (11)
7-9	Crew Compartment or crewman (11)
10	Engine (9)

Fairey Barracuda

Flight Speed: 3d (Top Speed ~228 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Two turreted machine guns (4d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (15)
5-6	Right wing (15)
7-9	Crew Compartment or crewman (14)
10	Engine (10)

Fairey Firefly

Flight Speed: 5d (Top Speed ~316 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed cannon (8d, Pen 8) and eight rockets (3d+2d Area per rocket, Pen 4)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (15)
5-6	Right wing (15)
7-9	Crew Compartment or crewman (14)
10	Engine (10)

Fairey Swordfish

Flight Speed: 2d (Top Speed ~138 MPH)

Difficulty Rating: 3

Heavy Armor: 1 (48 Structural Points)

Weapons: One fixed machine gun (2d) and one turreted machine gun (2d)

Roll	Hit Location (Number of Structural Points)
-------------	---

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Allied Carrier Dive Bombers: USA

Curtiss SB2C Helldiver

Flight Speed: 4d (Top Speed ~295 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Two fixed cannon (4d, Pen 4) and two turreted machine guns (4d)

Roll	Hit Location (Number of Structural Points)
-------------	---

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (15)
5-6	Right wing (15)
7-9	Crew Compartment or crewman (14)
10	Engine (10)

Douglas SBD Dauntless

Flight Speed: 4d (Top Speed ~245 MPH)

Difficulty Rating: 3

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed machine guns (2d) and two turreted machine guns (4d)

Roll	Hit Location (Number of Structural Points)
-------------	---

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Grumman TBF Avenger

Flight Speed: 4d (Top Speed ~276 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Three fixed machine guns (3d) and one turreted machine gun (2d)

Roll	Hit Location (Number of Structural Points)
-------------	---

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (15)
5-6	Right wing (15)
7-9	Crew Compartment or crewman (14)
10	Engine (10)

Allied Heavy Bombers: UK

Armstrong Whitworth Whitley

Flight Speed: 4d (Top Speed ~230 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (66 Structural Points)

Weapons: Five turreted machine guns (10d)

Roll	Hit Location (Number of Structural Points)
------	--

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (20)
10	Engine (7) (7)

Avro 683 Lancaster

Flight Speed: 4d (Top Speed ~287 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (78 Structural Points)

Weapons: Eight turreted machine guns (10d)

Roll	Hit Location (Number of Structural Points)
------	--

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (22)
10	Engine (7) (7) (7) (7)

Handley Page Halifax

Flight Speed: 5d (Top Speed ~312 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (78 Structural Points)

Weapons: Nine turreted machine guns (10d)

Roll	Hit Location (Number of Structural Points)
------	--

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (22)
10	Engine (6) (6) (6) (6)

Short Sterling

Flight Speed: 4d (Top Speed ~270 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (78 Structural Points)

Weapons: Eight turreted machine guns (10d)

Roll	Hit Location (Number of Structural Points)
------	--

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (20)

10

Engine (7) (7) (7) (7)

Vickers Wellington

Flight Speed: 4d (Top Speed ~255 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (66 Structural Points)

Weapons: Eight turreted machine guns (10d-3d)

Roll	Hit Location (Number of Structural Points)
-------------	---

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (19)
5-6	Right wing (19)
7-9	Crew Compartment or crewman (22)
10	Engine (7) (7)

Allied Heavy Bombers: USA

Boeing B-17 Flying Fortress

Flight Speed: 4d (Top Speed ~287 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (84 Structural Points)

Weapons: Thirteen turreted machine guns (10d)

Roll	Hit Location (Number of Structural Points)
-------------	---

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (16)
5-6	Right wing (16)
7-9	Crew Compartment or crewman (20)
10	Engine (7) (7) (7) (7)

Boeing B-29 Superfortress

Flight Speed: 5d (Top Speed ~358 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (90 Structural Points)

Weapons: Twelve turreted machine guns and one turreted cannon (10d, Pen 2)

Roll	Hit Location (Number of Structural Points)
-------------	---

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (15)
5-6	Right wing (15)
7-9	Crew Compartment or crewman (22)
10	Engine (8) (8) (8) (8)

Consolidated B-24 Liberator

Flight Speed: 4d (Top Speed ~290 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (72 Structural Points)

Weapons: Ten turreted machine guns (10d)

Roll	Hit Location (Number of Structural Points)
-------------	---

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)

7-9 Crew Compartment or crewman (20)
10 Engine (6) (6) (6) (6)

Allied Heavy Bombers: USSR

Ilyushin Il-4

Flight Speed: 4d (Top Speed ~255 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (66 Structural Points)

Weapons: Three turreted machine guns (6d)

Roll	Hit Location (Number of Structural Points)
------	--

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (20)
10	Engine (7) (7)

Allied Medium Bombers: UK

Handley Page Hampden

Flight Speed: 4d (Top Speed ~265 MPH)

Difficulty Rating: 4

Heavy Armor: 2 (54 Structural Points)

Weapons: Two fixed machine guns (2d) and five turreted machine guns (10d)

Roll	Hit Location (Number of Structural Points)
------	--

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (11)
5-6	Right wing (11)
7-9	Crew Compartment or crewman (16)
10	Engine (6) (6)

Allied Medium Bombers: USA

Martin Model 187 Baltimore

Flight Speed: 4d (Top Speed ~302 MPH)

Difficulty Rating: 4

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed machine guns (4d) and four turreted machine guns (8d)

Roll	Hit Location (Number of Structural Points)
------	--

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (16)
10	Engine (6) (6)

Martin B-26 Marauder

Flight Speed: 5d (Top Speed ~317 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (66 Structural Points)

Weapons: Eight turreted machine guns (10d)

Roll	Hit Location (Number of Structural Points)
------	--

1	Left tail (3)
---	---------------

2	Right tail (3)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (20)
10	Engine (8) (8)

Allied Medium Bombers: USSR

Petlyakov Pe-2

Flight Speed: 5d (Top Speed ~336 MPH)

Difficulty Rating: 4

Heavy Armor: 2 (60 Structural Points)

Weapons: Two fixed machine guns (2d) and two turreted machine guns (4d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (16)
10	Engine (7) (7)

Tupolev SB-2

Flight Speed: 4d (Top Speed ~255 MPH)

Difficulty Rating: 4

Heavy Armor: 2 (60 Structural Points)

Weapons: Four turreted machine guns (8d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (14)
10	Engine (7) (7)

Tupolev Tu-2

Flight Speed: 5d (Top Speed ~340 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (66 Structural Points)

Weapons: Two fixed machine guns (2d) and three turreted machine guns (6d)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (16)
5-6	Right wing (16)
7-9	Crew Compartment or crewman (16)
10	Engine (7) (7)

Allied Light Bombers: UK

Bristol Blenheim

Flight Speed: 4d (Top Speed ~266 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: One fixed machine gun (2d) and four turreted machine guns (8d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (16)
10	Engine (7) (7)

Allied Jet Aircraft: UK de Havilland Vampire

Flight Speed: 7d (Top Speed ~512 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Four fixed cannon (8d, Pen 8)

Roll	Hit Location (Number of Structural Points)
1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Gloster Meteor

Flight Speed: 5d (Top Speed ~415 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Four fixed cannon (8d, Pen 8)

Roll	Hit Location (Number of Structural Points)
1	Left tail (2)
2	Right tail (2)
3-4	Left wing (10)
5-6	Right wing (10)
7-9	Crew Compartment or crewman (10)
10	Engine (7) (7)

Allied Jet Aircraft: USA

Bell P-59 Airacomet

Flight Speed: 6d (Top Speed ~409 MPH)

Difficulty Rating: 2

Heavy Armor: 2 (60 Structural Points)

Weapons: Three fixed machine guns and one fixed cannon (5d, Pen 2)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (14)
10	Engine (7) (7)

Lockheed P-80 Shooting Star

Flight Speed: 8d (Top Speed ~580 MPH)

Difficulty Rating: 2

Heavy Armor: 2 (60 Structural Points)

Weapons: Six fixed machine guns (6d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (16)
10	Engine (10)

Axis Fighters: Germany

Dornier Do 335 Pfeil

Flight Speed: 7d (Top Speed ~477 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Two fixed machine guns and one fixed cannon (4d, Pen 2)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (14)
10	Engine (8) (8) one in nose, one in tail

Focke Wulf Fw 190

Flight Speed: 6d (Top Speed ~426 MPH)

Difficulty Rating: 2

Heavy Armor: 2 (60 Structural Points)

Weapons: Two fixed machine guns and four fixed cannon (10d, Pen 8)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (16)
10	Engine (10)

Heinkel He 112

Flight Speed: 5d (Top Speed ~317 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed machine guns and two fixed cannon (6d, Pen 4)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Messerschmitt Bf 109

Flight Speed: 5d (Top Speed ~354 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Four fixed machine guns and one fixed cannon (6d, Pen 2)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Axis Fighters: Italy

Fiat CR.42 Falco

Flight Speed: 4d (Top Speed ~274 MPH)

Difficulty Rating: 3

Heavy Armor: 0 (36 Structural Points)

Weapons: Two fixed machine guns (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (10)
5-6	Right wing (10)
7-9	Crew Compartment or crewman (6)
10	Engine (6)

Fiat G.50 Freccia

Flight Speed: 4d (Top Speed ~286 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed machine guns (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (12)
10	Engine (6)

Macchi C.200 Saetta

Flight Speed: 5d (Top Speed ~313 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed machine guns (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Macchi C.202 Folgore

Flight Speed: 5d (Top Speed ~373 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed machine guns (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Morane-Saulnier M.S. 406 (manufactured in France)

Flight Speed: 4d (Top Speed ~302 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed machine guns and one fixed cannon (4d, Pen 2)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Reggiane Re.2000

Flight Speed: 6d (Top Speed ~391 MPH)

Difficulty Rating: 2

Heavy Armor: 0 (36 Structural Points)

Weapons: Two fixed machine guns and three fixed cannon (8d, Pen 6)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (10)
5-6	Right wing (10)
7-9	Crew Compartment or crewman (7)
10	Engine (5)

Axis Fighters: Japan

Kawanishi N1K1 Shiden

Flight Speed: 5d (Top Speed ~363 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Two fixed machine guns and four fixed cannon (10d, Pen 8)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (16)
5-6	Right wing (16)
7-9	Crew Compartment or crewman (14)
10	Engine (8)

Kawasaki Ki-61 Hien and Kawasaki Ki-100

Flight Speed: 5d (Top Speed ~367 MPH)

Difficulty Rating: 2

Heavy Armor: 2 (60 Structural Points)

Weapons: Two fixed machine guns and two fixed cannon (6d, Pen 4)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (15)
5-6	Right wing (15)
7-9	Crew Compartment or crewman (15)
10	Engine (9)

Mitsubishi J2M Raiden

Flight Speed: 5d (Top Speed ~292 MPH)

Difficulty Rating: 2

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed cannon (8d, Pen 8)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (15)
5-6	Right wing (15)
7-9	Crew Compartment or crewman (15)
10	Engine (9)

Nakajima Ki-27

Flight Speed: 4d (Top Speed ~292 MPH)

Difficulty Rating: 2

Heavy Armor: 0 (36 Structural Points)

Weapons: Two fixed machine guns (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (9)
5-6	Right wing (9)
7-9	Crew Compartment or crewman (8)
10	Engine (6)

Nakajima Ki-43 Hayabusa

Flight Speed: 5d (Top Speed ~329 MPH)

Difficulty Rating: 0

Heavy Armor: 0 (36 Structural Points)

Weapons: Two fixed machine guns (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (9)
5-6	Right wing (9)
7-9	Crew Compartment or crewman (8)
10	Engine (6)

Nakajima Ki-44 Shoki

Flight Speed: 5d (Top Speed ~376 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (36 Structural Points)

Weapons: Four fixed machine guns (4d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (1)
2	Right tail (1)
3-4	Left wing (9)
5-6	Right wing (9)
7-9	Crew Compartment or crewman (10)
10	Engine (6)

Nakajima Ki-84 Hayate

Flight Speed: 6d (Top Speed ~392 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (36 Structural Points)

Weapons: Two fixed machine guns and two fixed cannon (6d, Pen 4)

Roll	Hit Location (Number of Structural Points)
1	Left tail (1)
2	Right tail (1)
3-4	Left wing (9)
5-6	Right wing (9)
7-9	Crew Compartment or crewman (10)
10	Engine (6)

Axis Fighters: Romania

I.A.R. 80

Flight Speed: 5d (Top Speed ~342 MPH)

Difficulty Rating: 2

Heavy Armor: 1 (36 Structural Points)

Weapons: Four fixed machine guns and two fixed cannon (8d, Pen 4)

Roll	Hit Location (Number of Structural Points)
1	Left tail (1)
2	Right tail (1)
3-4	Left wing (9)
5-6	Right wing (9)
7-9	Crew Compartment or crewman (10)
10	Engine (6)

Axis Carrier Fighters: Japan

Mitsubishi A6M Zero-Sen

Flight Speed: 5d (Top Speed ~332 MPH)

Difficulty Rating: 0

Heavy Armor: 0 (36 Structural Points)

Weapons: Two fixed machine guns and two fixed cannon (6d, Pen 4)

Roll	Hit Location (Number of Structural Points)
1	Left tail (2)
2	Right tail (2)
3-4	Left wing (9)
5-6	Right wing (9)

7-9 Crew Compartment or crewman (8)
10 Engine (6)

Axis Night Fighters: Japan

Kawasaki Ki-45 Toryu

Flight Speed: 5d (Top Speed ~335 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Three fixed cannon (6d, Pen 6) and one turreted machine gun (2d)

Roll Hit Location (Number of Structural Points)

1 Left tail (3)
2 Right tail (3)
3-4 Left wing (13)
5-6 Right wing (13)
7-9 Crew Compartment or crewman (12)
10 Engine (8) (8)

Nakajima J1N1-S Gekko

Flight Speed: 54d (Top Speed ~314 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed cannon (8d, Pen 8)

Roll Hit Location (Number of Structural Points)

1 Left tail (3)
2 Right tail (3)
3-4 Left wing (13)
5-6 Right wing (13)
7-9 Crew Compartment or crewman (14)
10 Engine (7) (7)

Axis Ground Attack Aircraft: Germany

Henschel Hs 129

Flight Speed: 4d (Top Speed ~253 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Two fixed machine guns and two fixed cannon (6d, Pen 4)

Roll Hit Location (Number of Structural Points)

1 Left tail (2)
2 Right tail (2)
3-4 Left wing (14)
5-6 Right wing (14)
7-9 Crew Compartment or crewman (14)
10 Engine (7) (7)

Junkers Ju 87 "Stuka"

Flight Speed: 4d (Top Speed ~255 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Two fixed machine guns (2d) and turreted twin machine guns (4d)

Roll Hit Location (Number of Structural Points)

1 Left tail (3)
2 Right tail (3)

3-4	Left wing (15)
5-6	Right wing (15)
7-9	Crew Compartment or crewman (15)
10	Engine (9)

Junkers Ju 88

Flight Speed: 3d (Top Speed ~224 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (66 Structural Points)

Weapons: Two fixed machine guns (2d), turreted twin machine guns (4d), two turreted machine guns (4d), one fixed rear machine gun (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (14)
10	Engine (9) (9)

Messerschmitt Bf 110

Flight Speed: 5d (Top Speed ~348 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed machine guns, two fixed cannon and one rear-facing machine gun turret (10d, Pen 4)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (12)
10	Engine (8) (8)

Messerschmitt Me 410 Hornisse

Flight Speed: 6d (Top Speed ~396 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed machine guns and two fixed cannon (8d, Pen 4)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (14)
10	Engine (8) (8)

Axis Ground Attack Aircraft: Italy

Caproni Bergamaschi Ca 314

Flight Speed: 4d (Top Speed ~245 MPH)

Difficulty Rating: 4

Heavy Armor: 2 (60 Structural Points)

Weapons: Two fixed machine guns (2d) and one turreted machine gun (2d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (14)
10	Engine (7) (7)

Axis Ground Attack Aircraft: Japan

Kawasaki Ki-48

Flight Speed: 5d (Top Speed ~314 MPH)

Difficulty Rating: 4

Heavy Armor: 2 (60 Structural Points)

Weapons: Three turreted machine guns (6d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (14)
10	Engine (7) (7)

Mitsubishi Ki-30

Flight Speed: 4d (Top Speed ~263 MPH)

Difficulty Rating: 3

Heavy Armor: 1 (48 Structural Points)

Weapons: One fixed machine gun (2d) and one rear turreted machine gun (2d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (10)
10	Engine (6)

Mitsubishi Ki-51

Flight Speed: 4d (Top Speed ~264 MPH)

Difficulty Rating: 3

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed machine guns (2d) and one rear turreted machine gun (2d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (11)
10	Engine (7)

Axis Carrier Dive Bombers: Japan

Aichi D3A

Flight Speed: 4d (Top Speed ~267 MPH)

Difficulty Rating: 3

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed machine guns (2d) and one turreted machine gun (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (12)
10	Engine (8)

Nakajima B5N

Flight Speed: 4d (Top Speed ~253 MPH)

Difficulty Rating: 3

Heavy Armor: 1 (48 Structural Points)

Weapons: One turreted machine gun (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (13)
10	Engine (7)

Nakajima B6N Tenzan

Flight Speed: 4d (Top Speed ~299 MPH)

Difficulty Rating: 3

Heavy Armor: 1 (48 Structural Points)

Weapons: One fixed machine gun (2d) and one turreted machine gun (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (11)
10	Engine (7)

Yokosuka D4Y

Flight Speed: 5d (Top Speed ~357 MPH)

Difficulty Rating: 3

Heavy Armor: 1 (48 Structural Points)

Weapons: Two fixed machine guns (2d) and one turreted machine gun (2d)

Roll Hit Location (Number of Structural Points)

1	Left tail (2)
2	Right tail (2)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (11)
10	Engine (7)

Axis Heavy Bombers: Germany

Dornier Do 217

Flight Speed: 5d (Top Speed ~348 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (78 Structural Points)

Weapons: Ten turreted machine guns (10d)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (16)
5-6	Right wing (16)
7-9	Crew Compartment or crewman (22)
10	Engine (9) (9)

Heinkel He 111

Flight Speed: 4d (Top Speed ~271 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (78 Structural Points)

Weapons: Seven turreted machine guns and one turreted cannon (10d, Pen 2)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (17)
5-6	Right wing (17)
7-9	Crew Compartment or crewman (24)
10	Engine (7) (7)

Heinkel He 177 Greif

Flight Speed: 4d (Top Speed ~303 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (72 Structural Points)

Weapons: Four turreted machine guns and two turreted cannon (10d, Pen 4)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (13)
5-6	Right wing (13)
7-9	Crew Compartment or crewman (22)
10	Engine (9) (9)

Axis Heavy Bombers: Japan

Mitsubishi G4M

Flight Speed: 4d (Top Speed ~272 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (66 Structural Points)

Weapons: Four turreted machine guns and two turreted cannon (10d, Pen 4)

Roll Hit Location (Number of Structural Points)

1	Left tail (3)
2	Right tail (3)
3-4	Left wing (11)
5-6	Right wing (11)
7-9	Crew Compartment or crewman (23)
10	Engine (8) (8)

Axis Medium Bombers: Germany

Dornier Do 17Z

Flight Speed: 4d (Top Speed ~255 MPH)

Difficulty Rating: 4

Heavy Armor: 2 (60 Structural Points)

Weapons: Four turreted machine guns (8d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (14)
10	Engine (6) (6)

Axis Medium Bombers: Italy

CANT Z.1007 Airone

Flight Speed: 4d (Top Speed ~283 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (66 Structural Points)

Weapons: Four turreted machine guns (8d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (14)
5-6	Right wing (14)
7-9	Crew Compartment or crewman (20)
10	Engine (6) (6)

Fiat B.R. Cicogna

Flight Speed: 4d (Top Speed ~273 MPH)

Difficulty Rating: 4

Heavy Armor: 2 (60 Structural Points)

Weapons: Three turreted machine guns (6d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (3)
2	Right tail (3)
3-4	Left wing (12)
5-6	Right wing (12)
7-9	Crew Compartment or crewman (18)
10	Engine (6) (6)

Axis Medium Bombers: Japan

Nakajima Ki-49 Donryu

Flight Speed: 5d (Top Speed ~306 MPH)

Difficulty Rating: 4

Heavy Armor: 2 (60 Structural Points)

Weapons: Five turreted machine guns (10d)

Roll	Hit Location (Number of Structural Points)
1	Left tail (2)
2	Right tail (2)
3-4	Left wing (10)
5-6	Right wing (10)

7-9 Crew Compartment or crewman (14)
10 Engine (5) (5)

Mitsubishi Ki-21

Flight Speed: 4d (Top Speed ~302 MPH)

Difficulty Rating: 4

Heavy Armor: 2 (60 Structural Points)

Weapons: Five turreted machine guns and one turreted cannon (10d, Pen 2)

Roll Hit Location (Number of Structural Points)

1 Left tail (3)
2 Right tail (3)
3-4 Left wing (13)
5-6 Right wing (13)
7-9 Crew Compartment or crewman (16)
10 Engine (7) (7)

Mitsubishi Ki-67 Hiryu

Flight Speed: 4d (Top Speed ~334 MPH)

Difficulty Rating: 4

Heavy Armor: 3 (66 Structural Points)

Weapons: Four turreted machine guns and one turreted cannon (10d, Pen 2)

Roll Hit Location (Number of Structural Points)

1 Left tail (3)
2 Right tail (3)
3-4 Left wing (14)
5-6 Right wing (14)
7-9 Crew Compartment or crewman (18)
10 Engine (7) (7)

Axis Jet Aircraft: Germany

Arado Ar 234

Flight Speed: 7d (Top Speed ~461 MPH)

Difficulty Rating: 3

Heavy Armor: 2 (60 Structural Points)

Weapons: None

Roll Hit Location (Number of Structural Points)

1 Left tail (3)
2 Right tail (3)
3-4 Left wing (13)
5-6 Right wing (13)
7-9 Crew Compartment or crewman (14)
10 Engine (7) (7)

Bachem Ba 349 Natter

Flight Speed: 7d (Top Speed ~497 MPH)

Difficulty Rating: 3

Heavy Armor: 0 (36 Structural Points)

Weapons: Twenty four rockets (3d+2d Area per rocket, Pen 4)

Roll Hit Location (Number of Structural Points)

1 Left tail (2)
2 Right tail (2)
3-4 Left wing (9)

5-6 Right wing (9)
7-9 Crew Compartment or crewman (8)
10 Engine (6)

Heinkel He 162 Salamander

Flight Speed: 7d (Top Speed ~519 MPH)

Difficulty Rating: 3

Heavy Armor: 0 (36 Structural Points)

Weapons: Two fixed cannon (4d, Pen 4)

Roll Hit Location (Number of Structural Points)

1 Left tail (2)
2 Right tail (2)
3-4 Left wing (9)
5-6 Right wing (9)
7-9 Crew Compartment or crewman (8)
10 Engine (6)

Messerschmitt Me 163 Komet

Flight Speed: 7d (Top Speed ~596 MPH)

Difficulty Rating: 2

Heavy Armor: 0 (36 Structural Points)

Weapons: Two fixed cannon (4d, Pen 4)

Roll Hit Location (Number of Structural Points)

1 Left tail (2)
2 Right tail (2)
3-4 Left wing (9)
5-6 Right wing (9)
7-9 Crew Compartment or crewman (8)
10 Engine (6)

Messerschmitt Me 262

Flight Speed: 7d (Top Speed ~541 MPH)

Difficulty Rating: 2

Heavy Armor: 2 (60 Structural Points)

Weapons: Four fixed cannon (8d, Pen 8)

Roll Hit Location (Number of Structural Points)

1 Left tail (3)
2 Right tail (3)
3-4 Left wing (13)
5-6 Right wing (13)
7-9 Crew Compartment or crewman (14)
10 Engine (7) (7)

Axis Jet Aircraft: Japan

Yokosuka MXY7 Ohka

Flight Speed: 6d (Top Speed ~403 MPH)

Difficulty Rating: 2

Heavy Armor: 0 (36 Structural Points)

Weapons: The Ohka is a 2,646 lb. warhead suicide bomb (10d, Pen 10 for a single ramming strike)

Roll Hit Location (Number of Structural Points)

1 Left tail (2)
2 Right tail (2)

3-4	Left wing (9)
5-6	Right wing (9)
7-9	Crew Compartment or crewman (9)
10	Engine (5)