

Air Force 60 Alpha Bravo Charlie

Technical information – Disclaimer – Credits

The card game uses 8 parameters/specifications, flag of the manufacturing country, a letter for the category, name, and role of the aircraft.

The parameters are only approximate values and all are in aviation units.

The dimension parameters

As much as possible, the lengths of helicopters are presented here as the fuselage Length and not till the tip of the rotor blade, and instead of Wingspan, the width for helicopters is the Rotor Diameter.

The weight parameters

Weight parameters for aircraft are usually the Empty_Weight and the Max Take-off Weight (MTOW). Here, we use the Payload which means the maximum weight an aircraft can be loaded with. The Payload is stated differently for different manufacturers. Here, we have simplified the Payload as MTOW – Empty Weight.

The Performance parameters

Max Speed in practice is very hard to record, or not released by the manufacturer.

Ceiling is the Max Altitude and its value is very hard to obtain for practical reasons or due to the manufacturer not releasing the accurate value.

Power is presented here in Horsepower (hp). Simply put, hp is a value stated for helicopters or turboprop airplanes (Shaft horsepower, shp), while turbofan, and turbojet airplanes use the parameter Thrust horsepower (thp). However, since we need comparable parameters across the board, all Thrust numbers have been converted into hp according to the formula below:

$$Power \text{ (horsepower)} = \frac{Thrust \text{ (pound force)} * Speed \text{ (mph)}}{375}$$

The power value depends of course on the inputs in the formula, Thrust and Speed, and how accurate they are.

Max Range is also very hard to record and is presented differently by manufacturers for example. In this game, the Max Range is the Ferry Range or the range an aircraft can fly without external fuel tanks but this number can also vary depending on the altitude, cruise speed, payload, and other factors. The Max Range is more of a calculation than a number from a test flight.

The roles

The roles are presented in a simple way when indeed any aircraft can be retrofitted for different purposes. For example, aerial refueling tankers are themselves retrofitted from other types to serve as tankers, or passenger aircraft retrofitted or manufactured for cargo. While looking at the roles on the cards, one must know that these roles can change depending on the purpose they need to serve. For example, any aircraft can be retrofitted to serve for rescue, transport, or for combat in one way or another.

The aircraft types

Most aircraft types have different variants and each variant has different parameter values as well.

Important to note that even engines can be replaced which would lead to different performance values.

Also important to note is that Boeing X-37B is actually not an aircraft but a spacecraft and needs a rocket to be launched but can land back on earth by itself and does not have a conventional aircraft engine. The Boeing X-37B is only an impressive addition to the line-up of the aircraft

The Stars

Stars are given to the aircraft according to their parameters in their own categories, special characteristics such as Stealth, ability to cruise at supersonic speed, and popularity.

Credits

The majority of the bulk of the photos are credited to

Andrei Shamtko

And the smaller part of the bulk of the photos are credited to

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