What is an Aircraft?

Elements of the Definition

Machine
This means an apparatus that has moving parts.

Reactions of air against the atmosphere
The definition excludes machines that derive support from reactions of the air against the *earth's surface.* The purpose is to remove ground-effect vehicles (also known as wing-in-ground-effect, ground-effect crafts, wingships, flarecraft or ekranoplans) from the scope of certain aircraft-specific regulation.

Air-breathing engine v. rocket
A *rocket* "is a device which is propelled by ejecting expanding gases generated in its motor from self-contained propellant and which is not dependent on the intake of outside substances and includes any part of the device intended to become separated during operation" (ANO 2016, Sch 1 para 1). If a machine has an engine which does not let air in and does not require air to create a lift, then it is a rocket. Aircraft with engines require air intake.

Horizontal v. vertical flying
The definition does not require that a machine flies horizontally to be considered an aircraft. Several aircraft fly vertically for taking off and landing, including rotorcraft and balloons.

Why is the definition of *aircraft* important?

Many new types of aircraft are currently being developed by industry. New aircraft might not fall clearly within any of the existing classifications.

There is a need to apply existing rules or develop new regulation for safety, security, consumer protection, economic and efficiency reasons.

> "Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface"
>
> (Chicago Convention 1944, Annex 7).

The Basic Regulation, Art. 3 (28), adopts the same definition.

Wings
The definition of *aircraft* does not refer to the need for, or existence of, aerofoils, wings or blades. The presence of wings is not a defining feature of an aircraft.

Lighter-than-air aircraft expressly included in the Chicago Convention and the ANO 2016 classifications of aircraft do not have wings (e.g., airships, captive balloons, and free balloons). Some heavier-than-air aircraft also lack wings.

Machines can generate lift without wings. A machine can derive support in the atmosphere from the reactions of the air without wings. The answer to the question "what part of the aircraft generates lift?" is "the whole aircraft", not only the wings.