CLAIMS

1. A rotary-wing aircraft comprising:

a plurality of rotary wings, each of the rotary wings being associable with a width and having a rotary shaft;

an arm portion that supports the plurality of rotary wings;

a first mounting portion for mounting an object; and

a connecting portion that connects the first mounting portion to the arm portion in a state in which the first mounting portion is movable within a predetermined range,

wherein a center of lift generated in a body by rotation of the plurality of rotary wings is present at a position of the connecting portion,

wherein the center of lift is within the width of each of the rotary wings and the center of lift defines a point of action, on the rotary-wing aircraft, of lift generated by rotation of the rotary wings, and

wherein each rotary wing is locatable at a position which coincides with the point of action, and

wherein the point of action is associable with a plane on which a plurality of concentric circles are definable, each concentric circle having a center, and

wherein a rotary shaft of a rotary wing passes through the center of a concentric circle defined on the plane.

2. The rotary-wing aircraft according to claim 1, wherein, in a case of moving in a direction including a horizontal direction, a posture of the body is changed by making a rotational speed of a rotary wing located on a rear side in a traveling direction higher than a rotational speed of a rotary wing located on a front side in the traveling direction, and, after the posture of the body is changed, movement in the direction including the horizontal direction is caused by reducing a difference between the rotational speed of the rotary wing located on the front side in the traveling direction and the rotational speed of the rotary wing located on the rear side in the traveling direction.

3. The rotary-wing aircraft according to claim 1 or 2, wherein the connecting portion connects a second mounting portion that is disposed on an opposite side to the first mounting portion as viewed from the connecting portion and connected to the first mounting portion to the arm portion together with the first mounting portion.

4. The rotary-wing aircraft according to claim 3, wherein an antenna for receiving a signal for positioning is mounted on the second mounting portion.

5. The rotary-wing aircraft according to any one of claims

1 to 4, comprising a center-of-gravity moving mechanism for moving a center of gravity of the body.