CLAIMS

1. A rotorcraft landing device suitable for use with a rotorcraft which is incapable of image capturing, the rotorcraft landing device comprising:

a landing portion on which the rotorcraft is capable of landing;

a position recognition portion that recognizes a position of the rotorcraft with respect to the landing portion; and

a distance measuring portion that measures a distance from the landing portion to the rotorcraft,

wherein the basis of a result of recognition performed by the position recognition portion and the basis of a result of measurement performed by the distance measuring portion are communicable to a remote control portion that remotely controls the rotorcraft such that the rotorcraft lands, in descending speed, on the landing portion.

2. The rotorcraft landing device according to claim 1, comprising an opening/closing mechanism including the landing portion,

wherein the landing portion is formed in a portion that is inside the opening/closing mechanism when the opening/closing mechanism is closed, and

wherein the landing portion takes a horizontal posture at a position a space above which is open when the opening/closing mechanism is open.

3. The rotorcraft landing device according to claim 1, comprising an opening/closing mechanism,

wherein the landing portion is accommodated in an inner space when the opening/closing mechanism is closed, and

wherein a space above the landing portion is open when

the opening/closing mechanism is open.

4. The rotorcraft landing device according to claim 2 or 3, comprising a movable member capable of taking a first posture of extending vertically upward from a periphery of the landing portion and a second posture of extending further to an outside from the periphery of the landing portion,

wherein the movable member takes the first posture when the opening/closing mechanism is closed, and the movable member takes the second posture when the opening/closing mechanism is open and the rotorcraft lands on the landing portion.

5. The rotorcraft landing device according to claim 4, wherein, in a state in which the movable member is in contact with a load released from the rotorcraft that has landed on the landing portion, the movable member is movable in such a direction as to move the load to a position closer to a center of the landing portion.

6. The rotorcraft landing device according to any one of claims 1 to 5, wherein the position recognition portion includes image capturing portions provided at a plurality of positions on the landing portion, and recognizes the position of the rotorcraft with respect to the landing portion on a basis of a result of image capturing performed by the image capturing portions.

7. The rotorcraft landing device according to any one of claims 1 to 6, wherein the remote control portion obtains identification information of the rotorcraft that has approached the landing portion from the rotorcraft, remotely controls the rotorcraft such that the rotorcraft lands on the landing portion in a case where the obtained identification information matches identification information of a rotorcraft that has already gained permission to land on the landing portion, and does not perform remote control in a case where the obtained identification information does not match.

8. The rotorcraft landing device according to any one of claims 1 to 7, comprising an ascending/descending mechanism capable of descending to a residential space for humans in a state of carrying a load received from the rotorcraft that has landed on the landing portion and ascending again to a position at which the ascending/descending mechanism receives a load.

9. The rotorcraft landing device according to any one of claims 1 to 8 provided at a position higher than a residential space for humans.