CLAIMS

1. A control device comprising:

an acquisition means for acquiring position information, battery information, and movement capability information of each of a plurality of mobile objects;

a prediction means for predicting a monitorable time based on the position information of a monitoring mobile object, the position information of a standby mobile object, and the battery information and the movement capability information of each of the plurality of mobile objects, the monitoring mobile object being a mobile object monitoring a target to be monitored among the plurality of mobile objects, the standby mobile object being a mobile object being on standby among the plurality of mobile objects, the monitorable time being a time for which the target to be monitored is monitorable by each standby mobile object;

a selection means for selecting, based on the monitorable time, at least one mobile object of a plurality of the standby mobile objects; and

a control means for control the selected mobile object to move to a position for monitoring the target to be monitored, wherein in a case where no target to be monitored is detected by the monitoring mobile object,

the control means causes the monitoring mobile object to monitor a predetermined range including a position at which no target to be monitored is detected, and moves the monitoring mobile object to the standby facility in which the mobile object stands by in a case where the monitoring mobile object did not detect the target to be monitored within a predetermined time.

2. The control device according to claim 1, wherein

the selection means selects a mobile object having a longest

monitorable time among the standby mobile objects.

3. The control device according to claim 1 or 2, further comprising

a priority setting means for setting a monitoring priority for each target in a case where there are a plurality of targets to be monitored, wherein

in a case where the number of targets to be monitored has increased,

the priority setting means sets the priority for each of the targets to be monitored, and

the control means controls the monitoring mobile object to monitor a target to be monitored having a highest set priority among the set priority.

4. The control device according to any one of claims 1 to 3, wherein

in a case where each of a plurality of the monitoring mobile objects monitors each of a plurality of the targets to be monitored, and the plurality of targets to be monitored join,

the control means controls one mobile object of the plurality of mobile objects to monitor the targets to be monitored after the joining, and controls another mobile object to move to a standby facility in which the mobile body stands by.

5. The control device according to any one of claims 1 to 4, wherein

the plurality of mobile objects each include

an imaging means for generating imaging data by imaging, and

a communication means for transmitting the imaging data,

the control device further comprises:

an extraction means for extracting a feature amount of an object included in a video based on imaging data transmitted from the selected

mobile object and a feature amount of the target to be monitored included in a video based on imaging data transmitted from the monitoring mobile object; and

a collation means for collating the feature amount of the object with the feature amount of the target to be monitored, and

the control means controls the selected mobile object to monitor the target to be monitored in a case where the feature amount of the object and the feature amount of the target to be monitored match each other.

6. The control device according to any one of claims 1 to 5, wherein

the acquisition means acquires information indicating availability of the standby facility in which the mobile object stands by, and

the control means moves the monitoring mobile object to an available standby facility located closest to the position of the monitoring mobile object based on the information indicating the availability of the standby facility.

7. The control device according to claim 6, wherein

the prediction means predicts a cruising distance of the monitoring mobile object based on the battery information of the monitoring mobile object and the movement capability information of the monitoring mobile object, and

in a case where the cruising distance is insufficient for a distance from the position of the monitoring mobile object to the standby facility to which the monitoring mobile object is to be moved,

the control means moves a mobile object that is on standby in the standby facility located closest to the monitoring mobile object to another available standby facility, and moves the monitoring mobile object to the standby facility located closest to the monitoring mobile object.

8. The control device according to any one of claims 1 to 7, wherein

the acquisition means acquires information on a category of the target to be monitored, and

the selection means selects a mobile object movable at a speed corresponding to the category of the target to be monitored from among the standby mobile objects whose monitorable time is equal to or longer than a predetermined value.

9. A control method comprising:

acquiring position information, battery information, and movement capability information of each of a plurality of mobile objects;

predicting a monitorable time based on the position information of a monitoring mobile object, the position information of a standby mobile object, and the battery information and the movement capability information of each of the plurality of mobile objects, the monitoring mobile object being a mobile object monitoring a target to be monitored among the plurality of mobile objects, the standby mobile object being a mobile object being on standby among the plurality of mobile objects, the monitorable time being a time for which the target to be monitored is monitorable by each standby mobile object;

selecting, based on the monitorable time, at least one mobile object of a plurality of the standby mobile objects;

controlling the selected mobile object to move to a position for monitoring the target to be monitored; and

in a case where no target to be monitored is detected by the monitoring mobile object, causing the monitoring mobile object to monitor a predetermined range including a position at which no target to be monitored is detected, and moving the monitoring mobile object to the standby facility in which the mobile object stands by in a case where the monitoring mobile object did not detect the target to be monitored within

a predetermined time.

10. A non-transitory computer-readable recording medium storing a program causing a computer to perform:

processing of acquiring position information, battery information, and movement capability information of each of a plurality of mobile objects;

processing of predicting a monitorable time based on the position information of a monitoring mobile object, the position information of a standby mobile object, and the battery information and the movement capability information of each of the plurality of mobile objects, the monitoring mobile object being a mobile object monitoring a target to be monitored among the plurality of mobile objects, the standby mobile object being a mobile object being on standby among the plurality of mobile objects, the monitorable time being a time for which the target to be monitored is monitorable by each standby mobile object;

processing of selecting, based on the monitorable time, at least one mobile object of a plurality of the standby mobile objects;

processing of controlling the selected mobile object to move to a position for monitoring the target to be monitored; and

in a case where no target to be monitored is detected by the monitoring mobile object, in the controlling processing, causing the monitoring mobile object to monitor a predetermined range including a position at which no target to be monitored is detected, and moving the monitoring mobile object to the standby facility in which the mobile object stands by in a case where the monitoring mobile object did not detect the target to be monitored within a predetermined time.