

ABSTRACT

The present invention relates to an aircraft-utilizing deterioration diagnostic system and provides a technique capable of improving diagnostic efficiency and accuracy when comparing the previous and current aerially-photographed images to diagnose a deteriorated state of a target. The diagnostic system includes: a drone 1 (aircraft) configured to be navigated along a route around a target 5 and having a camera 4 configured to photograph the target 5; and a computer (PC 2 and server 3) configured to control navigation of the aircraft and photographing by the camera 4. The computer is configured to: acquire data from the aircraft including an image group obtained by consecutively photographing the target 5 for each predetermined date and time; based on diagnostic data including a diagnostic image group photographed at a current date and time, reference data including a reference image group of a previous date and time, associate, for the same target 5, images including the same portion as comparison target images; compare the previous image and the current image among the comparison target images to detect a deteriorate portion; and provide a screen converted and visualized for the user such that the deteriorated portion in the image is plotted on the three-dimensional model of the target.

Fig. 4