CLAIMS

WHAT IS CLAIMED IS:

1. A method of servicing aviation equipment, the method comprising:

at least partially-autonomously inspecting components of the equipment using an environmental capture device,

wherein the environmental capture device is configured to capture information of the aviation equipment while the aviation equipment is being serviced, and

wherein the at least partially-autonomous inspection includes:

capturing information associated with the equipment using the environmental capture device;

identifying the components of the equipment using one or more computing devices;

performing an inbound verification of the components of the equipment including generation of a logged component list, wherein the logged component list includes a list of the identified components to be removed or reinstalled;

performing an outbound verification of the components of the equipment including adjusting the logged component list, wherein adjusting the logged component list includes removal of a particular component once the particular component is removed or reinstalled; and

determining, by the one or more computing devices, whether the logged component list includes any components from the logged component list once the servicing is completed.

2. The method of claim 1, wherein the equipment comprises a gas turbine engine.

3. The method of claim 1, further comprising performing diagnostic to determine where any components remaining on the logged component list need to be reinstalled.

4. The method of claim 1, wherein the logged component list is empty after the servicing.

5. The method of claim 1, wherein the environmental capture device includes one or more cameras.

6. The method of claim 1, wherein the environmental capture device is configured to capture information for identifying the components of the equipment.

7. A robotic assembly for servicing aviation equipment, the robotic assembly comprising:

an environmental capture device mounted to the robotic assembly, wherein the environmental capture device is configured to capture information associated with the equipment; and

one or more computing devices in communication with the environmental capture device,

wherein the one or more computing devices are configured to:

identify components of the equipment;

perform an inbound verification of the components of the equipment including generation of a logged component list, wherein the logged component list includes a list of the identified components to be removed or reinstalled;

perform an outbound verification of the components of the equipment including adjusting the logged component list, wherein adjusting the logged component list includes removal of a particular component once the particular component is removed or reinstalled; and

determine whether the logged component list includes any components from the logged component list once the servicing is completed.