CLAIMS

What is claimed is:

1. A method for maintenance of a turbine assembly, the turbine assembly comprising a rotor and a stator, the stator comprising a damaged region, the method comprising:

anchoring a remotely controllable maintenance apparatus on the rotor;

rotating the rotor to position the maintenance apparatus proximate to the damaged region; and

thereafter, operating and moving a repair tool along the maintenance apparatus and relative to the damaged region so as to repair the damaged region, wherein operating the repair tool comprises disposing a repair material on the damaged region.

2. The method of claim 1, wherein a camera is disposed on the apparatus, wherein the camera is operable to remotely transmit visual data to a receiver.

3. The method of claim 2, wherein the camera is operable to wirelessly transmit visual data to a receiver.

4. The method of claim 1, wherein the maintenance apparatus is anchored between the adjacent blades of the rotor subsequent to disposing of the apparatus.

5. The method of claim 1, wherein operating the repair tool comprises remotely transmitting a control signal to the apparatus.

6. The method of claim 5, wherein operating the repair tool comprises wirelessly transmitting a control signal to the apparatus.

7. The method of claim 1, wherein operating the repair tool comprises removing material from the damaged region.

8. The method of claim 1, wherein the damaged region is a crack and repairing the damaged region comprises repairing the crack.

9. The method of claim 1, further comprising removing the apparatus from the turbine assembly.