WHAT IS CLAIMED IS:

1. A system comprising:

a robotic arm comprising a touch probe and laser head;

a rotisserie control linkage configured to couple to a transport cart; and

a computer system communicatively coupled to the robotic arm and the rotisserie control linkage, the computer system configured to control the system to:

rotate an aircraft canopy on the transport cart using the rotisserie control linkage;

during rotation of the aircraft canopy, probe, using the touch probe of the robotic arm, a transparent outer layer of the aircraft canopy located on the transport cart in order to determine surface measurements of the aircraft canopy; and

during rotation of the aircraft canopy, ablate, using a plurality of predetermined parameters and the laser head of the robotic arm, an interface layer located between the transparent outer layer and the aircraft canopy, wherein movements of the robotic arm during the ablation are based on the surface measurements.

2. A method comprising:

rotating an aircraft canopy;

during rotation of the aircraft canopy, probing, using a touch probe of a robotic arm, a transparent outer layer of the aircraft canopy in order to determine surface measurements of the aircraft canopy; and

during rotation of the aircraft canopy, ablating, using a plurality of predetermined parameters and a laser head of the robotic arm, an interface layer located between the transparent outer layer and the aircraft canopy, wherein movements of the robotic arm during the ablation are based on the surface measurements.

3. The system of Claim 1, wherein the predetermined parameters comprise:

a laser fluence;

a speed;

a wavelength; and

a focal distance; or

the method of Claim 2, wherein the predetermined parameters comprise:

a laser fluence;

a speed;

a wavelength; and

a focal distance.

4. The system of Claim 3, wherein the wavelength is selected based on a material of the interface layer; or

the method of Claim 3, wherein the wavelength is selected based on a material of the interface layer.

5. The system of Claim 3 or Claim 4, wherein the focal distance is selected so that light from the laser head passes through the transparent outer layer and is focused on the interface layer.

6. The system of any preceding system Claim, wherein the laser head comprises a near IR (NIR) laser.

7. The system of Claim 6, wherein the laser is a Neodymium laser.

8. The system of any preceding system Claim, further comprising an enclosure that houses the robotic arm, rotisserie

control linkage, and the transport cart, the enclosure comprising one or more laser safety windows.

9. The method of Claim 3 or Claim 4, wherein the focal distance is selected so that light from the laser head passes through the transparent outer layer and is focused on the interface layer.

10. The method of any preceding method Claim, wherein the laser head comprises a near IR (NIR) laser.

11. The method of Claim 10, wherein the laser is a Neodymium laser.