CLAIMS

What is claimed is:

1. A method of working an exhaust nozzle comprising:

placing a first plate along an outer surface of the exhaust nozzle over a non-conforming area;

placing a second plate along an inner surface of the exhaust nozzle; and

attaching the first plate to the second plate sandwiching the non-conforming area of the outer sleeve therebetween.

2. The method as recited in claim 1, wherein the first plate and the second plate are riveted together.

3. The method as recited in claim 2, including the step of spacing the rivets apart from the non-conforming area in an axial direction and a radial direction.

4. The method as recited in claim 2, including the step of spacing the rivets apart from a weld joint of the exhaust nozzle in an axial direction and a radial direction.

5. The method as recited in claim 2, including placing the first plate on the outer surface of the exhaust nozzle to overlap an aft sleeve and attaching the first plate to the aft sleeve.

6. The method as recited in claim 5, including spacing the first plate apart from an aft edge of the aft sleeve.

7. The method as recited in claim 5, wherein the outer surface comprises a cellular panel abutted against the aft sleeve, wherein an interface between the aft sleeve and the cellular panel on the outer surface comprises an aft seam and the first plate is placed on the outer surface to extend from the cellular panel over the aft seam and attached to the aft sleeve.

8. The method as recited in claim 7, wherein the interface between the cellular panel and the aft sleeve on the inner surface includes an aft channel and the second plate includes an aft edge that is spaced apart from the aft channel.

9. The method as recited in claim 7, wherein the non-conforming area comprises a dent that extends from the interface between the cellular panel and the aft sleeve.

10. A patch for an exhaust sleeve comprising:

a first plate disposed over an outer surface of an exhaust sleeve, wherein the exhaust sleeve includes an aft sleeve attached to an aft edge of a cellular layer and the first plate extends from the cellular layer onto the aft sleeve;

a second plate disposed along an inner surface of the cellular layer;

a first plurality of fasteners securing the first plate to the second plate through the cellular layer; and

a second plurality of fasteners securing the first plate to the aft sleeve.

11. The patch as recited in claim 10, wherein the aft sleeve includes an aft channel on the inner surface and the second plate is spaced apart from the aft channel.

12. The patch as recited in claim 10, wherein the first plate is axially longer than the second plate.

13. The patch as recited in claim 10, wherein the first plurality of fasteners comprise rivets extending through the cellular material and the second plurality of fasteners comprise rivets extending through the first plate and the aft sleeve.

14. The patch as recited in claim 10, wherein the first plurality of fasteners and the second plurality of fastener spaced apart from a damaged area of the cellular layer.

15. The patch as recited in claim 10, wherein the first plurality of fasteners and the second plurality of fasteners are spaced apart from a joint between the aft sleeve and the cellular layer.

16. The patch as recited in claim 15, including the step of machining the fasteners to provide a smooth surface along an airflow path.

17. The patch as recited in claim 10, including the step of tapering at least one of the first plate and the second plate to define a smooth surface along an airflow path.

CLAIMS

What is claimed is:

1. A method of working an exhaust nozzle comprising:

placing a first plate along an outer surface of the exhaust nozzle over a non-conforming area of an outer sleeve, wherein the outer surface comprises a cellular panel abutted against the aft sleeve,;

placing a second plate along an inner surface of the exhaust nozzle; and

attaching the first plate to the second plate sandwiching the non-conforming area of the outer sleeve therebetween, wherein an interface between the aft sleeve and the cellular panel on the outer surface comprises an aft seam and the first plate is placed on the outer surface to extend from the cellular panel over the aft seam and is attached to the aft sleeve.

2. The method as recited in claim 1, wherein the first plate and the second plate are riveted together.

3. The method as recited in claim 2, including the step of spacing the rivets apart from the non-conforming area in an axial direction and a radial direction.

4. The method as recited in claim 2, including the step of spacing the rivets apart from a weld joint of the exhaust nozzle in an axial direction and a radial direction.

5. The method as recited in claim 2, including placing the first plate on the outer surface of the exhaust nozzle to overlap the aft sleeve and attaching the first plate to the aft sleeve.

6. The method as recited in claim 5, including spacing the first plate apart from an aft edge of the aft sleeve.

7. The method as recited in claim1, wherein the interface between the cellular panel and the aft sleeve on the inner surface includes an aft channel and the second plate includes an aft edge that is spaced apart from the aft channel.

8. The method as recited in claim 1, wherein the non-conforming area comprises a dent that extends from the interface between the cellular panel and the aft sleeve.

9. A patch for an exhaust sleeve comprising:

a first plate disposed over an outer surface of an exhaust sleeve, wherein the exhaust sleeve includes an aft sleeve attached to an aft edge of a cellular layer and the first plate extends from the cellular layer onto the aft sleeve;

a second plate disposed along an inner surface of the cellular layer;

a first plurality of fasteners securing the first plate to the second plate through the cellular layer; and

a second plurality of fasteners securing the first plate to the aft sleeve.

10. The patch as recited in claim 9, wherein the aft sleeve includes an aft channel on the inner surface and the second plate is spaced apart from the aft channel.

11. The patch as recited in claim 9, wherein the first plate is axially longer than the second plate.

12. The patch as recited in claim 9, wherein the first plurality of fasteners comprise rivets extending through the cellular material and the second plurality of fasteners comprise rivets extending through the first plate and the aft sleeve.

13. The patch as recited in claim 9, wherein the first plurality of fasteners and the second plurality of fastener spaced apart from a damaged area of the cellular layer.

14. The patch as recited in claim 9, wherein the first plurality of fasteners and the second plurality of fasteners are spaced apart from a joint between the aft sleeve and the cellular layer.

15. The patch as recited in claim 14, including the step of machining the fasteners to provide a smooth surface along an airflow path.

16. The patch as recited in claim 9, including the step of tapering at least one of the first plate and the second plate to define a smooth surface along an airflow path.