CLAIMS

1. A method of servicing a gas turbine engine (10), the method comprising:

   removing a first rigid raft assembly (290) from the gas turbine engine, the rigid raft assembly incorporating at least a part of at least one component or system (210, 300) of the gas turbine engine; and

   installing a second, pre-prepared, rigid raft assembly (290) onto the gas turbine engine in place of the first raft assembly.

2. A method of servicing a gas turbine engine (10) according to claim 1, wherein the first and second rigid raft assemblies are electrical harness raft assemblies (200) having electrical conductors (210) embedded in a rigid material (220), the electrical conductors being at least a part of an electrical system arranged to transfer electrical signals around the engine.

3. A method of servicing a gas turbine engine according to claim 1 or claim 2, wherein the first and second rigid raft assemblies are dressed rigid raft assemblies (290A-290D) comprising a rigid mounting surface on which at least a part of at least one of the components or systems of the gas turbine engine is mounted.

4. A method of servicing a gas turbine engine according to claim 3, wherein the rigid mounting surface of each of the first and second rigid raft assemblies has a pipe (300) for transferring fluid around the engine attached thereto, the pipe being at least a part of a fluid transfer system.

5. A method of servicing a gas turbine engine according to claim 4, wherein:

   the step of removing the first rigid raft assembly comprises disconnecting the respective pipe from another part of the fluid transfer system; and

   the step of installing the pre-prepared second raft assembly comprises connecting the respective pipe the other part of the fluid transfer system.

6. A method of servicing a gas turbine engine according to any one of claims 3 to 5, wherein each of the first and second rigid raft assemblies has at least a part of one or more of the following components or systems attached to its

respective rigid mounting surface: an ECU; a fire detection system; a thermocouple; a vibration monitoring system; a fluid pressure monitoring system; and/or a fluid quality measuring system for monitoring fluid pressure in pipes mounted to the respective rigid raft assembly.

7. A method of servicing a fleet of gas turbine engines, the method comprising:

the steps according to any one of the preceding claims of removing a first rigid raft assembly from a gas turbine engine and installing a second, pre-prepared, rigid raft assembly onto the gas turbine engine, the gas turbine engine being a first gas turbine engine;

servicing the first rigid raft assembly that has been removed from the first gas turbine engine; and

installing the serviced first rigid raft assembly onto a second gas turbine engine.

8. A method of servicing a fleet of gas turbine engines according to claim 7, wherein

the step of servicing the first rigid raft assembly comprises removing engine dressings from the first rigid raft assembly; and/or

the method further comprises testing the serviced first rigid raft assembly before installing it onto the second gas turbine engine.

9. A method of servicing a gas turbine engine or a fleet of gas turbine engines according to any one of the preceding claims, further comprising:

removing the gas turbine engine on which the first rigid raft assembly is installed from an airframe before the step of removing the first rigid raft assembly from the gas turbine engine; and

refitting that gas turbine engine to an airframe after the step of installing the second, pre-prepared, rigid raft assembly thereon.

10. A method of servicing a gas turbine engine or a fleet of gas turbine engines according to any one of the preceding claims, wherein:

the first rigid raft assembly is an electrical harness raft assembly having an electrical harness raft which comprises electrical conductors arranged to transfer electrical signals around the engine embedded in a rigid material, the first electrical harness raft assembly being electrically connected to another electrical component of the gas turbine engine using a flexible cable; and

the step of removing the first rigid raft assembly from the gas turbine engine comprises disconnecting the flexible cable from the first electrical harness raft.

11. A method of dressing a gas turbine engine (10) comprising:

preparing a rigid raft assembly (290) for installing on the gas turbine engine, the rigid raft assembly incorporating at least a part of at least one component or system (210, 300) of the gas turbine engine;

storing the prepared rigid raft assembly in a storage facility; and

when the gas turbine engine requires dressing, installing the prepared rigid raft assembly on the rest of the gas turbine engine, the prepared rigid raft assembly forming at least a part of the engine dressing.

12. A method of dressing a gas turbine engine according to claim 11, wherein the rigid raft assembly is an electrical harness raft assembly (200) having electrical conductors (210) embedded in a rigid material (220), the electrical conductors being at least a part of an electrical system arranged to transfer electrical signals around the engine.

13. A method of dressing a gas turbine engine according to claim 11 or claim 12, wherein the rigid raft assembly is a dressed rigid raft assembly (290A-290D) comprising a rigid mounting surface on which at least a part of at least one of the components or systems of the gas turbine engine is mounted.

14. A method of dressing a gas turbine engine installation according to any one of claims 11 to 13, wherein:

the step of installing the prepared rigid raft assembly comprises connecting the rigid raft assembly, including the components and/or systems incorporated in the rigid raft assembly, to the gas turbine engine; and/or

the step of installing the prepared rigid raft assembly comprises mounting the prepared rigid raft assembly to the rest of the gas turbine engine using at least one anti-vibration mount (400).

15. A method of dressing a gas turbine engine according to any one of claims 11 to 14, comprising:

preparing at least two rigid raft assemblies;

installing at least two prepared rigid raft assemblies on the rest of the gas turbine engine; and

electrically connecting the at least two prepared rigid raft assemblies together using at least one flexible cable.

CLAIMS

1. A method of servicing a gas turbine engine (10), the method comprising:

removing a first rigid raft assembly (290) from the gas turbine engine, the rigid raft assembly incorporating at least a part of at least one component or system (210, 300) of the gas turbine engine; and

installing a second, pre-prepared, rigid raft assembly (290) onto the gas turbine engine in place of the first raft assembly.

2. A method of servicing a gas turbine engine (10) according to claim 1, wherein the first and second rigid raft assemblies are electrical harness raft assemblies (200) having electrical conductors (210) embedded in a rigid material (220), the electrical conductors being at least a part of an electrical system arranged to transfer electrical signals around the engine.

3. A method of servicing a gas turbine engine according to claim 1 or claim 2, wherein the first and second rigid raft assemblies are dressed rigid raft assemblies (290A-290D) comprising a rigid mounting surface on which at least a part of at least one of the components or systems of the gas turbine engine is mounted.

4. A method of servicing a gas turbine engine according to claim 3, wherein the rigid mounting surface of each of the first and second rigid raft assemblies has a pipe (300) for transferring fluid around the engine attached thereto, the pipe being at least a part of a fluid transfer system.

5. A method of servicing a gas turbine engine according to claim 4, wherein:

the step of removing the first rigid raft assembly comprises disconnecting the respective pipe from another part of the fluid transfer system; and

the step of installing the pre-prepared second raft assembly comprises connecting the respective pipe the other part of the fluid transfer system.

6. A method of servicing a gas turbine engine according to any one of claims 3 to 5, wherein each of the first and second rigid raft assemblies has at least a part of one or more of the following components or systems attached to its

respective rigid mounting surface: an ECU; a fire detection system; a thermocouple; a vibration monitoring system; a fluid pressure monitoring system; and/or a fluid quality measuring system for monitoring fluid pressure in pipes mounted to the respective rigid raft assembly.

7. A method of servicing a fleet of gas turbine engines, the method comprising:

the steps according to any one of the preceding claims of removing a first rigid raft assembly from a gas turbine engine and installing a second, pre-prepared, rigid raft assembly onto the gas turbine engine, the gas turbine engine being a first gas turbine engine;

servicing the first rigid raft assembly that has been removed from the first gas turbine engine; and

installing the serviced first rigid raft assembly onto a second gas turbine engine.

8. A method of servicing a fleet of gas turbine engines according to claim 7, wherein

the step of servicing the first rigid raft assembly comprises removing engine dressings from the first rigid raft assembly; and/or

the method further comprises testing the serviced first rigid raft assembly before installing it onto the second gas turbine engine.

9. A method of servicing a gas turbine engine or a fleet of gas turbine engines according to any one of the preceding claims, further comprising:

removing the gas turbine engine on which the first rigid raft assembly is installed from an airframe before the step of removing the first rigid raft assembly from the gas turbine engine; and

refitting that gas turbine engine to an airframe after the step of installing the second, pre-prepared, rigid raft assembly thereon.

10. A method of servicing a gas turbine engine or a fleet of gas turbine engines according to any one of the preceding claims, wherein:

the first rigid raft assembly is an electrical harness raft assembly having an electrical harness raft which comprises electrical conductors arranged to transfer electrical signals around the engine embedded in a rigid material, the first electrical harness raft assembly being electrically connected to another electrical component of the gas turbine engine using a flexible cable; and

the step of removing the first rigid raft assembly from the gas turbine engine comprises disconnecting the flexible cable from the first electrical harness raft.

11. A method of dressing a gas turbine engine (10) comprising:

preparing a rigid raft assembly (290) for installing on the gas turbine engine, the rigid raft assembly incorporating at least a part of at least one component or system (210, 300) of the gas turbine engine;

storing the prepared rigid raft assembly in a storage facility; and

when the gas turbine engine requires dressing, installing the prepared rigid raft assembly on the rest of the gas turbine engine, the prepared rigid raft assembly forming at least a part of the engine dressing.

12. A method of dressing a gas turbine engine according to claim 11, wherein the rigid raft assembly is an electrical harness raft assembly (200) having electrical conductors (210) embedded in a rigid material (220), the electrical conductors being at least a part of an electrical system arranged to transfer electrical signals around the engine.

13. A method of dressing a gas turbine engine according to claim 11 or claim 12, wherein the rigid raft assembly is a dressed rigid raft assembly (290A-290D) comprising a rigid mounting surface on which at least a part of at least one of the components or systems of the gas turbine engine is mounted.

14. A method of dressing a gas turbine engine installation according to any one of claims 11 to 13, wherein:

the step of installing the prepared rigid raft assembly comprises connecting the rigid raft assembly, including the components and/or systems incorporated in the rigid raft assembly, to the gas turbine engine; and/or

the step of installing the prepared rigid raft assembly comprises mounting the prepared rigid raft assembly to the rest of the gas turbine engine using at least one anti-vibration mount (400).

15. A method of dressing a gas turbine engine according to any one of claims 11 to 14, comprising:

preparing at least two rigid raft assemblies;

installing at least two prepared rigid raft assemblies on the rest of the gas turbine engine; and

electrically connecting the at least two prepared rigid raft assemblies together using at least one flexible cable.