

SUMMARY

In one illustrative embodiment, an apparatus comprises an existing aircraft node and an information agent located in the existing aircraft node. The existing aircraft node is connected to a number of aircraft systems and a network in an aircraft network data processing system. The information agent is configured to provide access to information received by the existing aircraft node to other aircraft nodes in the aircraft network data processing system.

In another illustrative embodiment, an apparatus comprises an aircraft node and an information agent located in the aircraft node. The aircraft node is configured to be located in an aircraft and communicate with a number of aircraft systems in the aircraft. The information agent is configured to identify information received from the number of aircraft systems that correspond to a subscription for an application in a host aircraft node in the aircraft and send the information identified to the application in the host aircraft node.

In yet another illustrative embodiment, an information management system comprises an aircraft node, a host aircraft node, an information agent in the aircraft node, and a manager located in the host aircraft node. The aircraft node is configured to be located in an aircraft and communicate with a number of aircraft systems in the aircraft. The host aircraft node is configured to communicate with the aircraft node. The information agent is configured to identify information received from the number of aircraft systems that correspond to a request from the host aircraft node in the aircraft and send the information identified to the host aircraft node. The manager is configured to process the information received from the information agent from the aircraft node and process the information received from the aircraft node.

In yet another illustrative embodiment, a method for collecting information in an aircraft is present. Information received from a number of aircraft systems at an aircraft node is identified using a number of connections to the number of aircraft systems. The information identified is requested information that is requested by an application in a host aircraft node. The requested information is sent to the application in the host aircraft node.

~~According to an aspect of the present disclosure there~~ There is provided also provided an apparatus comprising an existing aircraft node connected to a number of aircraft systems and a network in an aircraft network data processing system, and an information agent located in the existing aircraft node, wherein the information agent is configured to provide access to information received by the existing aircraft node to other aircraft nodes in the aircraft network data processing system.

The apparatus further includes wherein in being configured to provide access to the information received by the existing aircraft node to the other aircraft nodes in the aircraft network data processing system, the information agent is configured to identify the information received from the number of aircraft systems for an application using a subscription for the application in a host aircraft node in the other aircraft nodes and send the information identified to the application in the host aircraft node. The apparatus further includes wherein the subscription identifies at least one of a type of information, an event, and the application.

According to ~~another~~ an aspect of the present ~~disclosure~~ invention there is provided an apparatus comprising an aircraft node configured to be located in an aircraft and communicate with a number of aircraft systems in the aircraft, and an information agent located in the aircraft node, wherein the information agent is configured to identify information received from the number of aircraft systems that correspond to a subscription for an application in a host aircraft node in the aircraft and send the information identified to the application in the host aircraft node.

The apparatus further includes the host aircraft node configured to receive the information from the aircraft node and send the information to the application. The apparatus further includes a manager located in the host aircraft node, wherein the manager is configured to receive a request from the application in the host aircraft node, communicate with the information agent to generate the subscription, receive the information from the information agent, and send the information to the application.

The apparatus further includes wherein in being configured to send the information to the application, the manager is configured to place the information into a data buffer for the application. The apparatus further includes wherein the information agent is configured to encrypt the information. The apparatus further includes wherein the subscription identifies at least one of a type of information, an event, and the application. The apparatus further includes wherein the aircraft node is a line replaceable unit. The apparatus further includes wherein an aircraft system in the number of aircraft systems is selected from one of a sensor system, a flight recorder, a navigation system, a flight control system, an environmental control system, and an engine system.

~~According to another aspect of the present disclosure there~~ There is provided also disclosed an information management system comprising an aircraft node configured to be located in an aircraft and communicate with a number of aircraft systems in the aircraft, a host aircraft node configured to communicate with the aircraft node, an information agent in the

aircraft node, wherein the information agent is configured to identify information received from the number of aircraft

systems that correspond to a request from the host aircraft node in the aircraft and send the information identified to the host aircraft node, and a manager located in the host aircraft node, wherein the manager is configured to process the information received from the information agent from the aircraft node and process the information received from the aircraft node.

5 The information management system further includes wherein the information agent is configured to encrypt the information. The information management system further includes wherein the aircraft node is a line replaceable unit. The information management system further includes wherein an aircraft system in the number of aircraft systems is selected from one of a sensor system, a flight recorder, a flight control system, an environmental control system, and an
10 engine system.

 According to another aspect of the present ~~disclosure~~invention there is provided a method for collecting information in an aircraft, the method comprising identifying the information received from a number of aircraft systems at an aircraft node using a number of connections to the number of aircraft systems, wherein the information identified is requested
15 information that is requested by an application in a host aircraft node, and sending the requested information to the application in the host aircraft node.

 The method further includes wherein sending the requested information to the application in the host aircraft node comprises sending the requested information to the application in the host aircraft node using a network in an aircraft network data processing system. The method
20 further includes wherein the identifying step and the sending step are performed by an information agent located in the aircraft node. The method further includes wherein the information agent is configured to provide access to the information received by the aircraft node to other aircraft nodes in an aircraft network data processing system. The method further includes wherein the information agent identifies the requested information using a subscription
25 for the application.

 The features and functions can be achieved independently in various embodiments of the present disclosure or may be combined in yet other embodiments in which further details can be seen with reference to the following description and drawings.

CLAIMS:

What is claimed is:

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1. An apparatus comprising:

an aircraft node (218) configured to be located in an aircraft (100) and communicate with a number of aircraft systems (208) in the aircraft (100); and

10 an information agent (224) located in the aircraft node (218), wherein the information agent (224) is configured to identify information (216) received from the number of aircraft systems (208) that correspond to a subscription (318) for an application (316) in a host aircraft node (220) in the aircraft (100) and send the information (216) identified to the application (316) in the host aircraft node (220).

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2. The apparatus of claim 1 further comprising:

the host aircraft node (220) configured to receive the information (216) from the aircraft node (218) and send the information (216) to the application (316).

20 3. The apparatus of claim 2 further comprising:

a manager (306) located in the host aircraft node (220), wherein the manager (306) is configured to receive a request (320) from the application (316) in the host aircraft node (220), communicate with the information agent (224) to generate the subscription (318), receive the information (216) from the information agent (224), and send the information (216) to the

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4. The apparatus of claim 3, wherein in being configured to send the information (216) to the application (316), the manager (306) is configured to place the information (216) into a data buffer (326) for the application (316).

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5. The apparatus of any of claims 1-4, wherein the information agent (224) is configured to encrypt the information (216).

6. The apparatus of any of claims 1-5, wherein the subscription (318) identifies at least one of a type of information (402), an event, and the application (316).

7. The apparatus of any of claims 1-6, wherein the aircraft node (218) is a line replaceable unit.

8. The apparatus of any of claims 1-7, wherein an aircraft system in the number of aircraft systems (208) is selected from one of a sensor system, a flight recorder, a navigation system, a flight control system, an environmental control system, and an engine system.

9. A method for collecting information (216) in an aircraft (100), the method comprising:
identifying the information (216) received from a number of aircraft systems (208) at an aircraft node (218) using a number of connections to the number of aircraft systems (208), wherein the information (216) identified is requested information that is requested by an application (316) in a host aircraft node (220); and
sending the requested information to the application (316) in the host aircraft node (220).

10. The method of claim 9, wherein sending the requested information to the application (316) in the host aircraft node (220) comprises:
sending the requested information to the application (316) in the host aircraft node (220) using a network (204) in an aircraft network data processing system (202).

11. The method of any of claims 9-10, wherein the identifying step and the sending step are performed by an information agent (224) located in the aircraft node (218).

12. The method of claim 11, wherein the information agent (224) is configured to provide access to the information (216) received by the aircraft node (218) to other aircraft nodes in an aircraft network data processing system (202).

13. The method of any of claims 9-12, wherein the information agent (224) identifies the requested information using a subscription (318) for the application (316).