CLAIMS

1. A computerised method for monitoring the status of an aircraft comprising:

sending, from an output module of an aircraft monitoring system, a reporting contract request to the aircraft's avionics, the reporting contract request defining one or more report criteria upon which the aircraft's avionics are required to provide a data signal response to the aircraft monitoring system;

monitoring, at an input module of the aircraft monitoring system, for received data signal response sent from the aircraft's avionics to the aircraft monitoring system;

determining, at a processor of the aircraft monitoring system, if one or more alert criteria have been satisfied by received data signal responses; and

generating, at an alerting module of the aircraft monitoring system, an alert based on the determination;

wherein the report criteria defines a first interval at which the aircraft's avionics are required to provide a data signal response, the alert criteria defines a second interval and wherein an alert is generated, at the alerting module of the aircraft monitoring system, in the absence of a required data signal response being received during the first or second interval.

2. A computerised method according to claim 1, wherein the report criteria indicates an immediate data signal response is required from the aircraft's avionics and wherein an alert is generated, at the alerting module of the aircraft monitoring system, in the absence of a data signal response being received within the second interval defined by the alert criteria.

3. A computerised method according to claim 1 or 2, wherein the one or more report criteria and the one or more alert criteria are received from a criteria database of the aircraft monitoring system and wherein the data signal response comprises aircraft location information corresponding to the aircraft.

4. A computerised method according to any preceding claim, wherein an alert is generated, at the alerting module of the aircraft monitoring system, if it is determined, at the processor, that a received data signal response is an emergency report.

5. A computerised method according to any preceding claim, wherein an alert is generated if the data signal response to the reporting contract request is determined, at the processor of the aircraft monitoring system, to be a connection denial message.

6. A computerised method according to any preceding claim, wherein the reporting contract request and the corresponding data signal response conform to an Automatic Dependent Surveillance Contract.

7. A computerised method according to any preceding claim, wherein the alerts that have been generated at the alerting module of the aircraft monitoring system are stored in a data store and are provided to a user upon a user request.

8. A system for monitoring the status of an aircraft comprising:

an output module configured to send a reporting contract request to the aircraft's avionics, wherein the reporting contract request defines one or more report criteria upon which the aircraft's avionics are required to provide a data signal response to the system;

an input module configured to receive data signal responses sent from the aircraft's avionics to the system;

a processor configured to determine if the one or more alert criteria have been satisfied by received data signal responses; and

an alerting module configured to generate an alert based on the determination;

wherein the report criteria defines a first interval at which the aircraft's avionics are required to provide a data signal response, the alert criteria defines a second interval and wherein the alerting module is configured to generate an alert in the absence of a required data signal response being received during the first or second interval.

9. A system according to claim 8, wherein the report criteria indicates an immediate data signal response is required from the aircraft's avionics and wherein the alerting module is configured to generate an alert in the absence of a data signal response being received within the second interval defined by the alert criteria.

10. A system according to claim 8 or 9, wherein the one or more report criteria and the one or more alert criteria are received from a criteria database of the system; and wherein the data signal responses that the input module is configured to receive comprise aircraft location information corresponding to the aircraft.

11. A system according to any of claims 8 to 10, wherein the alerting module is configured to generate an alert if the processor determines that a received data signal response is an emergency report.

12. A system according to any of claims 8 to 11, wherein the alerting module is further configured to generate an alert if the data signal response to the reporting contract request is determined by the processor to be a connection denial message.

13. A system according to any of claims 8 to 12, wherein the reporting contract requests, that the output module is configured to send, and the corresponding responses, that the input module is configured to receive, conform to an Automatic Dependent Surveillance Contract.

14. A system according to any of claims 8 to 13, further comprising a data store, wherein the processor is further configured to store the alerts that have been generated in the data store and to provide the alerts that have been generated to a user upon a user request.