CLAIMS

1. Aircraft computer system, the aircraft computer system comprising
   - an electronic flight bag computer,
   - at least two server computers which are linked via a databus in a network configuration, wherein the electronic flight bag computer and the at least two server computers are linked via respective control lines and wherein at least one of the server computers is configured to change between an electronic flight bag mode and an in-flight entertainment mode in response to receiving a pre-determined signal via the control line, wherein at least one of the server computers comprises
   - at least two network switches, and wherein the at least one server computer is configured to activate one of the at least two network switches and to deactivate the other one of the at least two network switches in response to the pre-determined signal via the control line.

2. Aircraft computer system according to claim 1, wherein at least a first server computer and a second server computer of the server computers of the network configuration comprise
   - a first network switch and a second network switch, wherein
   - the first network switch of the first server computer is linked to the first network switch of the second server computer, and
   - the second network switch of the first computer is linked to the second network switch of the second server

computer, and wherein, in an electronic flight bag mode, the first network switch of the first server computer is configured to communicate with the first network switch of the second computer, and wherein, in an in-flight entertainment mode, the second network switch of the first server computer is configured to communicate with the second network switch of the second computer.

3. Aircraft computer system according to claim 2, wherein the respective other network switch is configured to be disabled.

4. Aircraft computer system according to one of the claims 1 to 3, wherein the first network switch of a server computer is part of a network and control unit and wherein

- a first control line and a second control line are connected to the network and control unit, wherein
- the network and control unit is configured to receive pre-determined control commands from the electronic flight bag computer via the first control line and is configured to send pre-determined control commands to a further server computer of the network configuration via the second control line, and wherein
- the further server computer is configured to change between an electronic flight bag mode and an in-flight entertainment mode in response to a pre-determined command via the second control line.

5. Aircraft computer system according to claim 4, wherein the network and control unit is furthermore connected to at least one media server processor and wherein the me-

dia server processor is configured to change between an electronic flight bag mode and an in-flight entertainment mode in response to a pre-determined command signal from the network and control unit.

6. Aircraft computer system according to claim 5, wherein the network and control unit is connected to a second network switch and wherein the second network switch is configured to change between an electronic flight bag mode and an in-flight entertainment mode in response to a command signal from the network and control unit.

7. Aircraft computer system according to claim 6, wherein the second network switch is an Ethernet switch.

8. Aircraft computer system according to claim 7, wherein the first network switch is a four port switch.

9. Method to configure an aircraft computer system, the method comprising

- generating a pre-determined control command with an electronic flight bag computer,
- sending the pre-determined control command to a server computer of a network configuration of server computers,
- changing between an electronic flight bag mode and an in-flight entertainment mode of the server computer, the changing of mode comprising:
    - enabling a first set of network connection lines of the server computer,
    - disabling a second set of network connection lines of the server computer.

10. Aircraft computer system, the aircraft computer system comprising
    - an electronic flight bag computer,
    - at least two server computers which are linked in a network configuration, wherein the electronic flight bag computer and the at least two server computers are linked via control lines and wherein at least one of the server computers is configured to change between an electronic flight bag mode and an in-flight entertainment mode in response to a pre-determined signal via the control line, wherein at least one of the server computers of the network configuration is configured to reboot in response to a pre-determined command from the electronic flight bag computer via a control line.

11. Aircraft computer system according to one of the preceding claims, wherein at least one of the server computers of the network configuration is configured to load an executable image, in response to a command from the electronic flight bag computer via a control line

12. Aircraft computer system according to claim 11, wherein the executable image comprises an operating system.

13. Aircraft computer system according to claim 12, wherein the server computer is configured to load an executable image with at least one electronic flight bag application in response to a command to change to an electronic flight bag mode and wherein the server computer is configured to load an executable image with at least one in-flight entertainment application in response to a command to change to an in-flight entertainment mode.

14. Method to configure an aircraft computer system, the method comprising

- generating a pre-determined control command with an electronic flight bag computer,
- sending the pre-determined control command from the electronic flight bag computer to a server computer of a network configuration of server computers via a control line,
- changing between an electronic flight bag mode and an in-flight entertainment mode of the server computer in response to the pre-determined control command, the changing between the modes comprising:
    - rebooting of the server computer,
    - loading an executable image from an external computer readable memory into a computer readable memory of the server computer.

15. Server computer of an aircraft, which is configured to change between an electronic flight bag mode and an in-flight entertainment mode, the server computer comprising

- a network and control unit with an IP-router,
- a first network switch,
- a second network switch,

wherein the IP-router is configured to detect internal and external data packets based on identification data of the data packets and wherein the IP-router is configured to route the internal data packets via the first network switch and to route the external data packets via the second network switch.

16. Server computer according to claim 15, wherein the first network switch is connected to a network switch of an electronic flight bag computer, wherein the electronic flight bag computer is connected to a transceiver to a worldwide satellite link and the server computer is connected to a transceiver of a broadband satellite link.

17. Server computer according to claim 16,
wherein
- the first network switch is connected to a first network switch of a second server computer of a network configuration,
- the second network switch is connected to a second network switch of a second server computer of a network configuration and wherein
- the IP-router is configured to forward the internal data packets via the first network switch and to forward the external data packets via the second network switch.

18. Method for transmitting data in an aircraft computer system comprising
- receiving a data signal via an aircraft antenna,
- transmitting the data signal to a server computer,
- deriving data packets from the data signal,
- using identifiers in the data packets to classify the data packets into internal and external data packets,
- forwarding the internal data packets to an electronic flight bag computer via a first network switch of the server computer,

- forwarding the external data packets to inflight entertainment servers via a second network switch of the server computer.

19. Wireless network in an aircraft, the wireless network comprising
- a first WLAN communication equipment and
- a second short range WLAN communication equipment,

and an aircraft computer which is configured to send and receive data over the short range WLAN communication equipment according to at least two pre-determined proprietary protocols which are based on a serial Bluetooth protocol and wherein an aircraft computer which is connected to the short range WLAN communication equipment is configured to change between the at least two proprietary protocols in a pre-determined way.

20. Wireless network in an aircraft according to claim 19, wherein
- a protocol indicator is included into data packets of the short range WLAN communication equipment, wherein
- a list of pre-determined protocols and associated protocol identifiers is stored on a computer readable memory of an aircraft computer, wherein
- the aircraft computer is configured to choose a pre-determined protocol based on the protocol identifier and to decode a data packet according to the pre-determined protocol.

21. Wireless network in an aircraft according to claim 19 or claim 20, wherein

- a protocol sequence indicator is included into data packets of the short range WLAN communication equipment,
- a list of pre-determined protocols and associated protocol identifiers is stored on a computer readable memory of an aircraft computer, wherein
- the aircraft computer is configured to choose a pre-determined sequence of pre-determined protocols based on the protocol sequence identifier and to decode one or more data packets according to the pre-determined protocol sequence.

22. Wireless network according to one of claims 19 to 21, wherein the aircraft computer is connected to an aircraft antenna and wherein a computer readable memory of the aircraft computer comprises an application for forwarding data packets of the short range WLAN to a ground station via the aircraft antenna.

23. Wireless network according to one of claims 19 to 22, wherein the aircraft computer comprises a data assembler, the data assembler being configured to assemble different types of data that is contained in the data packets of the short range WLAN into a data bundle.

24. Wireless network according to one of claims 19 to 23, wherein the aircraft computer wherein the aircraft computer is furthermore configured to provide a sequence number to the data bundle.

25. Method for transmitting data over a wireless network of an aircraft comprising

- generating data packets from data to be transmitted, wherein the data packets conform to a pre-determined protocol, the pre-determined protocol being based on a Bluetooth serial profile and wherein at least one of the data packets comprises a pre-determined protocol identifier,
- generating a data signal from the data packets,
- sending the data signal from a mobile device within an aircraft,
- receiving the data signal by a WLAN access cluster, the WLAN access cluster being connected to a server computer in the aircraft,
- deriving data packets from the data signal,
- using the pre-determined protocol identifier to automatically select a pre-determined protocol that is based on the Bluetooth serial protocol and to decode the data packets according to the pre-determined protocol.

26. Method according to claim 25, the generation of the data packets comprising
- attributing a pre-determined significance to Bits of the data packets according to a pre-determined scheme, wherein the pre-determined scheme corresponds to the pre-determined protocol identifier.

27. Packet router for forwarding data packets to a secure processing area in a computer system on an aircraft wherein the packet router comprises
- means for storing an aircraft related key,
- means for decrypting data packets with the aircraft related key and
- means for forwarding the data packets to a secure computing area of the aircraft if the data packets

are detected as admissible, wherein the detection comprises a successful decryption attempt with the aircraft related key.

28. Packet router according to claim 27, wherein the aircraft related key is derived from a tail number of the aircraft.

29. Packet router according to claim 27, wherein the packet router further comprises a timer and a means for determining a list of packet numbers of data packets to be received in a time slot, depending on packet numbers of data packets received in a preceding time slot and means for triggering a re-transmission for data packets with numbers that are not in the determined list of packet numbers.

30. Packet router according to one of claims 27 to 29,wherein the packet router is located within an electronic flight bag line replaceable unit.

31. Packet router according to one of claims 27 to 29, wherein the packet router is located within an IP router.

32. Aircraft computer system with a packet router according to one of claims 27 to 31, the aircraft computer system comprising the secure processing area, wherein the secure processing area comprises an electronic flight bag line replaceable unit.

33. Aircraft computer system according to claim 32, wherein the secure processing area comprises furthermore server

computers which are linked to the electronic flight bag line replaceable unit, the server computers being in an electronic flight bag mode.

5