CLAIMS

1.- A data communication method between a plurality of aircraft of a set of aircraft, the aircraft being organized according to a plurality of telecommunications networks, notably radio telecommunications networks, connected together through relay stations, each telecommunications network being provided with an identifier specific to the network, the method comprising:

- a step for adding pieces of information into the data to be emitted from an aircraft belonging to a first network of aircraft, the pieces of information comprising the identifier specific to the first network, and

- a step for emitting data by an aircraft belonging to the first network of aircraft.

2.- The method according to claim 1, wherein each aircraft is provided with a specific identifier, the pieces of information comprising the specific identifier of each aircraft for which the data to be emitted are intended.

3.- The method according to claim 1 or 2, wherein the pieces of information comprise a piece of information relating to the unicast or multicast nature of the communication to be established with the data to be emitted.

4.- The method according to claims 1 to 3, wherein each relay station includes a relay unit between a first network of aircraft and a second network of aircraft, the method comprising:

- a step for modifying the pieces of information added into the data, the identifier specific to the first network being replaced with the identifier specific to the second network, and

- a step for emitting the data through the relay unit when the communication to be established is of a multicast nature or when the communication to be established is of a unicast nature and the aircraft for which the data to be emitted are intended belongs to a network different from the network whose specific identifier is present in the data to be emitted.

5.- The method according to any of claims 1 to 4, wherein the data include a media access control layer, the step for adding pieces of information is applied by encapsulation of the pieces of information at the media access control layer of the data to be emitted.

6.- The method according to any of claims 1 to 5 in their dependency with claim 2, further including:

- a step for comparing the identifiers added in the data with the identifiers respectively specific to the network of the second aircraft and to the second aircraft, and

- a step for having the second aircraft accept receiving the emitted data when the identifiers added into the data on the one hand and the identifiers respectively specific to the network of the second aircraft and to the second aircraft are identical.

7.- The communication method according to any of claims 1 to 6, further including, a step for calculating the shortest path to be followed for forwarding the data from one aircraft to another aircraft.

8.- The communication method according to any of claims 1 to 7, wherein each telecommunication network is a virtual local network.

9.- The communication method according to any of claims 1 to 8, wherein the data appear in the form of at least one Ethernet frame and the pieces of information are encapsulated in a field of the header of said or each Ethernet frame.

10.- A set of aircraft wherein the aircraft are organized according to a plurality of telecommunication networks, notably radio telecommunication networks connected to each other through relay stations, each telecommunication network being provided with an identifier specific to the network, the set of aircraft being adapted for applying the communication method according to any of claims 1 to 9.