C LAIMS:

What is claimed is:

1. A node in an internetwork comprising:

a processor and addressable memory wherein the processor is configured to:

read a sequence number and an originator identifier of a received packet ~~having a message from the originator, the packet received by the processor through at least one of a plurality of non-overlapping connections, the non-overlapping connections between the originator and the processor having no physical layer network connections in common with each other~~of a sent dual redundant packet by an originator having a message from the originator;

compare a stored highest sequence number associated with the originator identifier with the sequence number of the received packet;

if the sequence number of the received packet is less than or equal to the stored highest sequence number associated with the originator identifier, then discard the received packet; and

if the sequence number of the received packet is greater than the stored highest sequence number associated with the originator identifier, then deliver the message of the received packet to an application based on an upper layer protocol~~.~~;

wherein the originator comprises a near real-time controller and the node comprises a gateway and an aircraft effector responsive to payload information of the received frames.

2. The node of claim 1 wherein the node is further configured to receive packets having the same originator identifier from two or more paths.

3. The node of claim 1 wherein the node further comprises a radio frequency transmitter~~originator comprises a near real-time controller and the node comprises a gateway and an effector responsive to payload information of the received frames~~.

4. The node of claim 1 wherein the node ~~originator~~ further comprises ~~a near real-time controller and the node comprises a gateway and~~ a radio frequency ~~transmitter~~receiver.

5. The node of claim 1 wherein ~~the originator comprises a near real-time controller and~~ the node further comprises a sensor~~gateway and a radio frequency receiver~~.

~~6. The node of claim 1 wherein the originator comprises a near real-time controller and the node comprises a gateway and a sensor.~~

~~7~~6. A method of redundant message processing comprising:

assigning, by a processor of an originator node:

a frame sequence number to a frame of a first packet of a dual redundant set;

an originator identification number to the frame of the first packet of the dual redundant set;

the frame sequence number to a frame of a second packet of the dual redundant set; and

an originator identification number to the frame of the second packet of the dual redundant set;

~~transmitting, by the originator node, the first packet via a first network interface circuit and the second packet via a second network interface circuit, the first network interface and the second network interface having no physical layer network connections in common to a destination node;~~

recording, by ~~the~~ a processor of ~~the~~ a destination node:

the frame sequence number and the originator number of a first received packet of a the dual redundant set comprising the first packet and the second packet; and

dropping, by the processor of the destination node:

a second received packet of the dual redundant set having the recorded frame sequence number and the recorded originator number~~.~~;

wherein the originator node comprises a near real-time controller and the destination node comprises a gateway and an aircraft effector responsive to payload information of the received frames.

~~8~~7. The method of claim ~~7~~ 6 further comprising, preceding the step of dropping:

recording, by the processor of the destination node:

a frame sequence number and an originator number of ~~a~~ the second received packet of the dual redundant set having the recorded originator number of the first received packet, if a difference between the frame sequence number of the second received packet and the recorded frame sequence number of the first received packet is above an upper threshold or below a lower threshold value.

~~9~~8. The method of claim 6 further comprising:

transmitting, by the originator node, the first packet of the dual redundant set via a first network interface circuit and the second packet of the dual redundant set via a second network interface circuit.

~~10~~9. A method of network node health assessment comprising:

multicasting or broadcasting a health request to a plurality of network nodes of a network;

receiving a health request response message from at least one of the plurality of network nodes wherein the received health request response message comprises an Ethernet MAC address of the responding node;

associating a time stamp with the received health request response message;

storing the received Ethernet MAC address of the responding node and its associated time stamp; and

providing, to two or more network interface circuit (NIC) Ethernet drivers in communication with an originator node, identical outgoing messages from the originator node to one or more nodes based on the received and stored Ethernet MAC addresses of the one or more nodes; ~~and~~

wherein the originator node comprises a near real-time controller and the responding node comprises a gateway and an aircraft effector responsive to payload information of the received frames.

~~comparing packets transmitted via two or more NIC paths that have no physical layer network connections in common with packets received via the two or more NIC paths; and~~

~~determining a quantity of lost packets for each of the two to more NIC paths.~~

~~11~~10. The method of claim ~~10~~ 9 further comprising:

assessing network health based on one or more timestamps of the received and stored Ethernet MAC addresses of the one or more nodes.

~~12~~11. The method of claim 9 further comprising:

comparing packets transmitted via two or more NIC paths with packets received via the two or more NIC paths; and

determining a quantity of lost packets for each of the two to more NIC paths.