CLAIMS:

1. An airborne electronic warfare system mounted on an aerial platform, the airborne electronic warfare system comprising:

a Radar Warning Receiver (RWR) configured to receive: (a) at least one first signal being a radar emission signal emitted by a respective radar-based system in a first frequency spectrum, and (b) at least one second signal being a non-radar emission signal in a second frequency spectrum; and,

a processing circuitry, being in communication with said RWR, configured to:

obtain, from said RWR, both said at least one first signal and said at least one second signal;

analyze said at least one first signal and said at least one second signal to determine a respective set of characteristics associated with each of said signals;

compare each respective set of characteristics with a corresponding predefined set of characteristics; and

upon at least one respective set of characteristics meeting its corresponding predefined set of characteristics, perform an action.

2. The airborne electronic warfare system of claim 1, wherein (i) said airborne electronic warfare system is operative according to a mission regime composed of a plurality of missions arranged according to their order of execution, (ii) each mission of said missions is associated with an allotted slot within a frequency spectrum, within which the mission is to be executed, and (iii) each mission of said missions is associated with the receiving of either a first signal or a second signal, such that said RWR does not receive both signal types simultaneously.

3. The airborne electronic warfare system of claim 1, wherein (i) said RWR is an existing system, and (ii) the ability of said RWR to receive both said first and second signals is due to one or more upgrades to its firmware.

4. The airborne electronic warfare system of claim 1, wherein (i) said airborne electronic warfare system includes one or more additional receivers, each configured to receive signals in a specific frequency spectrum, and (ii) said RWR and said one or more additional receivers are configured to operate simultaneously.

5. The airborne electronic warfare system of claim 1, wherein said RWR is capable of (i) simultaneously receiving signals of different types associated with different frequency spectra, and (ii) performing one or more missions associated with said signals simultaneously.

6. The airborne electronic warfare system of claim 1, wherein said at least one second signal is a data communication signal transmitted along a communication channel extending between any two parties.

7. The airborne electronic warfare system of claim 6, wherein said two parties are at least one unmanned vehicle and a controller directed to enable an operator to communicate with said at least one unmanned vehicle.

8. The airborne electronic warfare system of claim 6, wherein said airborne electronic warfare system further includes a transmitter configured to transmit at least one counter signal upon at least one respective set of characteristics meeting its corresponding predefined set of characteristics, such that said counter signal disrupts the operation of said at least one party of said parties.

9. The airborne electronic warfare system of claim 6, wherein said communication signal is a spread-spectrum signal.

10. The airborne electronic warfare system of claim 6, wherein (i) said the respective set of characteristics associated with said data communication signal includes a first subset of distinct characteristics associated with a first party of said parties and a second subset of distinct characteristics associated with a

second party of said parties, and (ii) upon at least one of said first and second subsets of characteristics meeting its corresponding predefined set of characteristics, said system is capable of independently performing actions associated with said first party, said second party, or both.

11. The airborne electronic warfare system of claim 1, wherein said at least one second signal is a beacon signal emitted from at least one emission device associated with at least one object to be located.

12. An electronic warfare method comprising:

obtaining, by a processing circuitry, from a Radar Warning Receiver (RWR), (a) at least one first signal being a radar emission signal in a first frequency spectrum, and (b) at least one second signal being a non-radar emission signal in a second frequency spectrum;

analyzing, by said processing circuitry, said at least one first signal and said at least one second signal to determine a respective set of characteristics associated with each of said signals;

comparing, by said processing circuitry, each respective set of characteristics with a corresponding predefined set of characteristics; and

upon at least one respective set of characteristics meeting its corresponding predefined set of characteristics, performing, by said processing circuitry, an action.

13. The electronic warfare method of claim 12, wherein (i) said method is operative according to a mission regime composed of a plurality of missions arranged according to their order of execution, (ii) each mission of said missions is associated with an allotted slot within a frequency spectrum, within which the mission is to be executed, and (iii) each mission of said missions is associated with the receiving of either a first signal or a second signal, such that said RWR does not receive both signal types simultaneously.

14. The electronic warfare method of claim 12, wherein (i) said RWR is an existing system, and (ii) the ability of said RWR to receive both said first and second signals is due to one or more upgrades to its firmware.

15. The electronic warfare method of claim 12, wherein said RWR is capable of (i) simultaneously receiving signals of different types associated with different frequency spectra, and (ii) performing one or more missions associated with said signals simultaneously.

16. The electronic warfare method of claim 12, wherein said at least one second signal is a data communication signal transmitted along a communication channel extending between any two parties.

17. The electronic warfare method of claim 16, wherein said two parties are at least one unmanned vehicle and a controller directed to enable an operator to communicate with said at least one unmanned vehicle.

18. The electronic warfare method of claim 16, wherein said communication signal is a spread-spectrum signal.

19. The electronic warfare method of claim 12, wherein said at least one second signal is a beacon signal emitted from at least one emission device associated with at least one object to be located.

20. A non-transitory computer readable storage medium having computer readable program code embodied therewith, the computer readable program code, executable by at least one processor to perform an electronic warfare method, the method comprising:

obtaining, by a processing circuitry, from a Radar Warning Receiver (RWR), (a) at least one first signal being a radar emission signal in a first frequency spectrum, and (b) at least one second signal being a non-radar emission signal in a second frequency spectrum;

analyzing, by said processing circuitry, said at least one first signal and said at least one second signal to determine a respective set of characteristics associated with each of said signals;

comparing, by said processing circuitry, each respective set of characteristics with a corresponding predefined set of characteristics; and

upon at least respective set of characteristics meeting its corresponding predefined set of characteristics, performing, by said processing circuitry, an action.