Claims

1. Use of an unmanned aerial vehicle (20) and a control station (30) for testing the accuracy of the automatic positioning means of a signal tracking antenna (10) during a satellite signal searching and/or tracking operation; wherein a platform on which the signal tracking antenna (10) is mounted is kept stationary during the testing operation; wherein the unmanned aerial vehicle (20) is adapted for:

- receiving a test flight route from the control station (30), wherein the test flight route is configured for simulating waves or other mobile platform motions;
- automatically navigating the received test flight route with the aid of a received Global Navigation Satellite System signal;
- transmitting, while navigating the flight route, a signal configured for the signal tracking antenna (10) to search for and/or to track;

wherein the control station (30) is adapted for:

- transmitting the test flight route signal to the unmanned aerial vehicle (20), wherein the test flight route is configured for simulating waves or other mobile platform motions;
- receiving positioning data from the automatic positioning means during a predefined test period; and
- receiving data, such as signal strength data, from the signal tracking antenna, about the received signal from the unmanned aerial vehicle (20) during said predefined test period.

2. Use according to claim 1, wherein the control station (30) is configured to a) output the received positioning data, and data about the received signal and/or b) compare the received positioning data, and data about the received signal with reference values from previous tests and/or with data sheets from the antenna manufacturer.

3. Use according to any one of the claims 1-2, wherein the control station (30) is configured to receive positioning data from the unmanned aerial vehicle (20) during a test period; and
- instructing the automatic positioning means to initiate and/or continue the satellite signal searching and/or tracking operation based on the positioning data from the unmanned aerial vehicle (20).

4. Use according to claim 1, wherein the control station (30) is further configured to:
- receive positioning data from the unmanned aerial vehicle (20) during a test period; and
- compare the received positioning data from the unmanned aerial vehicle (20), the positioning data from the automatic positioning means, and data about the received signal with reference values from previous tests.

5. Use according to any one of the claims 1-3, wherein the control station (30) is configured to:
- receive positioning data from the unmanned aerial vehicle (20) during a test period;
- calculate simulated positioning data of the signal tracking antenna, wherein the signal tracking antenna comprises a directional antenna (10); and
- transmit said calculated simulated positioning data to the control unit (12) of an automatic positioning means of the directional antenna (10); wherein the calculation of simulated positioning data of the directional antenna (10) is based on the positioning data from the unmanned aerial vehicle (20).

6. Use according to any one of the claims 3-5, wherein the unmanned aerial vehicle (20) is configured for continuously transmitting its position to the control station (30).

7. Use according to any one of the claims 1-6, wherein the control station is integrated into the stabilized satellite communication antenna.

8. Use according to any one of the claims 1-7, wherein the signal tracking antenna is a COTM antenna.

9. A system for testing the accuracy of the automatic positioning means of a stabilized satellite communication antenna (10) during a satellite signal searching and/or tracking operation; the system comprising:
- unmanned aerial vehicle (20); and
- a control station (30);
wherein the unmanned aerial vehicle (20) is adapted for:
- receiving a test flight route from the control station (30), wherein the test flight route is configured for simulating waves or other mobile platform motions;
- automatically navigating the received test flight route with the aid of a received Global Navigation Satellite System signal;
- transmitting, while navigating a flight route, a signal configured for the signal tracking antenna (10) to search for and/or to track;
wherein the control station (30) is adapted for:
- transmitting the test flight route signal to the unmanned aerial vehicle (20), wherein the test flight route is configured for simulating waves or other mobile platform motions;
- receiving positioning data from the automatic positioning means during a predefined test period; and
- receiving data, such as signal strength data, from the signal tracking antenna, about the received signal from the unmanned aerial vehicle (20) during said predefined test period.

10. A system according to claim 9, wherein the control station (30) is configured to a) output the received positioning data, and data about the received signal and/or b) compare the received positioning data, and data about the received signal with reference values from previous tests and/or with data sheets from the antenna manufacturer.

11. A system according to any one of the claims 9-10, wherein the control station (30) is configured to receive positioning data from the unmanned aerial vehicle (20) during a test period; and
- instructing the automatic positioning means to initiate and/or continue the satellite signal searching and/or tracking operation based on the positioning data from the unmanned aerial vehicle (20).

12. A system according to any one of the claims 9-11, wherein the control station (30) is configured to:
- receive positioning data from the unmanned aerial vehicle (20) during a test period;
- calculate simulated positioning data of the signal tracking antenna, wherein the signal tracking antenna comprises a directional antenna (10); and
- transmit said calculated simulated positioning data to the control unit (12) of an automatic positioning means of the directional antenna (10); wherein the calculation of simulated positioning data of the directional antenna (10) is based on the positioning data from the unmanned aerial vehicle (20).

13. A system according to claim 9, wherein the control station (30) is further configured to:
- receive positioning data from the unmanned aerial vehicle (20) during a test period; and
- compare the received positioning data from the unmanned aerial vehicle (20), the positioning data from the automatic positioning means, and data about the received signal with reference values from previous tests.

14. A system according to any one of the claims 11-13, wherein the unmanned aerial vehicle (20) is configured for continuously transmitting its position to the control station (30).

15. A system according to any one of the claims 9-14, wherein the control station is integrated into the signal tracking antenna.

16. A system according to any one of the claims 9-15, wherein the signal tracking antenna is a COTM antenna.

17. A method of operating a control station for testing the accuracy of automatic positioning means of a signal tracking antenna (10) during a satellite signal searching and/or tracking operation; wherein a platform on which the signal tracking antenna (10) is mounted is kept stationary during the testing operation; the method, performed by the control station, comprising:

- transmitting a test flight route signal from the control station (30) to an unmanned aerial vehicle (20), wherein the test flight route is configured for simulating waves or other mobile platform motions, and the unmanned aerial vehicle (20) is adapted for:

automatically navigating the received test flight route with the aid of a received Global Navigation Satellite System signal, and

receiving, while the unmanned aerial vehicle (20) is navigating the flight route, a signal configured for the signal tracking antenna (10) to search for and/or to track;

- receiving, at the control station (30), positioning data from the automatic positioning means during a predefined test period; and

- receiving, at the control station (30), data, such as signal strength data, from the signal tracking antenna, about the received signal from the unmanned aerial vehicle (20) during said predefined test period.

18. An apparatus for a control station for testing the accuracy of automatic positioning means of a signal tracking antenna (10) during a satellite signal searching and/or tracking operation; wherein a platform on which the signal tracking antenna (10) is mounted is kept stationary during the testing operation; the apparatus of the control station (30) adapted to:

- transmit a test flight route signal from the control station (30) to an unmanned aerial vehicle (20), wherein the test flight route is configured for simulating waves or other mobile platform motions, and the unmanned aerial vehicle (20) is adapted for:

automatically navigating the received test flight route with the aid of a received Global Navigation Satellite System signal, and

receiving, while the unmanned aerial vehicle (20) is navigating the flight route, a signal configured for the signal tracking antenna (10) to search for and/or to track;

- receive, at the control station (30), positioning data from the automatic positioning means during a predefined test period; and

- receive, at the control station (30), data, such as signal strength data, from the signal tracking antenna, about the received signal from the unmanned aerial vehicle (20) during said predefined test period.

19. A method of operating an unmanned aerial vehicle (20) for testing the accuracy of automatic positioning means of a signal tracking antenna (10) during a satellite signal searching and/or tracking operation; wherein a platform on which the signal tracking antenna (10) is mounted is kept stationary during the testing operation; the method, performed by the unmanned aerial vehicle (20), comprising:

- receiving a test flight route from a control station (30), wherein the test flight route is configured for simulating waves or other mobile platform motions;

- automatically navigating the received test flight route with the aid of a received Global Navigation Satellite System signal; and

- transmitting, while navigating the flight route, a signal configured for the signal tracking antenna (10) to search for and/or to track;

wherein the control station (30) is adapted to:

- transmit the test flight route signal to the unmanned aerial vehicle (20), wherein the test flight route is configured for simulating waves or other mobile platform motions;

- receive positioning data from the automatic positioning means during a predefined test period; and

- receive data, such as signal strength data, from the signal tracking antenna, about the received signal from the unmanned aerial vehicle (20) during said predefined test period.

20. An apparatus for an unmanned aerial vehicle (20) for testing the accuracy of automatic positioning means of a signal tracking antenna (10) during a satellite signal searching and/or tracking operation; wherein a platform, such as a ship, on which the signal tracking antenna (10) is mounted is kept stationary during the testing operation; the apparatus adapted to:

- receive a test flight route from a control station (30), wherein the test flight route is configured for simulating waves or other mobile platform motions;

- automatically navigate the received test flight route with the aid of a received Global Navigation Satellite System signal; and

- transmit, while navigating the flight route, a signal configured for the signal tracking antenna (10) to search for and/or to track;

wherein the control station (30) is adapted to:

- transmit the test flight route signal to the unmanned aerial vehicle (20), wherein the test flight route is configured for simulating waves or other mobile platform motions;

- receive positioning data from the automatic positioning means during a predefined test period; and

- receive data, such as signal strength data, from the signal tracking antenna, about the received signal from the unmanned aerial vehicle (20) during said predefined test period.