Patent claims

1. A method for controlling, and monitoring surrounding areas of, an Unmanned Aerial Vehicle (UAV) by an Operator with a remote control comprising a flight display, wherein the UAV is equipped with a camera and a positioning device providing an image of the surrounding areas and positioning data of the operating field of the UAV, wirelessly transmitted to the remote control, characterized in

displaying the image captured by the camera on the flight display,

providing a transparent layer upon the image comprising a cardinal oriented map of a range of the operating field including at least a cardinal point, a UAV symbol oriented on the flight display relative to the cardinal point corresponding to the real compass direction of the UAV provided by the positioning device, and a waypoint symbol positioned relative to the UAV symbol corresponding in distance and direction to the real geographical relation between the UAV and the waypoint.

2. A method according to claim 1, characterized in that

the cardinal-oriented map further comprises an Operator position symbol positioned relative to the UAV symbol and the waypoint symbol corresponding in distance and direction to the real geographical relation between the Operator and the UAV and the waypoint, respectively.

3. A method according to claim 1 or 2, characterized in

displaying one or more rings indicating the scale of the cardinal-oriented map.

4. A method according to claim 3, characterized in that

the one or more rings is/are centered around the Operator position symbol which coincides with the center of the flight display.

5. A method according to claim 3, characterized in that

the one or more rings are marked with a radius stating the scale of the cardinal-oriented map.

6. A method according to claim 4, characterized in

when the UAV passes a predefined distance from the Operator position, then switching the scale of the cardinal-oriented map, and changing the one or more rings in terms of size and scale indication.

7. A method according to claim 3, characterized in

when the UAV passes a predefined distance to the waypoint position, then switching the scale of the cardinal-oriented map and coinciding the center of the one or more rings with the waypoint position symbol.

8. A method according to claim 1, characterized in that

the image is a video image or one or more snapshots.

9. A remote control adjusted to control, and monitor surrounding areas of, an Unmanned Aerial Vehicle (UAV) by an Operator, the remote control comprising a flight display, wherein the UAV is equipped with a camera and a positioning device providing an image, live or still a series of snapshots, of the surrounding areas and positioning data of the operating field of the UAV, wirelessly transmitted to the remote control, characterized in that the flight display is adjusted to

displaying the image captured by the camera on the flight display,

providing a transparent layer upon the image comprising a cardinal-oriented map of a range of the operating field including at least a cardinal point, a UAV symbol oriented on the flight display relative to the cardinal point corresponding to the real compass direction of the UAV

provided by the positioning device, and a waypoint symbol positioned relative to the UAV symbol corresponding in distance and direction to the real geographical relation between the UAV and the waypoint.

What is claimed is:

1. A method for controlling, and monitoring surrounding areas of, an Unmanned Aerial Vehicle (UAV) by an Operator with a remote control, comprising:

providing a flight display, and a UAV equipped with a camera and a positioning device providing an image of surrounding areas and positioning data of an operating field of the UAV, wirelessly transmitted to a remote control;

displaying the image captured by the camera on the flight display;

providing a transparent layer upon the image comprising a cardinal-oriented map of a range of the operating field including at least a cardinal point, a UAV symbol oriented on the flight display relative to the cardinal point corresponding to a real compass direction of the UAV provided by the positioning device, the cardinal-oriented map including an Operator position symbol;

a waypoint symbol positioned relative to the UAV symbol corresponding in distance and direction to a real geographical relation between the UAV and the waypoint;

displaying one or more rings indicating a scale of the cardinal-oriented map, the one or more rings being centered around the Operator position symbol which coincides with a center of the flight display.

2. The method according to claim 1, wherein the Operator position symbol is positioned relative to the UAV symbol and the waypoint symbol corresponding in distance and direction to a real geographical relation between the Operator and the UAV and the waypoint, respectively.

3. The method according to claim 1, wherein the one or more rings are marked with a radius stating the scale of the cardinal-oriented map.

4. The method according to claim 1, further comprising when the UAV passes a predefined distance from the Operator position, then switching the scale of the cardinal-oriented map, and changing the one or more rings in terms of size and scale indication.

5. The method according to claim 1, further comprising when the UAV passes a predefined distance to the waypoint position, then switching the scale of the cardinal-oriented map and coinciding a center of the one or more rings with the waypoint symbol.

6. The method according to claim 1, wherein the image is a video image or one or more snapshots.

7. A remote control adjusted to control, and monitor surrounding areas of, an Unmanned Aerial Vehicle (UAV) by an Operator, the remote control comprising:

a flight display in communication with the remote control, the remote control being in communication with an UAV that is equipped with a camera and a positioning device providing an image, live or still a series of snapshots, of the surrounding areas and positioning data of the operating field of the UAV, wirelessly transmitted to the remote control, the flight display being:

adjusted to display the image captured by the camera on the flight display;

provide a transparent layer upon the image comprising a cardinal-oriented map of a range of the operating field including at least a cardinal point, a UAV symbol oriented on the flight display relative to the cardinal point corresponding to a real compass direction of the UAV provided by the positioning device, and a waypoint symbol positioned relative to the UAV symbol corresponding in distance and direction to a real geographical relation between the UAV and the waypoint, the cardinal-oriented map including an Operator position symbol; and

display one or more rings indicating a scale of the cardinal-oriented map, the one or more rings being centered around the Operator position symbol which coincides with a center of the flight display.

8. A method for controlling, and monitoring surrounding areas of, an Unmanned Aerial Vehicle (UAV) by an Operator with a remote control, comprising:

providing a flight display, and a UAV equipped with a camera and a positioning device providing an image of surrounding areas and positioning data of an operating field of the UAV, wirelessly transmitted to a remote control;

displaying the image captured by the camera on the flight display;

providing a transparent layer upon the image comprising a cardinal-oriented map of a range of the operating field including at least a cardinal point, a UAV symbol oriented on the flight display relative to the cardinal point corresponding to a real compass direction of the UAV provided by the positioning device;

a waypoint symbol positioned relative to the UAV symbol corresponding in distance and direction to a real geographical relation between the UAV and the waypoint;

displaying one or more rings indicating a scale of the cardinal-oriented map; and

when the UAV passes a predefined distance to the waypoint position, then switching the scale of the cardinal-oriented map and coinciding a center of the one or more rings with the waypoint symbol.