CLAIMS

We claim:

1. A computer-implemented method comprising:

sending, by a computing device, unmanned aircraft system (UAS) data providing a first UAS location indication on a map on a display of the computing device, wherein the first UAS location indication comprises an aggregate indication of a plurality of UASs located within a first area on the map;

receiving, by the computing device, input data comprising a request for additional information related to the first UAS location indication;

in response to receiving the request for additional information, sending additional location data related to the plurality of UASs, including a plurality of second UAS location indications at a plurality of locations within the first area on the map, wherein each second UAS indication corresponds to a subset of the plurality of UASs represented by the first UAS location indication;

updating the display of the computing device to show the plurality of second UAS location indications;

receiving, by the computing device, input data comprising a request for additional information of a given UAS of the plurality of UASs corresponding to one of the plurality of second UAS location indications; and

in response to receiving the request for additional information of the given UAS, causing the display of the computing device to display, on the display of the computing device, a unique identifier associated with the given UAS and an altitude of the given UAS, wherein the altitude of the given UAS is displayed as an altitude range such that an exact altitude of the given UAS is not explicitly indicated.

2. The computer-implemented method of claim 1,

wherein the plurality of second UAS location indications at the plurality of locations within the first area on the map are displayed on a zoomed in area of the first area on the map.

3. The computer-implemented method of claim 1,

wherein the first UAS location indication is displayed in real time with no historical lookback.

4. The computer-implemented method of claim 1,

wherein the first UAS location indication is displayed in real time with a limited historical lookback of one minute.

5. The computer-implemented method of claim 1,

wherein the graphic display of the first UAS location indication is limited to a range around a location of the computing device.

6. The computer-implemented method of claim 5,

wherein the range around the location of the computing device comprises a geofence, and

wherein the first UAS location indication is displayed in response to detecting a breach of the geofence by at least one of the plurality of UASs.

7. The computer-implemented method of claim 1,

wherein each of the plurality of second UAS location indications at the plurality of locations within the first area on the map comprises an indication of the location of a plurality of individual UASs of the plurality of UASs.

8. The computer-implemented method of claim 1, further comprising:

receiving, by the computing device, input data comprising a request for additional information related to a given second UAS location indication of the plurality of second UAS location indications;

sending additional location data related to the plurality of UASs including a plurality of third UAS location indications at a plurality of locations within the first area on the map, wherein each third UAS indication corresponds to a subset of the plurality of UASs represented by the second UAS location indication; and

updating the display of the computing device to show the plurality of third UAS location indications.

9. The computer-implemented method of claim 1, further comprising:

in further response to receiving the request for additional information of the given UAS, sending an instruction to display one or more of (i) a ground speed of the given UAS on the display of the computing device, (ii) a model number of the given UAS on the display of the computing device, (iii) an image of the given UAS on the display of the computing device, and (vi) an operator of the given UAS on the display of the computing device.

10. The computer-implemented method of claim 1, further comprising:

in further response to receiving the request for additional information of the given UAS, sending an instruction to display an option for further additional information about the given UAS;

receiving, by the computing device, input data comprising a selection the option for further additional information about the given UAS; and

in response to receiving the selection of the option for further additional information about the given UAS, sending an instruction to display a website corresponding to the option for further additional information about the given UAS.

11. The computer-implemented method of claim 1, further comprising:

in further response to receiving the request for additional information of the given UAS, sending an instruction to display an option to report the given UAS for a non-standard operation.

12. The computer-implemented method of claim 1, further comprising:

in further response to receiving the request for additional information of the given UAS, sending an instruction to display an option to receive a notification when the given UAS is in proximity to the computing device.

13. The computer-implemented method of claim 1, wherein the request for additional information related to the first UAS location indication corresponds to a first source, the method further comprising:

determining a count of additional information requests received from the first source within a predetermined period of time;

when the count is greater than a threshold, denying the request for additional information; and

when the count is less than or equal to the threshold, sending the additional location data related to the plurality of UASs.

14. A non-transitory computer-readable medium having stored thereon instructions, that when executed by one or more processors, cause a computing device to perform operations comprising:

sending, by a computing device, unmanned aircraft system (UAS) data providing a first UAS location indication on a map on a display of the computing device, wherein the first UAS location indication comprises an aggregate indication of a plurality of UASs located within a first area on the map;

receiving, by the computing device, input data comprising a request for additional information related to the first UAS location indication;

in response to receiving the request for additional information, sending additional location data related to the plurality of UASs, including a plurality of second UAS location indications at a plurality of locations within the first area on the map, wherein each second UAS indication corresponds to a subset of the plurality of UASs represented by the first UAS location indication;

updating the display of the computing device to show the plurality of second UAS location indications;

receiving, by the computing device, input data comprising a request for additional information of a given UAS of the plurality of UASs corresponding to one of the plurality of second UAS location indications;

in response to receiving the request for additional information of the given UAS, updating the display of the computing device to show a unique identifier associated with the given UAS and an altitude of the given UAS, wherein the altitude of the given UAS is displayed as an altitude range such that an exact altitude of the given UAS is not explicitly indicated; and

in response to receiving the request for additional information of the given UAS, sending an instruction to display an option to report the given UAS for a non-standard operation.

15. The non-transitory computer-readable medium of claim 14, wherein the operations further comprise:

in further response to receiving the request for additional information of the given UAS, sending an instruction to display a unique identifier associated with the given UAS on the display of the computing device.

16. The non-transitory computer-readable medium of claim 14, wherein the operations further comprise:

in further response to receiving the request for additional information of the given UAS, sending an instruction to display one or more of (i) a ground speed of the given UAS on the display of the computing device, (ii) an altitude of the given UAS on the display of the computing device, (iii) a model number of the given UAS on the display of the computing device, (iv) an image of the given UAS on the display of the computing device, and (v) an operator of the given UAS on the display of the computing device.

17. A system, comprising:

a display;

a processing unit;

data storage; and

program instructions stored in the data storage and executable by the processing unit to carry out operations comprising:

sending, by a computing device, unmanned aircraft system (UAS) data providing a first UAS location indication on a map on a display of the computing device, wherein the first UAS location indication comprises an aggregate indication of a plurality of UASs located within a first area on the map;

receiving, by the computing device, input data comprising a request for additional information related to the first UAS location indication;

in response to receiving the request for additional information, sending additional location data related to the plurality of UASs, including a plurality of second UAS location indications at a plurality of locations within the first area on the map, wherein each second UAS indication corresponds to a subset of the plurality of UASs represented by the first UAS location indication;

updating the display of the computing device to show the plurality of second UAS location indications;

receiving, by the computing device, input data comprising a request for additional information of a given UAS of the plurality of UASs corresponding to one of the plurality of second UAS location indications;

in response to receiving the request for additional information of the given UAS, updating the display of the computing device to show a unique identifier associated with the given UAS and an altitude of the given UAS, wherein the altitude of the given UAS is displayed as an altitude range such that an exact altitude of the given UAS is not explicitly indicated; and

in response to receiving the request for additional information of the given UAS, sending an instruction to display an option to receive a notification when the given UAS is in proximity to the computing device.

18. The system of claim 17,

wherein each of the plurality of second UAS location indications at the plurality of locations within the first area on the map comprises an indication of the location of a plurality of individual UASs of the plurality of UASs.