

UAS Certificate of Authorization Electronic Surveillance/Detection Capability

Robert Gray Approach Control uses an ASR 9 digital radar system with STARS which can be used upon request to help provide traffic calls. Coverage is near surface for all of R6302.

- a. ASR 9 digital radar system w/STARS
- b. Ground
- c. Instantaneous via radio VHF/UHF or phone lines.
- d. FAA certified and operated approach control facility.
- e. N/A
- f. N/A
- g. N/A
- h. N/A

17b.

- a. FWD looking CCD camera for local flight operations. 280mm and 770mm EO/IR combined camera payloads for range operations.
- b. See Payload Technical Manual extract. (Attachment 2)
- c. Field of view reduced
- d. Video from Payload relayed to Operator via data-link and displayed to operator on 19inch LCD monitor.
- e. Extremely reliable
- f. Extremely reliable

17c. None

17d. Visual Observation by Ground Observers:

- a. What are the skills, knowledge, and certifications of each ground observer to detect other airborne operations? (I.e. Familiarity with FARs, AT operations and procedures, etc.): All observers have received FAA Ground School Training, and additional training on detection of other aircraft.
- b. How will each ground observer detect other airborne operations in comparison to human visual capabilities from the cockpit perspective (on the UA)? Ground observers will use visual aids such as binoculars to detect other airborne operations.

- c. What are the lateral and vertical range limits that ground observers will be employed? At no time shall the observers be more than 1-mile laterally and 3,000 feet vertically from the UA. Anytime visual contact with the UA while in the NAS is lost, operations shall be terminated.
- d. What are the communications capabilities between each ground observer and UA pilot? All observers shall have direct radio contact with the UAS operator. In the event communications is lost the UA mission will be terminated.
- e. How many aircraft will each ground observer be responsible to monitor?
Maximum of 2 UA at any given time.
- f. Will any ground observer also pilot the aircraft? NO, outside observers shall not be the operator of the UA.
- g. What is the legal connection between each ground observer and the proponent's organization? All ground observers shall be members of the organization.