

Federal Aviation Administration National Part 139 CertAlert

AdvisoryCautionary**Non-Directive**Advisory**Cautionary**Non-Directive**Advisory**Cautionary**Non-Directive**

Date: 2/15/2024 **24-02**

To: Title 14, Code of Federal Regulations (CFR) Part 139

Certificated Airport Operators and Federally Obligated

Airports

Subject: Autonomous Ground Vehicle Systems (AGVS) Technology on

Airports

Point of Contact: Kelvin K. Ampofo, AAS-320, 202-267-6457

Email: kelvin.k.ampofo@faa.gov

1. Purpose.

The purpose of this CertAlert is to provide information on the subject of Autonomous Ground Vehicle Systems (AGVS) technology and its use on airports. Currently, the testing, deployment, and operation of AGVS or autonomous vehicle (AV) technology for airside use have not been authorized by the FAA at part 139 certificated airports and federally obligated airports.

2. Background.

The testing and use of AVs and AGVS in and around airports has recently become more prevalent, both domestically and internationally. Increased demand for more efficient airport operations has resulted in an upsurge in interest of the availability of AV (or driverless) technology for various airport- related applications. These include maintenance vehicles (mowers, snow removal equipment, sweepers, etc.), perimeter security vehicles, self-driving aircraft tugs, baggage carts, employee buses, and passenger shuttles.

However, the operation, including testing, of AVs and AGVS on the airport could create significant challenges and risks to safe operations. Certain remote areas of the airport or landside locations are viewed as safer environments for exploring this technology because they offer a more controlled, less-congested, and low-speed environment for testing and operation which will reduce the risk of accidents or incidents involving these vehicles or equipment. However, testing of this technology on the airport operating area—which includes runways, taxiways, and aprons—presents significantly different hazards and complexities due to higher speed aircraft operations and congestion from vehicles, equipment, and pedestrians.

Existing FAA safety requirements, standards, and guidance were not originally developed with AV and AGVS technology in mind. The FAA will need to further review the application of AV and

AVGS technology to assess the operational impacts and safety controls and to determine their conformance with these safety requirements prior to deployment for on-airport applications.

To that end, the FAA is exploring various approaches to researching this technology with the intent of developing standards and guidance to address the use of AVs and AVGS's in the airport operating area. The FAA does support the testing of this technology by airports when conducted in a controlled environment.

3. Action.

14 CFR part 139 certificate holders interested in testing AV and AVGS technology should reach out to their regional FAA Airport Certification and Safety Inspector. All other airports should contact their Airport District Office when exploring their approach to testing activities. We also encourage airport operators to engage their local stakeholders to ensure awareness once testing activities have been authorized and are in progress.

Birkely Rhodes, Manager

Airport Safety and Operations Division, AAS-300

2/15/2024

Date