

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION Air Traffic Organization Policy

N JO 7110.777

Effective Date: September 10, 2020

Cancellation Date: December 31, 2020

SUBJ: Emergency Autoland System

- 1. **Purpose of This Notice**. This notice alerts air traffic control personnel of an emergency landing system that has been developed and installed in some aircraft which controllers may encounter in the National Airspace System. This notice also provides guidance regarding related changes to FAA Order JO 7110.65, *Air Traffic Control*.
- **2. Audience**. This notice applies to the following Air Traffic Organization (ATO) service units: Air Traffic Services (AJT), Safety and Technical Training (AJI), and all associated air traffic control facilities.
- **3.** Where Can I Find This Notice? This notice is available on the MyFAA employee website at https://employees.faa.gov/tools_resources/orders_notices/ and on the air traffic publications website at http://www.faa.gov/air_traffic/publications/.
- **4. Cancellation**. This notice is canceled upon the publication of FAA Order JO 7110.65Y, Change 3, effective December 31, 2020.
- **5. Explanation of Policy Change**. This change allows the Emergency Autoland system to alert the controller of an emergency situation and the intentions of the aircraft. It also defines the Emergency Autoland behavior as well as clarifies some items pertaining to the handling of emergency aircraft.
- **6. Procedures/Action**. Amend FAA Order JO 7110.65Y by changing paragraphs 10-1-1, 10-1-2, 10-2-1, 10-2-5, and 10-2-15 to read as follows:

10-1-1. EMERGENCY DETERMINATIONS

Title thru subparagraph b. No change

c. If the words "Mayday" or "Pan-Pan" are not used but you believe an emergency or an urgent situation exists, handle it as though it were an emergency.

No further changes to paragraph

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10-1-2. OBTAINING INFORMATION

a. Use the information provided or solicit more information as necessary to assist the distressed aircraft. Provide assistance that is consistent with the requests of the pilot. If you believe an alternative course of action may prove more beneficial, transmit your recommendation(s) to the pilot.

REFERENCE-

14 CFR § 91.3 Responsibilities and authority of pilot in command.

- **b.** If an emergency was declared by an Emergency Autoland system, the aircraft may transmit the following:
 - 1. Callsign.
 - 2. That Emergency Autoland has been activated.
 - **3.** Position (mileage and direction) relative to a nearby airport.
 - **4.** The intended emergency landing airport and the planned landing runway.
 - **5.** An ETE to the emergency landing airport.

EXAMPLE-

"Aircraft, N123B, pilot incapacitation, 12 miles southwest of KOJC, landing KIXD airport. Emergency Autoland in 13 minutes on runway 36."

NOTE-

- **1.** System configurations may vary between manufacturers. All systems should be configured to transmit enough information for the controller to respond effectively to the emergency.
- **2.** In the event of frequency congestion, an Emergency Autoland system may transmit on 121.5 or CTAF instead of the last assigned ATC frequency.

No further changes to paragraph

10-2-1. INFORMATION REQUIREMENTS

Title thru subparagraph b.

No change

NOTE-

- **1.** Emergency Autoland systems may not provide all of the required information for emergencies. Use the information provided to develop an appropriate course of action to assist the aircraft.
- **2.** If an emergency has been declared by an Emergency Autoland system, transmissions to the aircraft may go unanswered.
- **3.** Normally, do not request this information from military fighter-type aircraft that are at low altitudes (for example, on approach, immediately after departure, on a low level route). However, request the position of an aircraft that is not visually sighted or displayed on radar if the location is not given by the pilot.

No further changes to paragraph

10-2-5. EMERGENCY SITUATIONS

Consider that an aircraft emergency exists and inform the RCC or ARTCC if:

NOTE-

USAF facilities are only required to notify the ARTCC.

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- a. An emergency is declared by any of the following:
 - 1. The pilot.
 - 2. Facility personnel.
 - **3.** Officials responsible for the operation of the aircraft.
 - **4.** A system-generated transmission from an aircraft.

No further changes to paragraph

10-2-15. EMERGENCY AIRPORT RECOMMENDATION

Title thru subparagraph a.7

No change

NOTE-

In the event of an Emergency Autoland system activation, the system will select a suitable airport and advise ATC. The Emergency Autoland system does not consider closed runways, equipment on the runway, construction, or other possible airport hazards when selecting a suitable airport.

No further changes to paragraph

- **7. Distribution**. This notice is distributed to: Air Traffic Services, Mission Support Services, System Operations, Safety and Technical Training, Air Traffic Safety Oversight Service, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, National Air Traffic Controllers Association, Professional Aviation Safety Specialists, and interested public aviation entities.
- **8. Background**. Airborne technology has been developed that, in the event of a pilot death or incapacitation, the flight computer will take control of the aircraft. The computer will declare an emergency with ATC, change the squawk code to 7700, select a suitable airport, broadcast its intentions, navigate to that airport, land, and shut down the engine(s). Or, in situations where hypoxic conditions may exist, the system will descend the aircraft to a lower altitude to allow the pilot(s) to recover and then initiate the autoland sequence if necessary.

KAREN L CHIODINI Digitally signed by KAREN L CHIODINI Date: 2020.07.31 12:47:20 -04'00'

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