



Havarikommisjonen

Accident Investigation Board Denmark

Bulletin 2022-127



Serious incident involving LN-PFI (Diamond DA40 NG) and an unidentified Unmanned Aerial Vehicle (UAV) 1.5 nautical miles north of the island of Laesoe on 21-3-2022

INTRODUCTION

This bulletin reflects the opinion of the Danish Accident Investigation Board regarding the circumstances of the occurrence and its causes and consequences.

In accordance with the provisions of EU Regulation 996/2010, the Danish Air Navigation Act and pursuant to Annex 13 of the International Civil Aviation Convention, the safety investigation is of an exclusively technical and operational nature, and its objective is not the assignment of blame or liability.

The safety investigation was carried out without having necessarily used legal evidence procedures and with no other basic aim than preventing future accidents and serious incidents.

Consequently, any use of this bulletin for purposes other than preventing future accidents and serious incidents may lead to erroneous or misleading interpretations.

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GENERAL

State file number:	2022-127
UTC date:	21-3-2022
UTC time:	10:42
Occurrence class:	Serious incident
Location:	1.5 nautical miles (nm) north of the island of Laesoe
Injury level:	None
Aircraft registration:	LN-PFI
Aircraft make/model:	Diamond DA40 NG
Current flight rules:	Instrument Flight Rules (IFR)
Operation type:	Private
Flight phase:	En route
Aircraft category:	Fixed wing
Last departure point:	Sandefjord Torp (ENTO)
Planned destination:	Billund (EKBI)
Aircraft damage:	None
UAV:	Unidentified

SYNOPSIS**Notification**

All time references in this statement are Coordinated Universal Time (UTC).

The Aviation Unit of the Danish Accident Investigation Board (AIB) was notified of the serious incident by the Norwegian Civil Aviation Authority on 25-3-2022 at 11:02 hours (hrs).

The Danish AIB notified the Danish Civil Aviation and Railway Authority (DCARA), the Norwegian Safety Investigation Authority (NSIA), the European Aviation Safety Agency (EASA), the Directorate-General for Mobility and Transport (DG MOVE) on 28-3-2022 at 08:08 hrs and the Austrian Federal Safety Investigation Authority (FSIA) on 4-4-2022 at 11:41 hrs.

Summary

An unauthorised UAV operation at Flight Level (FL) 090 resulted in a near collision with an aircraft.

The serious incident occurred in daylight and under Visual Meteorological Conditions (VMC).

FACTUAL INFORMATION

History of flight

The serious incident occurred during a pleasure cross-country flight from Sandefjord Torp (ENTO) to Billund (EKBI) with two pilots on board.

Cruising at FL 090 at a position 1.5 nm north of the island of Laesoe, the pilots suddenly observed a close by object at the same level moving toward them.

When the object passed at a horizontal and vertical distance of 4-5 meters and 0 feet respectively, the pilots identified the object to be a quadrotor UAV.

The pilots identified the colours of the UAV to be black at the bottom and orange on the top.

The flight continued as planned.

Injuries to persons

<i>Injuries</i>	<i>Crew</i>	<i>Passengers</i>	<i>Others</i>
Fatal			
Serious			
None	2		

Safety investigation information

A playback of radar and Automatic Dependent Surveillance–Broadcast (ADS–B) data did not reveal any UAV operations in the area near the island of Laesoe at the time of the serious incident. [See appendix 1.](#)

No Danish military UAV operations took place in the area near the island of Laesoe at the time of the serious incident.

The DCARA had not issued any authorisations for special UAV operations near the island of Laesoe at the time of the serious incident.

Operational categories for Unmanned Aerial Systems

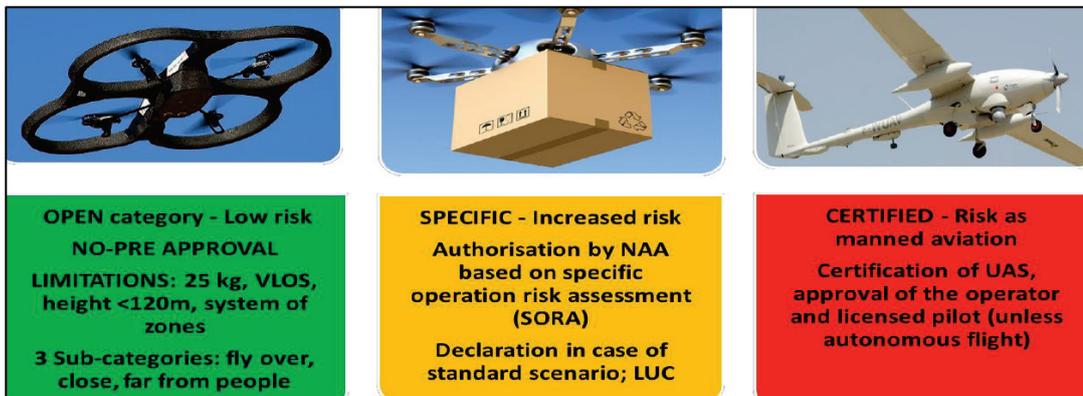


Figure 1. Operational categories for Unmanned Aerial Systems

ANALYSIS

The UAV was unidentified.

The actual UAV operation at FL 090 was unauthorised and posed, in the opinion of the AIB, a significant risk to flight safety.

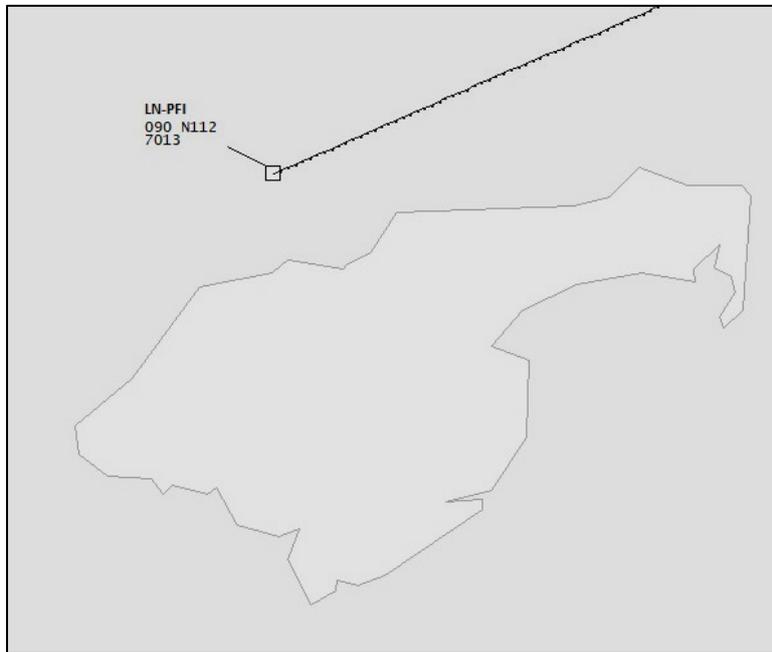
To mitigate the risk of near collisions between UAVs and aircraft, the AIB strongly recommends every UAV operator to operate within the legal framework.

APPENDIX 1

The AIB replaced the aircraft call sign with the aircraft registration.

Return to [safety investigation information](#).

Radar replay at 10:42:03 hrs.



ADS-B replay at 1042:03 hrs.

