



This investigation has been conducted in accordance with
Annex 13 to the ICAO Convention on International Civil Aviation,
EU Regulation No 996/2010, and
The Civil Aviation (Investigation of Air Accidents and Incidents) Regulation; Legal Notice 16 of 2013.

Under these Regulations, the sole objective of the investigation of an accident or incident
is the prevention of accidents and incidents in the future.
It is not the purpose of this investigation to assign fault or blame,
and the reporting process should not be used to determine liability.

Preliminary Report

**Airbus A320-214 returned to Malta shortly after take-off due to fumes/vapour in
the cockpit and forward passenger cabin,
on Thursday 17 November 2022**

Classification: Serious Incident

OCCURRENCE FILING INFORMATION

- File number BAAI/171122
- Responsible entity BAAI [Bureau of Air Accident Investigation]
- Occurrence status Serious Incident – Fumes/vapour in cockpit and forward passenger cabin

WHEN

- Date Thursday 17 November 2022
- Local time 07:44 LT
- UTC 06:44 UTC

STATE OF OCCURRENCE: MALTA

- Location Shortly after take-off from RWY 23, Malta International Airport
- Latitude N/A
- Longitude N/A

SEVERITY

- Highest damage to aircraft Nil
- Injury total Nil
- Third party damage Nil

INJURY

- Fatalities Nil
- Serious Nil
- Minor Nil

REPORTS

- Investigation entity BAAI
- Investigation type ICAO Annex 13 investigation
- Investigation delegated Nil
- Final report date This is a preliminary report

LIST OF ORGANISATIONS/ENTITIES/PEOPLE INVOLVED

1. Air Malta
2. Malta Air Traffic Services [MATS]
3. Transport Malta - Civil Aviation Directorate [TM-CAD]
4. Malta International Airport [MIA]
5. Bureau d'Enquetes et d'Analyses [BEA]
6. International Civil Aviation Organisation [ICAO]
7. European Network of Civil Aviation Safety Investigation Authority [ENCASIA]

AIRCRAFT DESCRIPTION

- Registration 9H-AHS
- State of Registry Malta
- Flight Number AMC 514
- Manufacturer Airbus
- Model A320-214
- Year built 2011
- Serial number 5086
- Aircraft category Passenger Aircraft
- Propulsion type Turbofan
- Engine manufacturer CFMI
- Number of engines Two
- Maximum take-off mass N/A

AIRCRAFT OPERATOR

- Operator Air Malta
- State of operator Malta
- State of registration Malta
- Type of operation Commercial Scheduled

ITENERARY

- Last departure Malta International Airport [MLA, LMML]
- Planned destination Vienna International Airport [VIE, LOWW]
- Actual landing airport Malta International Airport [MLA, LMML]
- Flight phase of occurrence Shortly after take-off

NARRATIVE

Narrative language: English

Shortly after take-off from RWY 23, the flight crew noticed fumes, resembling mist with a burnt oil odour, in the cockpit. The same fumes and pungent odour were felt by the cabin crew at the forward galley to the over-wing emergency exit area. The cabin crew stationed at the aft of the passenger cabin, saw the fumes resembling mist in front of the over-wing emergency exit area, however the pungent odour never reached the aft part of the passenger cabin.

Following an assessment of the situation the flight crew donned the oxygen masks as per procedure and the decision was taken to return to base. At 07:44 LT the flight crew declared "PAN PAN" to ATC and prepared for an overweight landing. The crew were informed that all runways were available, and subsequently the crew was given clearance to land on RWY 31. The Rescue and Fire Fighting Services were informed and deployed their equipment to assist if necessary.

The aircraft landed safely on RWY 31 at 08:06 LT. The RFFS personnel informed the crew that in and around the aircraft there was no fire or obvious damage. The aircraft was taxied to Apron 8 Stand 3.

A normal and uneventful disembarkation of passengers and crew was carried out. No damages or injuries were reported.

At the arrival's terminal, all passengers and crew were tested for any possible inhalation of fumes. All persons tested negative.

The Cockpit Voice Recorder (CVR) and the Quick Access Recorder (QAR) data stored in the PCMCIA card, were retrieved by BAAI for further investigation.

The operator's aircraft maintenance section carried out the trouble-shooting necessary as per procedures for smoke / fumes / avionics smoke fault.

Interviews were carried out with the flight crew and the cabin crew.

PROBABLE CAUSE

Narrative language: English

Investigation still underway.

RECOMMENDATIONS

Narrative language: English

Investigation still underway.

GLOSSARY OF ABBREVIATIONS

ATC	Air Traffic Control
BAAI	Bureau of Air Accident Investigation
BEA	Bureau d'Enquetes et d'Analyses
CFMI	CFM International
CVR	Cockpit Voice Recorder
ENCASIA	European Network of Civil Aviation Safety Investigation Authority
EU	European Union
ICAO	International Civil Aviation Organisation
LMML	Luqa Airport, Malta
LT	Local Time
MATS	Malta Air Traffic Services
MIA	Malta International Airport
PCMCIA	Personal Computer Memory Card International Association
QAR	Quick Access Recorder
RFFS	Rescue and Fire Fighting Services
RWY	Runway
TM-CAD	Transport Malta - Civil Aviation Directorate
UTC	Universal Coordinated Time