

# ***Final Report***

On the incident on 15<sup>th</sup> October 2024

to the **XK A800**

registered **RCHF-8**

operated by **National Administration of Catopolis for Aeronautics**

**ACA 001 Random Field Regional Airport – Random Field Regional Airport**



# ***Safety Investigations***

The CATS is the Catopolis Agency for Transportation Safety. Its investigations are conducted with the sole objective of improving aviation safety and are not intended to apportion blame or liability.

CATS investigations are independent, separate and conducted without prejudice to any judicial or administrative action that may be taken to determine blame or liability.

Update: 6<sup>th</sup> November 2024

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# ***GLOSSARY***

ATC	Air Traffic Control
CATS	Catopolis Agency for Transportation Safety
CBA	Catopolis Board for Aviation
CRM	Crew Resource Management
CVR	Cockpit Voice Recorder
SAR	Search And Rescue

# ***SYNOPSIS***

**Date of incident:**

23 October 2024 at 14 – 15 hours

**Site of incident:**

Random Field Regional Airport

**Type of flight:**

Experimental test flight

**Aircraft:**

XK A800 registered RCHF-8

**Owner:**

National Administration of Catopolis for Aeronautics

**Operator:**

National Administration of Catopolis for Aeronautics

**Persons on board:**

Flight crew: 0

Cabin crew: 0

Passengers: 0

On 15<sup>th</sup> October 2024, the XK A800 flight NEA 001 took off from Random Field Regional Airport bound for Random Field Regional Airport and was in contact with the Random Field Regional Airport ATC.

Around 1 minute after takeoff, the flight's battery had been drained of fuel. The crew lost all control of the aircraft. The plane had, however, been in a low-altitude level-flying point in the flight. Shortly after the battery had been drained of fuel, the aircraft impacted the ground.

The accident resulted due to the following succession of events:

1. The draining of the battery, and
2. The loss of control of the aircraft.

# ***ORGANISATION OF INVESTIGATION***

On 15<sup>th</sup> October 2024 at around 14 – 15 hours, the CATS was notified by the Random Field Regional Airport control centre about the accident. After this, the CATS initiated an investigation team to conduct an investigation of the crash.

The CATS Investigator-in-charge had organised the following areas to be investigated:

1. Ground searches
2. Maintenance,
3. Operations,
4. Systems and equipment.

The investigation crew worked onwards of 15<sup>th</sup> October 2024 to investigate these areas.

The ground searches retrieved the aircraft, which was still completely intact. The battery was found to be void of all energy.

These areas of information were completed in a short time which resulted in the publication of the Final Report being on the 6<sup>th</sup> November 2024.

# ***I – FACTUAL INFORMATION***

## ***1.1 History of Flight***

On 15<sup>th</sup> October 2024, the A800 was planned to make an experimental test flight operated by the National Administration of Catopolis for Aeronautics between Random Field Regional Airport and Random Field Regional Airport. The aircraft was controlled remotely, and, as such did not have any persons on board.

At around 14 – 15 hours, the aircraft was cleared by the Random Field Regional Airport ATC for takeoff. The captain was pilot flying. There was no first officer present.

There is no available CVR recording.

After around 1 minute of flight, during which the aircraft was going through a low-altitude level-flying maneuver, the drainage of the battery was realized as the captain lost all control of the aircraft.

The aircraft impacted the ground shortly after.

The crew had sent an emergency message, and the aircraft was found shortly after.

## ***1.2 Killed and Injured***

<b>Injuries</b>	<b>Crew Members</b>	<b>Passengers</b>	<b>Others</b>
Fatal	-	-	-
Serious	-	-	-
Light/none	-	-	-

## ***1.3 Damage to Aircraft***

Not applicable.

## ***1.4 Other Damage***

Not applicable.

## ***1.5 Personnel Information***

At the time of the event, this was captain's (approximately) 10<sup>th</sup> flight on the A800.

### ***1.5.1 Flight Crew***

#### ***1.5.1.1 Captain***

Male, aged [REDACTED]

Experience:

Total: 0.5 flying hours, of which 0.5 as Captain

Hours on type: 0.5

All as Captain in the previous six months: 0.5 hours, ~10 landings, ~10 take-offs

the previous three months: 0.5 hours, ~10 landings, ~10 take-offs

In the previous 30 days: 0.5 hours, ~10 landings, ~10 take-offs

The captain had spent lots of time in the simulator, of which the exact amount is unknown.

He had received an experimental pilot license on 23<sup>rd</sup> June 2024.



### ***1.5.1.2 First Officer***

Not applicable.

## ***1.6 Aircraft Information***

The National Administration of Catopolis for Aeronautics had owned the aircraft since a few months before the accident. It was delivered new.

### ***1.6.1 Airframe***

Manufacturer	XK
Type	A800
Serial Number	0001
Registration	RCHF-I
Entry into service	23 <sup>rd</sup> June 2024
Certificate of Airworthiness	N°000001/I dated 22 <sup>nd</sup> June 2024 issued by the CATS
Airworthiness examination certificate	2024/000001/I valid until 23/6/2025
Utilisation as of 15 <sup>th</sup> October 2024	0.5 flying hours and unknown cycles

### ***1.6.2 Engine(s)***

Manufacturer: XK

Type: Unknown

	Engine I
Serial number	000001
Installation date	Unknown
Total running time	Approximately 30 minutes

The engines were shown to be operating normally at full power.

### ***1.6.3 Weight and Balance***

The aircraft left the stand with an unknown weight and as such, the balance is not known.

### ***1.6.4 Condition of Aircraft Before Departure***

There were no recorded issues with this particular A800 before departure.

### ***1.6.5 Maintenance Operations Follow-Up***

There were no maintenance operations completed in the last month as heavy maintenance checks had been completed prior.

## ***1.7 Meteorological Conditions***

### ***1.7.1 Meteorological Situation***

On 15<sup>th</sup> October 2024, the weather was cloudy with a small amount of rain. These conditions had no impact on the accident.

## ***1.8 Flight Recorders***

There were no flight recorders present for this flight.

## ***1.9 Wreckage and Impact Information***

The CATS Investigation team retrieved all parts of the aircraft, including:

- I. The aircraft

They were identified by:

- I. Looking at the parts, it was of no difficulty to tell that the aircraft is, in fact, the aircraft

## ***1.10 Fire***

There was no evidence of fire or explosions.

## ***1.11 Information on Organisations and Management***

### ***1.11.1 Organisation of NorthEast Airlines***

At the time of the accident, NorthEast Airlines had an active AOC, which was issued on 22<sup>nd</sup> June 2024, valid until 29<sup>th</sup> February 2027.

### ***1.1.1.1 Training at NorthEast Airlines***

#### ***1.1.1.1.1 CRM Training***

CRM is defined as the utilisation in the cockpit of all available resources: equipment, procedures and people, to ensure the safety and efficiency of flights.

Training in this field is governed by a regulatory framework: the directive of 22<sup>nd</sup> October 2024, accompanied by a guide and the recommended practices drawn up by the authority.

The aim of CRM is to develop effective cross-checking and support capabilities between the members of the crew. Crews are evaluated using four behavioural indicators: ability to cooperate, management and leadership, situational awareness, and decision-making. In addition, the ability to cooperate, or work as a team requires that the Captain has effective management and leadership qualities. Working as a team increases the crew's ability to solve problems in degraded situations.

The crew must use resources such as:

1. Communication, monitoring and information retrieval skills,
2. Technical expertise,
3. A willingness to succeed.

Certain organisational or personal factors could adversely affect the operator's CRM performance:

1. Company culture,
2. The belief that the crew's actions and decisions are correct, even though they deviate from the standards,
3. Effects of fatigue and the lack of corrective measures to address the issue and to restore vigilance levels, or
4. A certain reticence to accept that CRM issues can play a key role in the occurrence of accidents.

At the time of the accident, the National Administration of Catopolis for Aeronautics met all the stipulated requirements from the CATS regarding CRM training.

#### ***1.1.1.1.2 NorthEast Airlines' Safety Management Process***

The National Administration of Catopolis for Aeronautics met all the requirements stipulated by the CATS regarding safety management.

## ***1.12 Additional Information***

### ***1.12.1 Information on the Uncontrollable Pitch Up***

It was shown that proper fueling of the aircraft was conducted by the refueling department, however, whether the aircraft had enough fuel was not confirmed.

## ***1.13 Testimony***

During the previous descriptions of the flight, as there were no cameras, cockpit voice recorder or flight data recorder, all descriptions were either from outside viewers or from the words of the pilots.

## ***2 – ANALYSIS***

### ***2.1 Accident Scenario***

This section is mainly based off of information provided by the pilots and conclusions made by the investigators.

#### ***2.1.1 Takeoff***

The takeoff of the aircraft was stable. Around 1 minute after takeoff, during a low-altitude level-flying portion of the flight, the aircraft had lost all power and, subsequently, was uncontrollable by the pilot.

#### ***2.1.2 Reaction to Loss of Power and Control***

The captain reacted by trying to land the aircraft safely, succeeding in doing so.

### ***2.2 Lessons Learnt from the Wreckage of National Administration of Catopolis for Aeronautics 001***

The events of NorthEast Airlines flight 001 demonstrated that it is important to refuel the aircraft properly and to confirm the level of fuel prior to flight.

# ***3 – CONCLUSION***

## ***3.1 Findings***

1. The crew possessed the licenses required to undertake this flight
2. The aircraft had a valid Certificate of Airworthiness
3. The aircraft had taken off from Random Field Regional Airport without any issue until the loss of power and control
4. The composition of the crew was in accordance with regulations
5. The meteorological situation at Random Field Regional Airport was within the limits of satisfaction for flights
6. The aircraft's movements were consistent with the position of the flight control surfaces.

## ***3.2 Causes of the Accident***

The accident of NorthEast Airline flight 001 was found to be caused by:

1. The improper refueling of the aircraft and subsequent loss of power and control.

## ***4 – SAFETY RECOMMENDATIONS***

On the basis of the first findings from the investigation, the CATS issued the following recommendations.

### ***4.1 Training***

Not applicable.

### ***4.2 Maintenance***

It is recommended that the refueling of the aircraft is confirmed to have been done.

It is recommended that the refueling of the aircraft is conducted in a more proper manner.



# ***5 – CHANGES MADE FOLLOWING THE ACCIDENT***

## ***5.1 National Administration of Catopolis for Aeronautics***

### ***5.1.1 Maintenance***

The completion of refueling of the aircraft will now be confirmed prior to flight.

The refueling of the aircraft will be completed in a more professional manner.

### ***5.1.2 Training***

Not applicable