



**HELLENIC REPUBLIC  
MINISTRY OF INFRASTRUCTURE AND TRANSPORT**

**AIR ACCIDENT INVESTIGATION AND  
AVIATION SAFETY BOARD  
(AAIASB)**



**ACCIDENT INVESTIGATION REPORT  
AIRCRAFT FLIGHT DESIGN CTSL SUPRA LIGHT  
REGISTRATION UR-STAS  
AT KERASIA AREA OF RODOPI  
ON SEPTEMBER 22, 2017**

**ACCIDENT INVESTIGATION REPORT**  
**06 / 2022**

**Aircraft Flight Design CTSL Supra Light**  
**Registration UR-STAS**  
**At Kerasia area of Rodopi**  
**On September 22, 2017**

**This accident investigation was carried out by the Air Accident Investigation and Aviation Safety Board according to:**

- **Annex 13 of the Chicago Convention**
- **EU regulation (EU) 996/2010**
- **Law 2912/2001**

*“According to Annex 13 of the Chicago Convention of the International Civil Aviation, EU Regulation 996/2010 and Law 2912/2001, Accidents and Incidents Investigation is not intended to attribute blame or liability. The sole purpose of this Investigation and the findings is to prevent Accidents and Incidents.*

*Therefore, the use of this Report for any purpose other than to prevent future Accidents and Incidents could lead to misinterpretations.”*

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**SECRETARY: Kyriakos Katsoulakis**

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## TITLE

|                        |   |                              |
|------------------------|---|------------------------------|
| OPERATOR               | : | Mr. STANISLAV MYCHKA         |
| OWNER                  | : | Mr. STANISLAV MYCHKA         |
| MANUFACTURER           | : | FLIGHT DESIGN GmbH           |
| A/C TYPE               | : | CT CTSL SUPRA LIGHT          |
| COUNTRY OF MANUFACTURE | : | GERMANY                      |
| NATIONALITY            | : | UKRAINE                      |
| A/C REGISTRATION       | : | UR-STAS                      |
| LOCATION OF ACCIDENT   | : | KERASIA AREA OF RODOPI       |
| DATE & TIME            | : | 22/09/2017 $\cong$ 10:15 UTC |
| Note                   | : | All times UTC (LT = UTC+3)   |

## SYNOPSIS

Two Supra Light aircraft with Ukraine registration, made in Germany, took-off from Alexandroupolis Airport LGAL on September 22, 2017, at 09:37 UTC with destination Bucharest. Head of the light formation was UR-FOX, head of the formation as N<sup>01</sup> who was in charge of Air Traffic Communication, followed by UR-STAS as N<sup>02</sup>.

Approaching RODIP waypoint, N<sup>02</sup> requested from N<sup>01</sup> to reduce speed. That was the last communication transmitted by N<sup>02</sup>. There after, N<sup>02</sup> finally crashed 12 Km (6.5 nm) Northwest of Komotini Town near the village of Kerasia of Rodopi Prefecture at about 10:15 UTC.

## 1 FACTUAL INFORMATION

### 1.1 History of Flight

On September 22, 2017, at 09:37 UTC two aircraft departed Alexandroupolis LGAL Airport on a light flight formation at 10.500 ft (FL105) with destination LRBS Bucharest Băneasa – Aurel Vlaicu International Airport. Near RODIP reporting point, N<sup>02</sup> requested N<sup>01</sup> to reduce speed and without any other transmission, it crashed.

The N<sup>01</sup> preceding aircraft changed frequency to Sofia ATC on frequency 130.6 MHz.

At 11:05 UTC Sofia informed Athens-Macedonia Control Center that the N<sup>01</sup> head of the formation had lost communication Flight Design CTSL Supra Light with the N<sup>02</sup> aircraft at position RODIP around 50 km Northwest of Alexandroupolis Airport.

At 12:45 UTC Sofia informed that the preceding N<sup>01</sup> UR-FOX landed at its destination while the fate of the N<sup>02</sup> UR-STAS was ignored and informed that it has declared a Second Alarm Phase.

At 13:42 UTC Athens-Macedonia Control Center declared a Distress Phase for UR-STAS aircraft.

At 14:40 UTC, the Joint Search & Rescue Coordination Center (JSRCC) informed that the Air Force radar recorded the position of the UR-STAS aircraft at 10:07 UTC at 41° 10' N and 025° 17' E.

At 15:49 UTC a Super Puma Air Force helicopter reported that it has spotted one wing of the aircraft.

At 15:58 UTC the fuselage was located at the position above mentioned.

The wing was 300 m away.

At 16:00 UTC the Distress Phase was cancelled.

At 19:20 UTC the Joint Search & Rescue Coordination Center (JSRCC) informed that the two aircraft occupants of UR-STAS were found.

## **1.2 Injuries to Persons**

| <b>Injuries</b>     | <b>Flight Crew</b> | <b>Passengers</b> | <b>Others</b> |
|---------------------|--------------------|-------------------|---------------|
| <b>Deaths</b>       | 1                  | 1                 | 0             |
| <b>Serious</b>      | 0                  | 0                 | 0             |
| <b>Minor / None</b> | 0/0                | 0/0               | 0             |
| <b>Total</b>        | 1                  | 1                 | 0             |

## **1.3 Damages to the aircraft**

The aircraft was totally destroyed.

#### **1.4 Other Damages**

No other damages or damages to third parties.

#### **1.5 Flight Crew Information**

##### **1.5.1 The Pilot**

|                     |                                  |
|---------------------|----------------------------------|
| The Pilot/Captain   | Man                              |
| Licence             | PA 013906                        |
| Medical Certificate | From 28/04/2016 until 28/04/2018 |

##### **1.5.2 Passengers**

One lady. The wife of the Pilot.

#### **1.6 Aircraft Information**

##### **1.6.1 General Information**

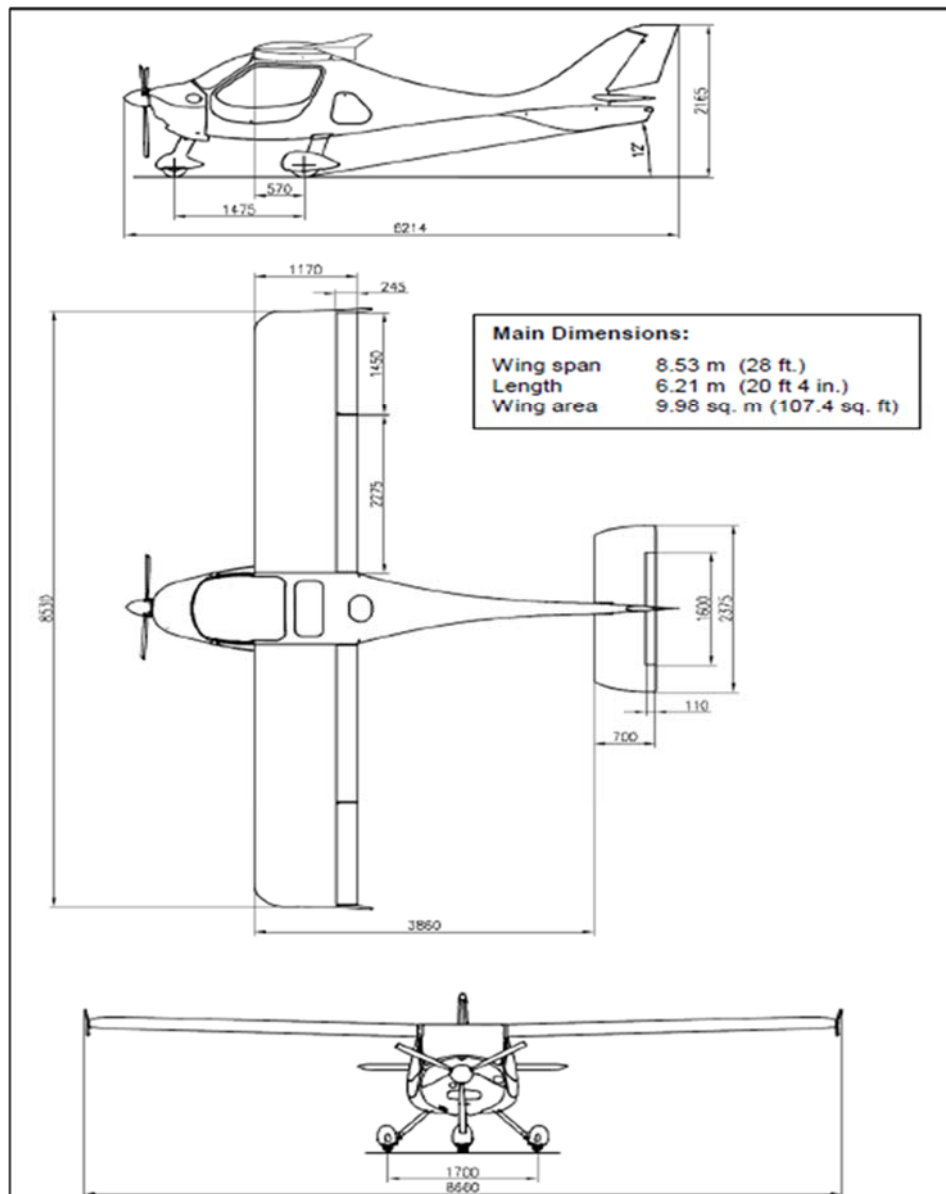
|                                     |                                            |
|-------------------------------------|--------------------------------------------|
| Manufacturer                        | Flight Design GmbH                         |
| Aircraft Type                       | CT CTSL Supra Light                        |
| Manufacturer Serial Number (M.S.N.) | S.N.: E-16-02-02                           |
| Year of Construction                | September 06, 2016                         |
| Registration Data                   | UR-STAS                                    |
| Country of Manufacture              | Germany                                    |
| Propeller Manufacturer / Model      | NEWFORM / CR3-V-70-(IP)-R2-ECS-M           |
| Propeller Blades Serial No.         | 20936211538 / 20936208538 /<br>20936201538 |
| Engine Manufacturer / Serial Number | ROTAX / S. N.: 6785653                     |

### 1.6.2 General Characteristics

|                         |                                                                              |
|-------------------------|------------------------------------------------------------------------------|
| Crew                    | One                                                                          |
| Passenger / Luggage     | One / 50 kg (110 lb)                                                         |
| Length                  | 6.22 m (20 ft 5 in)                                                          |
| Wingspan                | 8.50 m (27 ft 11 in)                                                         |
| Height                  | 2.15 m (7 ft 1 in)                                                           |
| Wing Area               | 9.94 m <sup>2</sup> (107.0 sq. ft)                                           |
| Empty Weight            | 318 kg (701 lb)                                                              |
| Gross Weight            | 472.5 kg (1,042 lb)                                                          |
| Maximum Take-off Weight | 600 kg (1,323 lb)                                                            |
| Fuel Capacity           | 126 lt (28 imp gal)                                                          |
| Powerplant              | 1 × Rotax 912S 4-cylinder, 4-stroke liquid/air-cooled engine, 75 kW (101 hp) |

### 1.6.3 Aircraft performance

|                             |                                     |
|-----------------------------|-------------------------------------|
| Maximum Speed               | 230 km/h (140 mph, 120 kn)          |
| Cruise Speed                | 207 km/h (129 mph, 112 kn)          |
| Stall Speed                 | 65 km/h (40 mph, 35 kn)             |
| Velocity Never Exceed (VNE) | 301 km/h (187 mph, 163 kn)          |
| Range                       | 2,000 km (1,200 mi, 1,100 nm)       |
| Service Ceiling             | 4,572 m (15,000 ft)                 |
| Rate of Climb               | 4.9 m/s (960 ft/min)                |
| Wing Loading                | 61 kg/m <sup>2</sup> (12 lb/sq. ft) |



#### 1.6.4 Landing Gear

There were no signs of malfunction before the accident.

#### 1.7 Meteorological Information

Prevailing weather was a light wind from the South.

#### 1.8 Aeronautical Information

Not applicable.

## 1.9 Communication

Due to the fact that the Accident Pilot did not speak English, the Pilot of the N<sup>01</sup> aircraft, UR-FOX, communicated with the ground stations and informed the Pilot of the N<sup>02</sup> UR-STAS aircraft.

## 1.10 Airport Information

Not applicable.

## 1.11 Flight Recorders

Garmin GPS AERA 795.

The BEA representative informed AAIASB that there was no data recording because the device was switched off with the power switch in the OFF position.

## 1.12 Wreckage and Impact Information

The trail of large scattering of debris indicates the course of the aircraft from North to South with the disintegration of the aircraft in flight. The heaviest parts of the aircraft, engine, cabin and steering system were found in the Southern part. The left wing was found in the Eastern Section and part of the right wing in the West. The dismantling of the aircraft began from the tail section. The traces that exist in the right part of the steering wheel, testify strong vibrations. The steering wheel was found complete with its connection to the fuselage. Many parts of the aircraft were missing. The propeller blades indicate that the engine was not running when it hit the ground. This is considered a reasonable reason due to the inflight detachment of the fuel tank.



**Figure 1:** Scattering of debris  $\cong 500,000 \text{ m}^2$

## **1.13 Medical and Pathological Information**

### **1.13.1 Alcohol control Procedure**

The whole process of checking the crew members to determine the percentage of alcohol in their body, is covered by the Government Gazette Issue 1380 B' of 03.08.2007. Sections related to the present, are listed below.

### **1.13.2 Allowed Limits**

**Article 2. Paragraph 3.:** *A person referred to in paragraphs 1 and 2 shall not be allowed to fly an aircraft or work under the influence of toxic substances or drugs which, according to their instructions for use, may affect the safety of flights or third parties on the ground or the generally safe performance of their duties.*

### **1.13.3 Determination of Alcohol in the Blood by Blood sampling**

**Article 6. Paragraph 9.:** *The sample, in excellent and safe packaging to avoid breakage or replacement of evidence is sent to the laboratory as soon as possible. Until then, keep in a refrigerator at a temperature of 20° to 4°C.*

**Article 6. Paragraph 10.:** *Competent Laboratories for the analysis of Blood, to determine the amount of alcohol taken, are the Laboratories of the Forensic Services of the Forensic Medicine and Toxicology of the Universities, as well as any other Laboratory designated by decision of the Director General of Aviation.*

### **1.13.4 Aircraft Pilot Blood test**

The Pilot's Blood Test taken, according to the Greek Law, for the detection of alcohol, in two vials, had as its only observation that the Second Vial, which was intended as a spare, had been destroyed. The Medical Examiners' opinion, was that the case did not affect the result of the analysis made in accordance with the Law.

### **1.13.5 Medical Examiner Document**

The Medical Examiner of the Thrace Service, in his document of 22.07.2021, concludes that the alcohol level found in the pilot's blood, represents the alcohol that existed in the deceased BEFORE death.

## **1.14 Fire**

Not applicable.

## **1.15 Survival Aspects**

Not applicable.

### **1.16 Tests and Research**

Not applicable.

### **1.17 Organizational and Management Information**

Not applicable.

### **1.18 Additional information**

Not applicable.

## **2 ANALYSIS**

On September 22, 2017, at 09:37 UTC the ultra light aircraft with registration UR-STAS after being inspected and serviced by the N<sup>02</sup> Pilot, took off from Alexandroupolis LGAL Airport as N<sup>02</sup> of a formation of two identical aircraft destined for Bucharest Băneasa – Aurel Vlaicu International Airport for an approximate 3h:30 min flight at an altitude of 10.500 ft.

The communication with the ground stations was undertaken by the N<sup>01</sup> of the formation as N<sup>02</sup> did not know the English language. Approaching the RODIP waypoint on the border with Bulgaria, N<sup>02</sup> asked N<sup>01</sup> to reduce its cruising speed because of his distance. This transmission was the last of N<sup>02</sup>. He then finally crashed 12 Km Northwest of Komotini, and the wreck was found itself in a ravine, while one of its wings was found at a distance of 300 m. An eyewitness testified that he heard an explosion and saw the aircraft falling in a spin. The aircraft disintegrated in the air. A bottle of alcohol was found at the crash scene with the remaining one third of its contents.

## **3 CONCLUSIONS**

### **3.1 Findings**

1. According to a statement from the N<sup>01</sup> pilot, the aircraft was inspected, serviced and found airworthy on departure by the N<sup>02</sup> pilot.
2. According to a statement from the pilot of the N<sup>01</sup> leading aircraft, during the briefing, the pilot of the N<sup>02</sup> aircraft behaved in a completely normal manner.
3. In a witness testimony on 23.09.2017 it was stated that at a meal he had with the two occupants of UR-STAS they did not drink alcohol.

4. The accident pilot after his transmission near RODIP waypoint asking for reduction of speed from N<sup>0</sup>1 did not respond to any transmission and deviated from the flight plan without any notification.
5. An eyewitness testified that he heard an explosion and saw an aircraft in a spinning descend without any smoke.
6. During the investigation on the accident site a bottle was found containing alcoholic beverage by one third.
7. According to the conclusion of the Head of the Forensic Medicine Service of Thrace, the alcohol level in the blood of the accident pilot was 2.24% gr/lit which represents the percentage of alcohol that was in the pilot's body BEFORE death.
8. Government Gazette Issue 1380 B' of 03.08.07 Article 6 states that the maximum permissible level of Alcohol in the body of each person which falls within the scope of this present, is set at 0.20% gr/lit of blood measured by the method of blood sampling.
9. The dismantling of the aircraft testifies that its surfaces underwent Dynamic Loading, and vibrations as a result led to violent rupture of the entire structure of the aircraft.
10. For the above reason, there is no information about his last transmission with which N<sup>0</sup>2 requested N<sup>0</sup>1 the reduction of cruising speed.
11. The entire dispersal of the aircraft parts, at the scene of the accident, testifies that the aircraft disintegrated in the air.
12. There was no significant weather phenomenon during the flight.
13. There were no other flight activities in the area.

### **3.2 Possible Cause(s)**

Alcohol consumption during the flight resulted in the loss of control of the aircraft and its dissolution in the air.

#### **4 SAFETY RECOMMENDATIONS**

The prohibition of Alcohol consumption is covered by the following instructions:

1. ICAO Doc. 8984 / 2012
2. EASA SIB No. 2018-07 / 12.04.2018
3. Government Gazette 1380 / B' / 03.08.2007

**Nea Philadelphia, 23/11/2022**

#### **THE CHAIRMAN**

**Ioannis Kondylis**

#### **MEMBERS**

**Akrivos Tsolakis**

**Grigorios Flessas**

**Christos Valaris**

**Charalampos Tzonos-Komilis**

**Exact Copy  
THE SECRETARY**

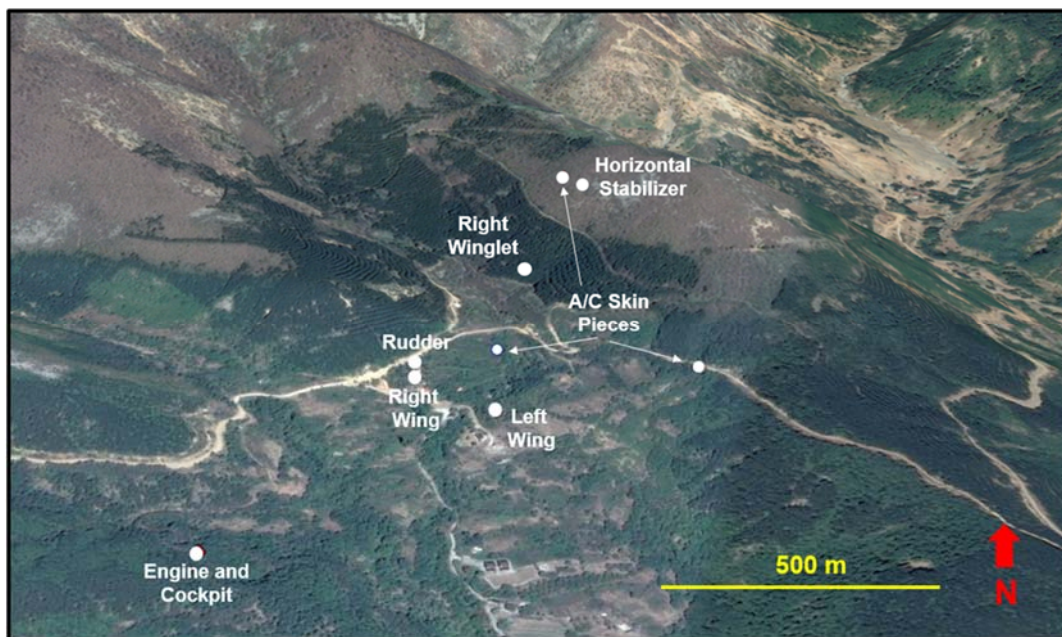
**Kyriakos Katsoulakis**

## 5 APPENDICES

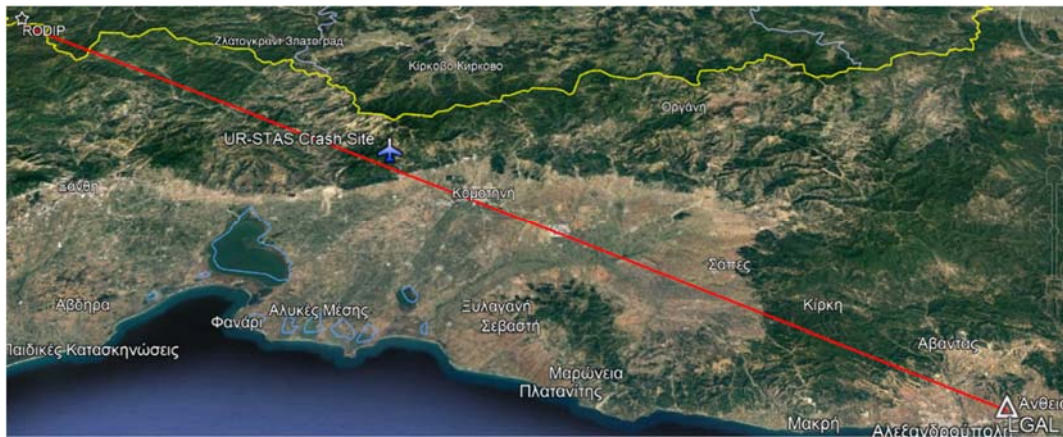
### 5.1 UR-STAS aircraft



### 5.2 Accident Site and Wreckage Dispersal



### 5.3 LGAL to RODIP route and Crash Site



### 5.4 Geographical map of Flight route and Accident Area



## 5.5 Field Notes BFU



### **HELLENIC AIR ACCIDENT INVESTIGATION AND AVIATION SAFETY BOARD**

#### **ACCIDENT OF A FLIGHT DESIGN AIRCRAFT**

**REG. NUMBER: UR-STAS**

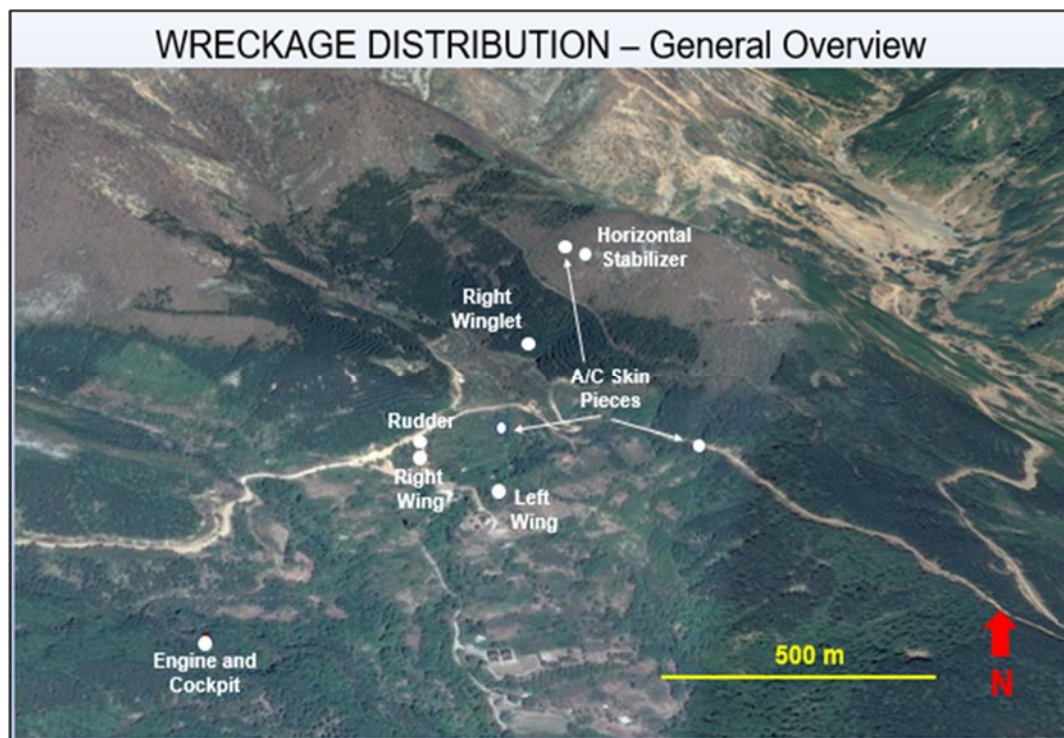
**ON 22/9/2017 AT KERASIA RODOPIS**

#### **A/C INFORMATION:**

- Registration : UR-STAS
- Manufacturer : Flight Design
- Type : CT
- Model : CTSL
- Serial Number : E-16-02-02
- Date of Manufacture : 06/9/2016

#### **INFORMATION OF ACCIDENT SITE**

- 6.5 nm Northwest from the city of Komotini
- Mountainous Area about 1900 ft height



## WRECKAGE DISTRIBUTION – Engine & Cockpit



## WRECKAGE DISTRIBUTION-LH Wing



WRECKAGE DISTRIBUTION –RH Wing



WRECKAGE DISTRIBUTION - Rudder



WRECKAGE DISTRIBUTION – RH Winglet



WRECKAGE DISTRIBUTION – Horizontal Stabilizer



## WRECKAGE DISTRIBUTION – Skin Pieces



## Blood Test Results

- Date of blood sampling : 24/09/2017
- Examination Method : Gas Chromatography (GC-MS)
- Results: Alcohol 2.24 g/l or 2.24 ‰



## **5.6 Government Gazette 1380 / B' / 3.8.2007**

### **Government Gazette 1380 / B' / 3.8.2007**

#### **DECISION D3 / B' / 28021/6495/2007 - Government Gazette 1380 / B' / 3.8.2007**

Adoption of a regulation on "Control of persons involved in the maintenance, preparation and flight of civil aircraft for the detection of Alcohol and toxic substances or drugs in their body".

#### **Article 2**

##### **Permitted Limits**

3. A person referred to in paragraphs 1 and 2 shall not be allowed to fly an aircraft or work under the influence of toxic substances or drugs which, according to their instructions for use, may affect the safety of flight or third parties on the ground or the generally safe performance of their duties.

#### **Article 6**

##### **Determination of Alcohol in the Blood by Blood sampling**

9. The sample, in excellent and safe packaging to avoid breakage or replacement of evidence is sent to the laboratory as soon as possible. Until then, keep in a refrigerator at a temperature of 20 to 4 ° C.

10. Competent Laboratories for the analysis of Blood, to determine the amount of alcohol taken, are the laboratories of the Forensic Service of the Forensic Services of the Forensic Medicine and Toxicology of the Universities, as well as any other Laboratory designated by decision of the Director General of Aviation.