



**AIRCRAFT SERIOUS INCIDENT FINAL REPORT**  
**SI 09/16**

**Air Accidents Investigation Bureau (AAIB)**  
**Ministry of Transport**

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**Serious Incident Involving a Piper PA-28-161**  
**Registration 9M-SKC**  
**at Malacca International Airport (WMKM), Melaka, Malaysia**  
**on the 4 August 2016**



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Issued on 4 August 2017

**FINAL REPORT SI 09/16**

**AIR ACCIDENTS INVESTIGATION BUREAU (AAIB)  
MALAYSIA**

**SERIOUS INCIDENT REPORT NO. : SI 09/16**

**OWNER / OPERATOR : MALAYSIAN FLYING ACADEMY SDN BHD**  
**AIRCRAFT TYPE : PIPER PA-28-161**  
**NATIONALITY : MALAYSIA**  
**REGISTRATION : 9M-SKC**  
**PLACE OF OCCURRENCE: MALACCA INTERNATIONAL AIRPORT,  
MELAKA, MALAYSIA**  
**DATE AND TIME : 4 AUGUST 2016 AT 1800LT**

This investigation is carried out to determine the circumstances and causes of the accident with the sole objective for the preservation of life and the avoidance of accidents in the future. It is not for the purpose of apportioning blame or liability (ICAO's Annex 13 to the Chicago Convention).

All times in this report are Local Time (LT) unless stated otherwise. LT is UTC +8 hours.

## INTRODUCTION

### **The Air Accidents Investigation Bureau Malaysia**

The Air Accidents Investigation Bureau (AAIB) is the air accident and serious incident investigation authority in Malaysia and is accountable to the Minister of Transport. Its mission is to promote aviation safety through the conduct of independent and objective investigations into air accidents and serious incidents.

The AAIB conducts the investigations in accordance with ICAO's Annex 13 to the Chicago Convention, the Civil Aviation Act of Malaysia 1969 and the Civil Aviation Regulations of Malaysia 2016.

It is inappropriate that AAIB reports should be used to assign fault or blame or determine liability, since neither the investigation nor the reporting processes has been undertaken for that purpose.

In accordance with ICAO's Annex 13 paragraph 4.1, a notification of the accident was sent out to the Civil Aviation Authority Malaysia (CAAM) as the State of Occurrence, Registration & Operator and also to the National Transportation Safety Board (NTSB), United States as the State of Design and Manufacturer.

Unless otherwise indicated, recommendations in this report are addressed to the investigating or regulatory authorities of the State having responsibility for the matters with which the recommendations are concerned. It is for those authorities to decide what action is to be taken.

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**ABBREVIATIONS**

<b>AAIB</b>	Air Accidents Investigation Bureau
<b>AFRS</b>	Airport Fire and Rescue Service
<b>ATO</b>	Aviation Training Organisation
<b>CAAM</b>	Civil Aviation Authority of Malaysia
<b>CAVOK</b>	Cloud and Visibility OK
<b>ICAO</b>	International Civil Aviation Organisation
<b>LT</b>	Local Time
<b>MFA</b>	Malaysian Flying Academy
<b>PAX</b>	Passengers
<b>POB</b>	Persons on Board
<b>RT</b>	Radio Telephony
<b>SPL</b>	Student Pilot License
<b>TSN</b>	Time Since New
<b>UTC</b>	Coordinated Universal Time
<b>WMKM</b>	ICAO Code for Malacca international Airport, Melaka

## **SYNOPSIS**

On 4 August 2016, a Piper PA-28-161 bearing the registration 9M-SKC was involved in a serious incident at Malacca International Airport, Melaka, Malaysia. The aircraft had 1 POB.

A student pilot going for a solo flight was unsuccessfully attempting to start the aircraft's engine. As fate would have it, after several attempts the engine suddenly caught fire. The ground crew present however managed to put it out with the available fire extinguishers.

The AAIB Chief Inspector was notified immediately and an investigation team was promptly dispatched.

## **1.0 FACTUAL INFORMATION**

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

On Thursday, 4 August 2016, 9M-SKC was being prepared by a student pilot for a solo flight. After completing his pre-flight checks, the student pilot entered the aircraft and proceeded to start-up the aircraft.

However the engine refused to start-up despite numerous attempts by the student pilot. On his last attempt the engine caught fire and he quickly shutdown the aircraft before vacating it. The ground crew who were present managed to extinguish the fire but not before substantial damage had been done to the aircraft.

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### 1.2 Injuries to Persons

The student pilot was not injured in the serious incident.

<i>Injuries</i>	<b>9M-SKC</b>	
	<b>Crew</b>	<b>Pax</b>
<b>Fatal</b>	-	-
<b>Serious</b>	-	-
<b>Minor / None</b>	1	-

### 1.3 Damage to Aircraft

For images of damage to the aircraft on-site, please refer to **APPENDIX A**.

### 1.4 Other Damages

No damages to other property was observed.

### 1.5 Personnel Information

The student pilot held a valid SPL and was properly qualified for his solo flight. He had logged 48.5 hours of flying experience up until the serious incident.

Nationality	Malaysia
Age	18
Gender	Male
License Type	SPL No 12694
License Validity	30 June 2017
Medical Certificate Validity	30 June 2017
Flying Hours	Total: 48.5 Hrs Type: 48.5 Hrs

**1.6 Aircraft Information**

The aircraft in question is operated by the Malaysian Flying Academy (MFA), a professional flight training centre based in Malacca International Airport. MFA is a pioneer among the Aviation Training Organisations (ATO) in Malaysia, approved and accredited by CAAM and recognized by ICAO.

Aircraft	Piper PA-28-161
Manufacturer	Piper Aircraft
C of A Issue	17 April 2016
C of A Expiry	16 April 2017

Registration	9M-SKC
Serial No.	2841187
Owner	MFA Sdn Bhd
Airframe Flight Hours	18,098.0
Engine TSN	1,445.3
Fuel used	AvGas

**1.7 Meteorological Information**

The weather on the day of the serious incident was described as CAVOK.

**1.8 Aids to Navigation**

Not applicable.

**1.9 Communications**

No distress call was made over the RT. The AFRS also was not informed as the fire had been extinguished by the ground personnel.

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### 1.10 **Aerodrome Information**

Not applicable.

### 1.11 **Flight Recorders**

The Piper PA-28-161 is not equipped with flight recorders (FDR and/or CVR) nor is it mandated by law to do so.

### 1.12 **Wreckage and Impact Information**

The aircraft was secured and was later towed back to its hangar.

### 1.13 **Medical and Pathological Information**

As was stated earlier the student pilot was not injured.

### 1.14 **Fire**

The cause of the fire will be discussed in the analysis section of this report.

### 1.15 **Survival Aspects**

The student pilot egressed from the aircraft via the cabin door unhampered and unaided.

**1.16 Tests and Research**

Not applicable.

**1.17 Organisational and Management Information**

All organisational and management aspects of the operator were found to be in order throughout the investigation.

**1.18 Additional Information**

Nil.

**1.19 Useful or Effective Investigation Techniques**

Nil.

**2.0 ANALYSIS**

2.1 The numerous attempts by the student pilot to start-up the aircraft apparently led to the engine being flooded with fuel. A subsequent attempt led to the ignition of fuel that had somehow leaked out causing a fire which spread throughout the engine compartment very quickly.

2.2 The fire caused substantial damage to the engine and airframe. This and other operational factors led the operator to decide that 9M-SKC was beyond economical repair. The aircraft was subsequently scrapped and the registration number was later transferred to another airframe.

### 3.0 CONCLUSION

This serious incident is classified as **Fire Non-Impact (F-NI)**.

### 4.0 SAFETY RECOMMENDATIONS

The operator is to ensure that correct techniques are applied by all pilots in the event an engine fails to start-up on a first attempt. This is to avoid a recurrence of this serious incident.

#### **INVESTIGATOR-IN-CHARGE**

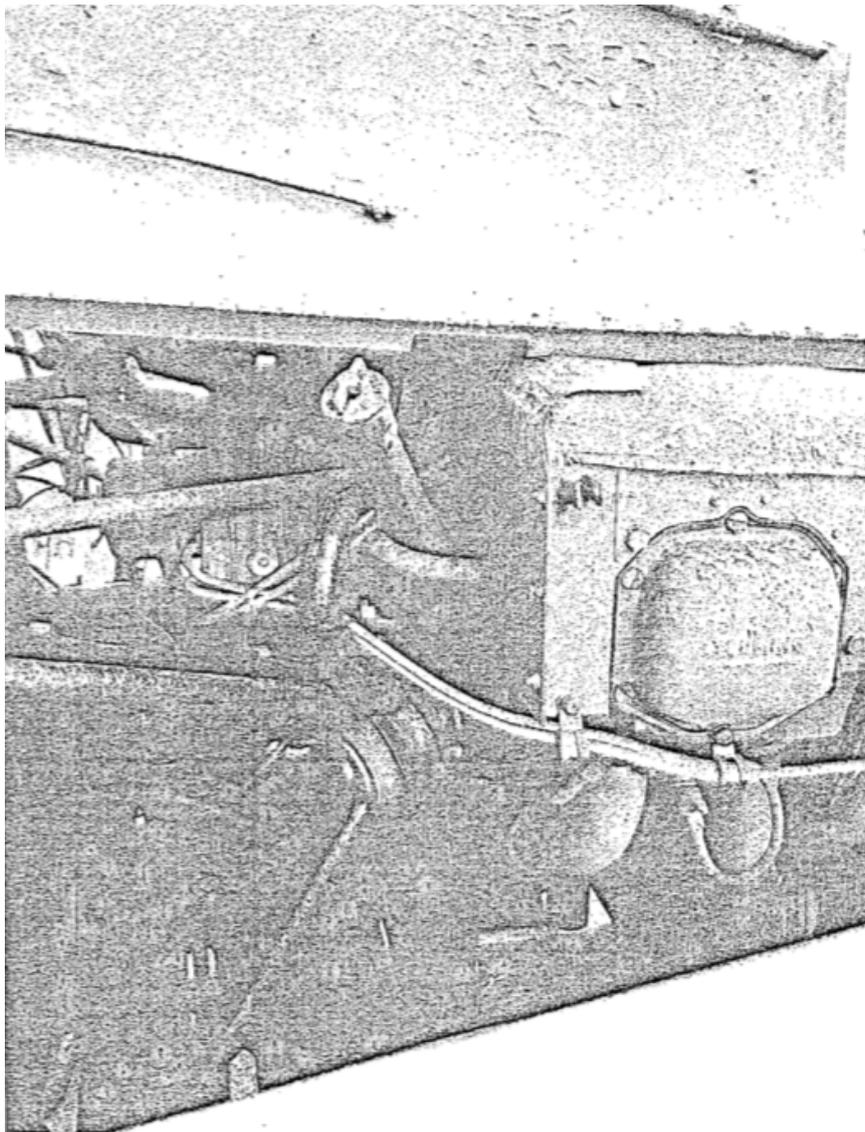
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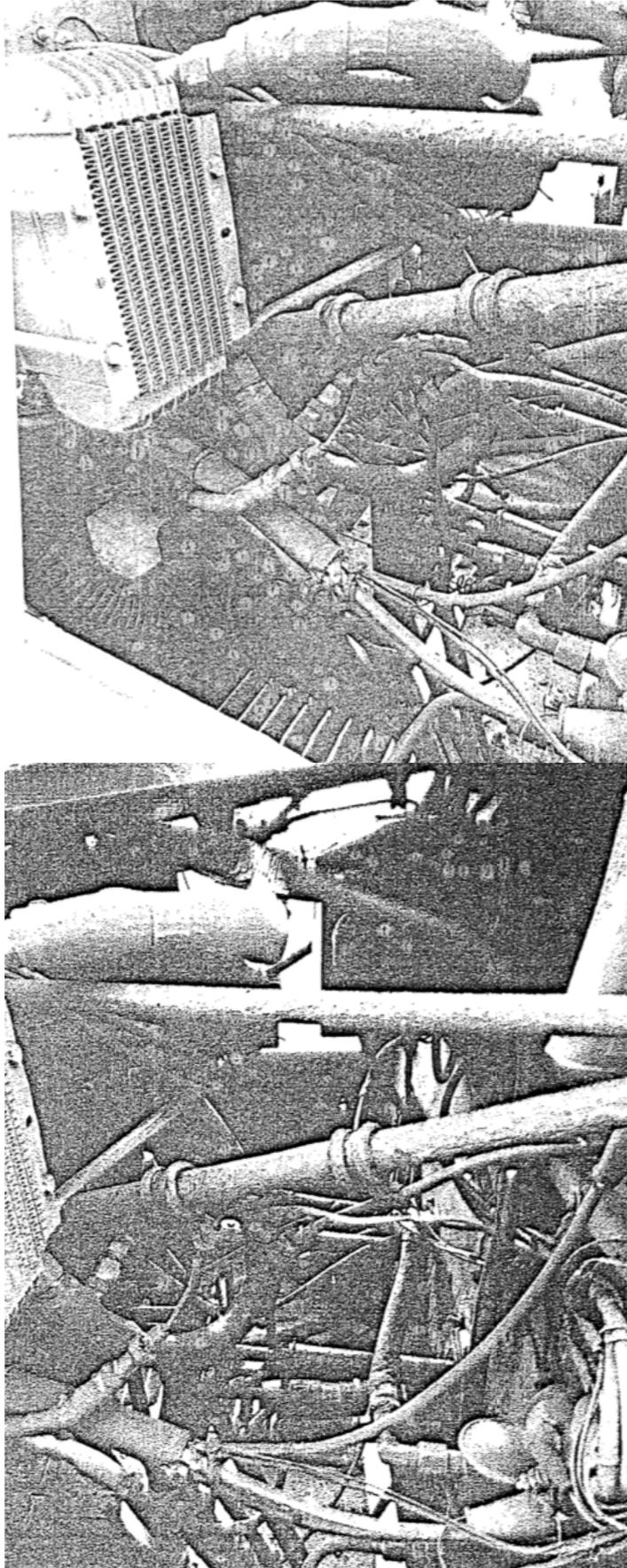
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DAMAGE ASSESSMENT (IMAGES ON-SITE)

9M-SKC



9M-SKC (Cont...)



9M-SKC (Cont...)

