

KOMITE NASIONAL KESELAMATAN TRANSPORTASI REPUBLIC OF INDONESIA

# **PRELIMINARY** KNKT.19.12.30.04

**Aircraft Serious Incident Investigation Report** 

PT. ASI Pudjiastuti Aviation (Susi Air) Cessna C208B, PK-BVN About 32 Nm North of Dili On coordinate 8°5'5.71"S; 125°30'47.91"E, Republic of Indonesia 5 December 2019



This Preliminary Report is published by the Komite Nasional Keselamatan Transportasi (KNKT), Transportation Building, 3<sup>rd</sup> Floor, Jalan Medan Merdeka Timur No. 5 Jakarta 10110, Indonesia.

The report is based upon the initial investigation carried out by the KNKT in accordance with Annex 13 to the Convention on International Civil Aviation Organization, the Indonesian Aviation Act (UU No. 1/2009) and Government Regulation (PP No. 62/2013).

The preliminary report consists of factual information collected until the preliminary report published. This report will not include analysis and conclusion.

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However, the KNKT fully recognizes that the implementation of recommendations arising from its investigations will in some cases incur a cost to the industry.

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Jakarta,22January 2020 KOMITE NASIONAL KESELAMATAN TRANSPORTASI CHAIRMAN SOERJANTO TJAHJONO

# **TABLE OF CONTENTS**

TA	ABLE (	OF CON	TENTS	i		
TA	ABLE (	OF FIGU	J <b>RES</b>	ii		
AI	BBREV	IATION	NS AND D	EFINITIONSiii		
S¥	NOPS	IS	•••••	iv		
1	FAC'	ΓΙΟΝ5				
	1.1	History of the Flight				
	1.2 Personnel Information					
		1.2.1	Pilot in C	ommand7		
		1.2.2	Second in	Command7		
1.3 Aircraft Information				on8		
	1.4 Communications					
1.5 Flight Recorders						
<ol> <li>Medical and Pathological Information</li> <li>Organizational and Management Information</li> </ol>				blogical Information8		
				d Management Information8		
		1.7.1	Aircraft (	Operator		
			1.7.1.1	Pilot Incapacitation Procedure9		
			1.7.1.2	Supplemental Oxygen in the Aircraft9		
			1.7.1.3	Aircraft Flight Following System10		
			1.7.1.4	Serious Incident Reporting10		
		1.7.2	Indonesia	Civil Aviation Authority10		
		1.7.3 Medical Standard and Certification11				
		1.7.4	Serious I	ncident of Indonesia Civil Aircraft11		
	1.8	Additional Information11				
	1.9	Useful	Il or Effective Investigation Techniques12			
2	FINI	DINGS13				
3	SAFI	AFETY ACTION15				
4	SAFETY RECOMMENDATIONS					
	4.1	Susi A	ir			

# **TABLE OF FIGURES**

# **ABBREVIATIONS AND DEFINITIONS**

AOC	:	Air Operator Certificate
C of A	:	Certificate of Airworthiness
C of R	:	Certificate of Registration
CAA	:	Civil Aviation Authority
CASR	:	Civil Aviation Safety Regulation
CPL	:	Commercial Pilot License
DAAO	:	Directorate of Airworthiness and Aircraft Operation
DGCA	:	Directorate General of Civil Aviation
GPIAIA	:	Gabinete Prevensaun e Investigasacao Insidente e Acidente com Aeronave (Timor-Leste accident investigation authority)
ICAO	:	International Civil Aviation Organization
KNKT	:	Komite Nasional Keselamatan Transportasi (Indonesia accident investigation authority)
LT	:	Local Time
OCC	:	Operations Control Center
OM-Part A	:	Operation Manual Part A
PF	:	Pilot Flying
PIC	:	Pilot in Command
PM	:	Pilot Monitoring
SIC	:	Second in Command
SMM	:	Safety Management Manual
UTC	:	Universal Time Coordinated

# SYNOPSIS

On 5 December 2019, a Cessna C208B aircraft registered PK-BVN was operating by PT. ASI Pudjiastuti Aviation (Susi Air) on a schedule passenger flight from John Becker Airport (WATQ), Kisar to El Tari International Airport (WATT), Kupang. The flight crew on board for the flight were two pilots consisted of Pilot in Command (PIC) and Second in Command (SIC).

During the preflight check for the aircraft, there was no record or report of aircraft system malfunction and the SIC was aware that supplemental oxygen was not available in the aircraft. The supplemental oxygen was not required for unpressurized aircraft flying on cruising altitude at or below 10,000 feet.

At 0359 UTC, the aircraft departed from Kisar with flight number SQS6161, the PIC acted as PM and the SIC as PF. About 15 minutes after departure, the aircraft reached the cruising altitude of 10,000 feet.

During cruising, both pilots discussed regarding a certain health issue, thereafter, the SIC started to feel anxious and difficult to breath. The SIC's condition deteriorated when he recalled that there was no supplemental oxygen in the aircraft, and his breathing became shorter. The PIC was aware to the SIC condition then requested descend to the air traffic controller. The air traffic controller responded the pilot to standby.

The SIC felt dizzy, tunneled vision followed by black out vision and then loss of consciousness about 20 seconds. The PIC declared MAYDAY and requested to divert to Presidente Nicolau Lobato International Airport (WPDL), Dili, Timor Leste. The decision to divert was based on consideration that the flight to Dili was shorter than continued the flight to Kupang.

The PIC advised to the air traffic controller that the SIC had heart attack and requested ambulance of arrival. The air traffic control acknowledged and approved the pilot request. The PIC diverted to Dili and started descending. The SIC regained the consciousness and drank water. Afterwards, the SIC was aware that the aircraft was on descend and he was able to take deep breaths and felt better.

At 0457 UTC, the aircraft landed safely at Dili. The SIC was taken to the hospital near the airport for medical treatment. The blood sugar level, blood pressure, oxygen levels in blood and heart rate were tested, and the result were normal. The details physical examination could not be carried out due to the SIC did not collaborate and did not provide clear information. The pilots decided to continue flying to Kupang and would conduct further medical examination in Kupang.

There was no injury to person and no damage to the aircraft in this occurrence.

At the time of issuing this Preliminary Report, the KNKT had not been informed safety actions taken by the Susi Air and the KNKT issued safety recommendations to the Susi Air resulting from this occurrence.

The investigation is continuing with participation of South Africa Civil Aviation Authority and the Timor-Leste *Gabinete Prevensaun e Investigasacao Insidente e Acidente com Aeronave* (GPIAIA) assisted the investigation by providing several information. Should any further relevant safety issues emerge during the course of the investigation, KNKT will immediately bring the issues to the attention of the relevant parties and publish as required.

# **1 FACTUAL INFORMATION**

# **1.1** History of the Flight

On 5 December 2019, a Cessna C208B aircraft registered PK-BVN was operating by PT. ASI Pudjiastuti Aviation (Susi Air) on a schedule passenger flight on Nusa Tenggara and Maluku area, Indonesia. The flight planned route for the day were El Tari International Airport (WATT), Kupang<sup>1</sup> to Tardamu Airport (WATS), Sabu<sup>2</sup> and return, thereafter from Kupang to John Becker Airport (WATQ), Kisar<sup>3</sup> and return. The flight crew on board for those flight were two pilots consisted of Pilot in Command (PIC) and Second in Command (SIC).

Prior to the first flight, the SIC conducted preflight check for the aircraft. There was no record or report of aircraft system malfunction. During the preflight check, the SIC was aware that supplemental oxygen was not available in the aircraft, and it was not required for unpressurized aircraft flying on cruising altitude at or below 10,000 feet.

At 0712 LT (2312 UTC<sup>4</sup>), during daylight the aircraft departed from Kupang with destination to Sabu, and the cruising altitude was 10,000 feet. At this flight the PIC acted as Pilot Flying (PF) and the SIC acted as Pilot Monitoring (PM). At 2352 UTC, the aircraft landed on Sabu. The flights conducted as the schedule and the subsequent flights until landed on Kisar were uneventful.

At 0359 UTC, the aircraft departed from Kisar with flight number SQS6161, on board the aircraft was two pilots and 12 passengers. The PIC acted as PM and the SIC as PF. The flight plan route for this flight was from Kisar directed to coordinate 08°05'S; 125°27'E then to 08°10'S; 125°14'E and to Kupang (see figure 1). About 15 minutes after departure, the aircraft reached the cruising altitude of 10,000 feet.

During cruising, both pilots discussed regarding a certain health issue, afterwards, the SIC started to feel anxious and difficult to breath. The SIC's condition deteriorated when he recalled that there was no supplemental oxygen in the aircraft, and his breathing became shorter. The PIC was aware to the SIC's condition then requested descend to the air traffic controller. The air traffic controller responded the pilot to standby.

The SIC felt dizzy, tunneled vision followed by black out vision and then loss of consciousness about 20 seconds. The PIC declared MAYDAY and requested to divert to Presidente Nicolau Lobato International Airport (WPDL), Dili, Timor Leste<sup>5</sup>. The decision to divert was based on consideration that the flight to Dili was shorter than continued the flight to Kupang.

<sup>1</sup> El Tari International Airport (WATT), Kupang will be named as Kupang for the purpose of this report.

<sup>2</sup> Tardamu Airport (WATS), Sabu will be named as Sabu for the purpose of this report.

<sup>3</sup> John Becker Airport (WATQ), Kisar will be named as Kisar for the purpose of this report.

<sup>&</sup>lt;sup>4</sup> The 24-hours clock in Universal Time Coordinated (UTC) is used in this report to describe the local time as specific events occured. Local time in Kupang is UTC+8 hours.

<sup>5</sup> Presidente Nicolau Lobato International Airport (WPDL), Dili, Timor Leste will be named as Dili for the purpose of this report.

The PIC advised to the air traffic controller that the SIC had heart attack and requested ambulance of arrival. The air traffic control acknowledged and approved the pilot request. The PIC diverted to Dili and started descending. The SIC regained the consciousness and drank water. Thereafter, the SIC was aware that the aircraft was on descend and he was able to take deep breaths and felt better.

At 0449 UTC, when the aircraft passed altitude of 6,000 feet the PIC activated the Quick Position report<sup>6</sup> of the flight following system installed in the aircraft.



Figure 1: The flight profile based on flight following data

At 0457 UTC, the aircraft landed safely at Dili. The SIC was taken to the hospital near the airport for medical treatment. The blood sugar level, blood pressure, oxygen levels in blood and heart rate were tested, and the result were normal. The details physical examination could not be carried out due to the SIC did not collaborate and did not provide clear information. The pilots decided to continue flying to Kupang and would conduct further medical examination in Kupang.

At 0733 UTC, the aircraft departed from Dili to Kupang with cruising altitude of 6,000 feet. The flight was uneventfully and landed safely at 0832 UTC.

There was no injury to person and no damage to the aircraft in this occurrence.

<sup>&</sup>lt;sup>6</sup> The Quick Position report is feature on the flight following system to increase the reporting interval to 15 second interval. The detail of flight following system can be found in subchapter 1.7.1.3.

## **1.2** Personnel Information

#### **1.2.1** Pilot in Command

The Pilot in Command (PIC) is 27 years old, from Uruguay who had valid Commercial Pilot License (CPL) with qualification as Single Engine Land aircraft pilot, included Cessna 208B aircraft. The PIC had valid first-class medical certificate without any limitation.

The PIC had accumulated total flying hours of 2,170 hours including 1,870 hours on Cessna 208B.

#### 1.2.2 Second in Command

The Second in Command (SIC) is 23 years old, from South Africa who had valid South Africa CPL with qualification as Single Engine Land aircraft, including Cessna 208B aircraft which had been validated by the Indonesia Directorate General of Civil Aviation (DGCA). The SIC had valid first-class medical certificate issued by the South African Civil Aviation Authority (CAA) and valid up to 28 February 2020.

On 22 May 2019, the SIC conducted medical examination in the *Balai Kesehatan Penerbangan* (Indonesia Aviation Medical Center) as part of the requirement for foreign CPL validation. The SIC met the medical standard requirement and received first-class medical certificate without any limitation which valid until 22 November 2019. This was the last medical examination performed on aviation medical facility prior the occurrence.

The SIC had accumulated total flying hours of 599.5 hours including 153.5 hours on Cessna 208B.

About one week before the occurrence, the SIC received information regarding health issue of his family and friends then became very concern about it. Thereafter when thinking about that health issue, the SIC felt anxiety and often unable to get proper sleep. This health issue was the same issue that was discussed with the PIC during the occurrence flight.

On 29 November 2019 – seven days before the occurrence, the SIC completed 6 flight sectors with total flight hour of 4 hours 24 minutes. The SIC then had three days off from 30 November until 2 December 2019. On 1 December 2019 the SIC conducted physical activity by exploring a beach which 3-hours-drive away. On 2 December 2019, the SIC was advised by the PIC, who also company check pilot, to conduct Instrument Landing system (ILS) approach check on 5 December 2019.

On 3 December 2019 – two days before the occurrence, the SIC had schedule of two sectors with total flight hours of 1 hour 50 minutes.

On 4 December 2019 – one day before the occurrence, the SIC did not have any significant physical activity. The SIC prepared the ILS approach check and slept about 2000 LT.

On 5 December 2019 – the day of the occurrence, the SIC woke up about 0500 LT. The SIC ate slice of papaya for breakfast. The SIC arrived at the airport and signed on for duty at 0650 LT (2250 UTC). Thereafter, the SIC conducted blood pressure and alcohol test, the blood pressure was 138 (systolic) – 80 (diastolic) and the alcohol test result indicated the pilot was not under the influence of alcohol. Prior the occurrence, there was no report or indication that SIC was unfit to perform his duty.

The flight schedule for that day was 4 sectors. (Kupang – Sabu – Kupang – Kisar – Kupang). The SIC prepared 1.5 liters of mineral water in the cockpit for the flight.

Prior to the occurrence flight, the SIC had flown for 3 hours 30 minutes and during the occurrence flight, the SIC had flown about 48 minutes.

## **1.3** Aircraft Information

The Cessna 208B registered PK-BVN had valid Certificate of Airworthiness (C of A) and Certificate of Registration (C of R). The total time since new of the aircraft was 10,806.9 hours and the total cycle since new was 13,773 cycles.

The aircraft is unpressurized aircraft, equipped with supplemental oxygen. During the day of the occurrence, supplemental oxygen was not available in the aircraft. It was not required by current Indonesian aviation regulations as the PK-BVN would be flown at and below 10,000 feet.

There was no report or record of aircraft system malfunction during the occurrence.

## **1.4 Communications**

All communications between air traffic control and the crew were recorded by ground based automatic voice recording equipment. The quality of the aircraft recorded transmissions was good.

## **1.5 Flight Recorders**

The aircraft was not fitted with a flight data recorder or cockpit voice recorder. Neither recorder was required by current Indonesian aviation regulations.

## **1.6 Medical and Pathological Information**

Should any medical and pathological investigation will be included in the final report.

## **1.7** Organizational and Management Information

#### **1.7.1** Aircraft Operator

The PK-BVN is operated by PT. ASI Pudjiastuti Aviation (Susi Air) which had valid Air Operator Certificate (AOC) number 135-028. The Susi Air authorized to conduct air transportation carrying passengers and cargo in scheduled and non-scheduled operation within and outside Indonesia for aircraft operations under Civil Aviation Safety Regulation (CASR) Part 135.

The Susi Air has established a centralized Operations Control Center (OCC) in the company headquarter in Pangandaran, West Java. All information and communication of the flight operation are collected, processed and passed through the OCC, includes the flight operation monitoring.

The Susi Air developed Operation Manual Part A (OM-Part A) which contains policy and procedure approved by the Directorate General of Civil Aviation.

#### **1.7.1.1 Pilot Incapacitation Procedure**

The Susi Air described procedure of pilot incapacitation in the OM-Part A subchapter 4.8. This subchapter defines flight incapacitation as any condition which affects the health of a crewmember during the performance of duties which renders him or her incapable of performing the assigned duties.

The subchapter described that early recognition of incapacitation is essential and requires pilot to advised the paired pilot. During routine monitoring and cross-checking of flight instruments, especially during critical phases of flight, pilot should be alert to subtle incapacitation as follows:

- If a crewmember does not respond appropriately to two verbal communications, or
- If a crewmember does not respond to a verbal communication associated with a significant deviation from a standard flight profile

Other symptoms of the beginning of incapacitation are:

- Incoherent speech
- Strange behavior
- Irregular breathing
- Pale fixed facial expression
- Jerky motions that are either delayed or too rapid

The OM-Part A subchapter 4.8.3 described action to be followed if pilot incapacitation is detected as follows:

- The fit pilot must assume control and return the aircraft to a safe flight path, announce "I have control" and engage the autopilot,
- The fit pilot must take whatever steps are possible to ensure that the incapacitated pilot cannot interfere with the handling of the aircraft,
- The fit pilot must land as soon as practicable considering all pertinent factors,
- Arrange medical assistance after landing, giving as many relevant details about the condition of the crewmember as possible.

#### 1.7.1.2 Supplemental Oxygen in the Aircraft

The Susi Air complied with the requirement of the CASR Part 135, described in the OM-Part A subchapter 13.6 which requires pilot to:

"ensure that they must be equipped with oxygen mask(s) when flying an aircraft at an altitude above 10,000 feet MSL through 15,000 feet MSL – for a maximum of 30-minute duration – as well as at least 10 percent of the passengers on board the said aircraft."

#### 1.7.1.3 Aircraft Flight Following System

The aircraft operator utilizes flight following system provided by Blue Sky Network with D1000C Iridium satcom tracking kit and Advanced Control Head (ACH1000) aviation transceiver. The device has capability to report several aircraft parameters including altitude, heading, speed and coordinate position of the aircraft in interval time. For the PK-BVN aircraft, the reporting capability was as follows:

- 4 minutes interval reporting when aircraft is below 5,000 feet; and
- 8 minutes interval reporting when aircraft is above 5,000 feet.

The device has Quick Position report button to increase the interval reporting to 15 seconds interval. The Susi Air OM-Part A subchapter 18.3 requires pilot to activate the Quick Position report during distress and urgency situation. Should the Quick Position report have been activated, aural alert will be sounded in the OCC. Thereafter, the dedicated flight following personnel must perform emergency procedure Phase 2 (Aircraft Alert – ALERFA).

#### **1.7.1.4** Serious Incident Reporting

The Susi Air OM-Part A chapter 17 described the requirement when accident and incident occur in the Susi Air which require the company personnel to notify, by the quickest means available to the Operation Manager and, the Safety and Quality Manager.

The serious incident described in the Susi Air Safety Management Manual (SMM) as follows:

"an incident involving circumstances indicating that an accident nearly occurred."

The SMM did not describe more detail of the serious incident and only mentioned that the classification of serious incident is based on the International Civil Aviation Organization (ICAO) Annex 13. There was no list of examples of serious incident in the SMM.

The SMM subchapter 3.5 described serious incident as mandatory occurrence to be reported to the DGCA and *Komite Nasional Keselamatan Transportasi* (KNKT) as soon as possible.

On 10 December 2019, the KNKT received the occurrence report from Indonesia Ministry of Foreign Affair. Afterwards the KNKT contacted the Susi Air to get the detail chronological report and on 13 December 2019, the Susi Air reported this occurrence to KNKT. Based on the reports, the KNKT determined the occurrence as serious incident and conducts ICAO Annex 13 investigation.

#### 1.7.2 Indonesia Civil Aviation Authority

The civil aviation in Indonesia is regulated by Directorate General of Civil Aviation (DGCA) which is government agency under the Ministry of Transportation. The DGCA has several directorates including the Directorate of Airworthiness and Aircraft Operation (DAAO) that responsible in formulating policy and standard including oversight of aircraft operation under CASR Part 135.

#### 1.7.3 Medical Standard and Certification

The CASR Part 67 described medical standard and certification in Indonesia, according to CASR Part 67 subchapter 67.9:

The flight crew, air traffic controller, and flight operation personnel other than pilot shall not exercise the privileges of their license unless they hold a current medical certificate appropriate to the license.

The CASR Part 67 subchapter 67.21 described that Commercial Pilot License (CPL) holder is require to have valid Class 1 medical certificate which will valid for six months. The subchapter 67.21 also described requirement of medical certification for holder foreign license as follows:

Holder of foreign license issued by ICAO contracting states who applies for license validation shall have medical certification under this part.

#### 1.7.4 Serious Incident of Indonesia Civil Aircraft

According to the Aviation Law Number 1 of 2009 and Government Decree Number 62 of 2013 described that KNKT has the responsibility to conduct investigation on serious incident of Indonesia civil aircraft occurred within and outside the territory of Republic of Indonesia.

The CASR Part 830 subpart 830.2 defines serious incident as:

An incident involving circumstances indicating that there was a high probability of an accident and associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down.

The Appendix B of the CASR Part 830 described that flight crew incapacitation in flight is included in the list examples of serious incident.

In the case of Indonesia civil aircraft experienced serious incident, the CASR Part 830 subpart 830.06 requires person, organization or enterprise engaged in or offering to engage in an aircraft operation, with minimum delay and by the most suitable and quickest means available, must report to the KNKT.

### **1.8** Additional Information

The investigation is continuing with participation of South Africa Civil Aviation Authority (CAA) as Accredited Representative and the Timor-Leste *Gabinete Prevensaun e Investigasacao Insidente e Acidente com Aeronave* (GPIAIA) assisted the investigation by providing several information. Should any further relevant safety issues emerge during the course of the investigation, KNKT will immediately bring the issues to the attention of the relevant parties and publish as required.

# **1.9** Useful or Effective Investigation Techniques

The investigation was conducted in accordance with the KNKT approved policies and procedures, and in accordance with the standards and recommended practices of Annex 13 to the Chicago Convention.

## 2 FINDINGS<sup>7</sup>

According to factual information during the investigation, the KNKT identified initial findings as follows:

- 1. The aircraft had valid Certificate of Airworthiness (C of A) and Certificate of Registration (C of R). Prior to the departure, there was no record or report of aircraft system malfunction.
- 2. The pilots had valid commercial pilot licenses which qualified as single engine land pilot and valid first-class medical certificates. The SIC had valid first-class medical certificate issued by the South African Civil Aviation Authority and valid up to 28 February 2020.
- 3. On 22 May 2019, the SIC conducted medical examination in the Balai Kesehatan Penerbangan (Indonesia Aviation Medical Center) as part of the medical requirement for foreign CPL validation. The SIC met the medical standard requirement and received first-class medical certificate without any limitation which valid until 22 November 2019. This was the last medical examination performed on aviation medical facility prior the occurrence.
- 4. According to CASR Part 67 subchapter 67.9, flight crew must not exercise the privileges of their license unless they hold a current medical certificate appropriate to the license. The holder of foreign license issued by ICAO contracting states who applies for license validation must have medical certification under CASR Part 67.
- 5. About one week before the occurrence, the SIC received information regarding health issue of his family and friends then became very concern about it. Thereafter when thinking about that health issue, the SIC felt anxiety and often unable to get proper sleep. This health issue was the same issue that was discussed with the PIC during the occurrence flight.
- 6. Prior duty, the SIC conducted blood pressure and alcohol test, the blood pressure was 138 (systolic) 80 (diastolic) and the and the alcohol test result indicated the pilot was not under the influence of alcohol. Prior the occurrence, there was no report or indication that SIC was unfit to perform his duty.
- 7. During the preflight check, the SIC was aware that the supplemental oxygen was not available in the aircraft, and it was not required for unpressurized aircraft flying on cruising altitude at or below 10,000 feet.
- 8. During cruising, both pilots discussed regarding a certain health issue, afterwards, the SIC started to feel anxious and difficult to breath. The SIC's condition deteriorated when he recalled that there was no supplemental oxygen in the aircraft, and his breathing became shorter.

<sup>7</sup> Findings are statements of all significant conditions, events or circumstances in the accident sequence. The findings are significant steps in the accident sequence, but they are not always causal, or indicate deficiencies. Some findings point out the conditions that pre-existed the accident sequence, but they are usually essential to the understanding of the occurrence, usually in chronological order.

- 9. The PIC who was aware to the SIC condition then requested descend to the air traffic controller and decided to divert to Dili considering the flight to Dili was shorter than continuing the flight to Kupang.
- 10. The SIC felt dizzy, tunneled vision followed by black out vision and then loss of consciousness about 20 seconds.
- 11. When the aircraft passed altitude of 6,000 feet, the PIC activated the Quick Position report of the flight following system installed in the aircraft.
- 12. The OM-Part A subchapter 4.8.3 described that if pilot incapacitation is detected, the fit pilot must land as soon as practicable considering all pertinent factors and arrange medical assistance after landing, giving as many relevant details about the condition of the pilot as possible.
- 13. The OM-Part A subchapter 18.3 requires pilot to activate the Quick Position report during distress and urgency situation. Should the Quick Position report have been activated, the dedicated flight following personnel must perform emergency procedure Phase 2 (Aircraft Alert – ALERFA).
- 14. After regained the consciousness, the SIC drank water and was aware that the aircraft was on descend, thereafter the SIC was able to take deep breaths and felt better.
- 15. After landed at Dili, the SIC was taken to the hospital near the airport for medical treatment. The blood sugar level, blood pressure, oxygen levels in blood and heart rate were tested, and the result were normal. The details physical examination could not be carried out due to the SIC did not collaborate and did not provide clear information. The pilots decided to continue fly to Kupang and further medical examination would be conducted in Kupang.
- 16. The Susi Air SMSM described the definition of serious incident, however did not include the list of examples of serious incident.
- 17. The SMM subchapter 3.5 described serious incident as mandatory occurrence to be reported to the Directorate General of Civil Aviation and Komite Nasional Keselamatan Transportasi (KNKT) as soon as possible.
- 18. The KNKT received the report of the PK-BVN pilot incapacitation from Indonesia Ministry of Foreign Affair five days after the occurrence. Afterwards the KNKT contacted the Susi Air to get the detail chronological report and on 13 December 2019, the Susi Air reported this occurrence to KNKT.

# SAFETY ACTION

At the time of issuing this Preliminary Report, the KNKT had not been informed of any safety actions resulting from this occurrence.

# **4 SAFETY RECOMMENDATIONS**

## 4.1 Susi Air

In the case of Indonesia civil aircraft experienced serious incident, the CASR Part 830 subpart 830.06 requires person, organization or enterprise engaged in or offering to engage in an aircraft operation, with minimum delay and by the most suitable and quickest means available, must report to the KNKT. The Appendix B of the CASR Part 830 described that flight crew incapacitation in flight is included in the list examples of serious incident.

The Susi Air Safety Management System Manual (SMSM) described the definition of serious incident, however the list of examples of serious incident has not included. The KNKT received the report of the PK-BVN pilot incapacitation from Indonesia Ministry of Foreign Affair five days after the occurrence.

The delay of serious incident could affect the availability of information especially that came from data which easily might be removed, effaced, lost or destroyed.

Therefore, the KNKT recommend Susi Air to review and amend procedure of occurrence reporting to ensure serious incident can be identified and reported to KNKT by the most suitable and quickest means available.

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