

KNKT Safety Recommendation
Number 04.O-2024-02.01 and 04.O-2024-02.02
Aircraft Serious Incident Investigation
Batik Air Indonesia, Airbus A320, PK-LUV
En Route Kendari to Jakarta, 25 January 2024

FACTUAL INFORMATION

1. History of the Flight

On 25 January 2024, an Airbus A320 aircraft registered PK-LUV was being operated as scheduled passenger flight from Soekarno-Hatta International Airport (WIII), Jakarta to Halu Oleo Airport (WAWW), Kendari and return. The aircraft was operated by two pilots and four flight attendants.

The first flight from Jakarta was scheduled for departure at 0255 LT (1955 UTC) and the crew required to sign in for duty at 0125 LT. During the flight preparation, the second in command (SIC) advised the pilot in command (PIC) that he did not have proper rest.

The aircraft departed from Jakarta at 0314 LT. According to the filed flight plan, the flight would follow the Instrument Flight Rules (IFR). The PIC acted as pilot flying (PF) and the SIC acted as pilot monitoring (PM). The aircraft cruised at an altitude of 36,000 feet. During cruising, the PIC offered the SIC to take a rest as he was aware that the SIC did not have a proper rest. The SIC rested in the cockpit and slept for about 30 minutes. The PIC took over the SIC duty as the PM. The SIC woke up before the aircraft started to descend.

When the aircraft approached Kendari, the Kendari air traffic control (ATC) advised that the weather was below the IFR minimum for landing and the airport was still closed. The aircraft then made holding about 30 minutes at Waypoint ESGIX which located 14 Nm from the airport on bearing of 260°.

At 0711 LT (2311 UTC) the aircraft landed Kendari using Runway 26 and parked at the apron on parking stand number 4. During this transit, both pilots eat instant noodle cups in the cockpit. After the passenger disembarkation had been completed, the passenger boarding process for the return flight to Jakarta initiated.

At 0748 LT, after the boarding process has been completed, the aircraft started to move for the return flight with flight number BTK6723. Both pilots utilized their headsets to monitor the air traffic controller radio communication. The cockpit loudspeakers were on with minimal volume.

At 0005 UTC, the aircraft departed from Kendari to Jakarta. In this flight, the PIC acted as PM and the SIC as PF. The total number of passengers on board was 153. About 55 Nm from KDI VOR/DME, when the aircraft at altitude of 22,000 feet, the Kendari ATC transferred the control of BTK6723 to the ATC of Makassar Area Control Center (ACC). The aircraft continued to climb to the cruising altitude of 36,000 feet.

After the fastened seatbelt sign was turned off, the Flight Attendants (FAs) performed cabin check and started the passenger light meal service. The FA1 came to the cockpit and provided snacks to the pilots.

At 0037 UTC, the aircraft reached the cruising altitude of 36,000 feet. After maintaining the cruising altitude, both pilots took their headsets off and the cockpit loudspeaker volume was increased. The PIC then asked permission to rest from the SIC and was granted. A few seconds later, the PIC slept and the SIC then took over the PIC duty as PM.

The PIC woke up and at 0122 UTC, asked whether the SIC wanted to rest. The SIC responded that he did not want to rest. Both pilots then had a non-related-duty conversation for about 30 seconds and then the PIC continued to sleep.

The SIC was aware that the PIC was sleeping and continued the duty both as PF and PM.

At 0124 UTC, the SIC requested to fly on heading 275° to avoid bad weather conditions to the Makassar ACC and it was approved.

At 0129 UTC, the SIC communicated with FA using interphone asking the passenger condition as he felt that the aircraft encountered light turbulence. FA1 responded to the SIC that the passengers were ok.

At 0134 UTC, the SIC reported to the Makassar ACC that the aircraft was flying on heading 250°. The Makassar ACC acknowledged the pilot report and instructed BTK6723 to report when the aircraft was clear from the bad weather conditions. The SIC then readback the Makassar ACC acknowledged.

At 0142 UTC, the Makassar ACC instructed the BTK6723 to contact ATC of Jakarta ACC and it was readback by the SIC.

At 01:43:32 UTC, the SIC made initial contact with Jakarta ACC. BTK6723 was instructed to follow KURUS 2G Standard Instrument Arrival (STAR) and report when the aircraft was clear from bad weather conditions. At that time, the aircraft was flying on heading 250°, and located about 125 Nm east of Waypoint KURUS.

At 01:43:42 UTC, the SIC readback the Jakarta ACC instruction. A few moments later, the SIC then inadvertently fell asleep.

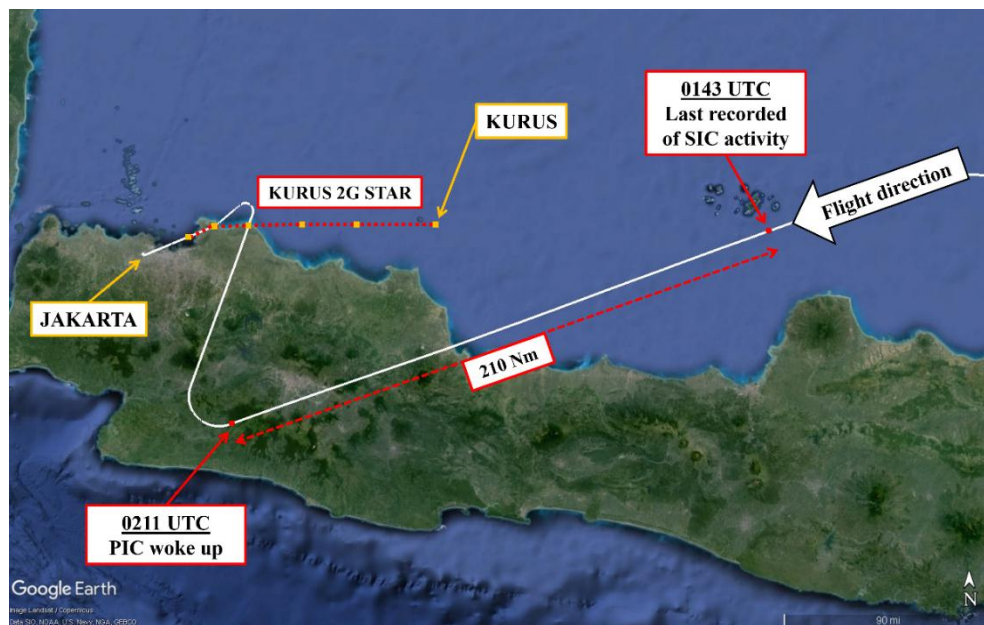


Figure 1: BTK763 flight profile

Makassar ACC and Jakarta ACC provided the air traffic control services by utilizing surveillance system (radar service).

At 0156 UTC or 12 minutes after the last recorded transmission from the SIC, the Jakarta ACC asked BTK6723 how long the aircraft need to fly on the current heading (250°). There was no reply from the pilots.

At 0157 UTC, the Jakarta ACC called BTK6723 and there was no response from the pilots. Several attempts to contact BTK6723 had been made by the Jakarta ACC including asking other pilots to call the BTK6723. None of the calls were responded by the BTK6723 pilots.

At 0211 UTC or 28 minutes after the last recorded transmission from the SIC, the PIC woke up and was aware that the aircraft was not in the correct flight path. The PIC then saw the SIC was sleeping and woke him up. About the same time, the PIC responded to the call from another pilot and Jakarta ACC. The PIC advised the Jakarta ACC that BTK6723 experienced radio communication problem and currently the problem has been resolved. The flight then continued and landed at Jakarta uneventfully.

No one was injured in this occurrence and there was no damage to the aircraft.

2. Pilot in Command

The PIC was 32 years old, Indonesia nationality who held valid Airline Transport Pilot License (ATPL) and qualified as Airbus A320 pilot. The pilot also held valid First-Class medical certificate with medical limitation to wear corrective lenses.

The last proficiency check was conducted on 12 November 2023, and the result was satisfactory.

The PIC had total flying time of 6,304 hours 11 minutes. The details flight time of the PIC as provided by the aircraft operator was as follows:

Last 90 days : 200 hours 19 minutes

Last 30 days : 77 hours 37 minutes

Last 7 days : 16 hours 31 minutes

Last 24 hours : 6 hours 26 minutes

The rest period of the PIC prior conducting the flight duty on 25 January 2024 was 35 hours.

On 23 January 2024, the PIC had a scheduled flight with a total flight time of 1 hour 35 minutes. The flight duty terminated at 1235 LT (0535 UTC) and the PIC returned to his home using a car with a driver. The PIC arrived at home and slept about 2200 LT.

On 24 January 2024, the PIC was scheduled for standby which required the PIC to stay reachable and ready for the early morning duty schedule. The PIC woke up about 0530 LT and did a morning run for about 40 minutes. After the morning run, the SIC took a bath and had his breakfast. About 1100 LT, the PIC visited a family and had lunch. The PIC arrived home about 1830 LT. The PIC continued his routine daily activities and slept about 2000 LT. The PIC woke up about 2200 LT and prepared to go to the airport.

On 25 January 2024, about 0045 LT, the PIC left to the airport by driving a car. At 0139 LT, the PIC signed on at the flight operation office and underwent a medical examination performed by a nurse provided by the company. The blood pressure and the heart rate of the PIC was normal, and the alcohol test was negative, which then considered fit for the flight duty. The PIC then prepared the flight with the other crew members.

3. Second in Command

The SIC was 28 years old, Indonesia nationality who held valid Commercial Pilot License (CPL) and qualified as Airbus A320 pilot. The SIC also held a valid First-Class medical certificate without limitation.

The last proficiency check was conducted on 1 November 2023, and the result was satisfactory.

The SIC had a total flight time of 1,664 hours 45 minutes. The details flight time of the SIC as provided by the aircraft operator was as follows:

Last 90 days	:	212 hours 36 minutes
Last 30 days	:	79 hours 57 minutes
Last 7 days	:	17 hours 8 minutes
Last 24 hours	:	6 hours 26 minutes

The rest period of the SIC prior to conducting the flight duty on 25 January 2024 was 53 hours.

On 22 January 2023, the SIC had one flight schedule with a total flight time of 1 hour 2 minutes. The flight duty terminated on 1842 LT (1142 UTC), and the SIC returned to his home using a car with a driver. The SIC arrived at home and slept about 2200 LT. The SIC had one-month-twin-babies. His wife took care of the babies and the SIC assisted while at home.

On 23 January 2024, the SIC was scheduled for a day off. The SIC woke up about 0800 LT and did a house moving. After the packing was completed in the afternoon, the SIC drove to his new house in about one and half hours.

On 24 January 2024, the SIC woke up at about 0800 LT and had breakfast. About 0900 LT, the SIC drove to the old house to continue moving the remaining stuff to his new house. The SIC had lunch and returned to his new house about 1400 LT then continued to tidy up the house stuff. About 1900 LT, the SIC attempted to sleep, however he had to wake up several times to help his wife take care of the babies. The SIC felt that his sleep quality had degraded by the several wakes up.

On 25 January 2024, about 0000 LT, the SIC woke up and prepared to go to the airport. The SIC drove a car to the airport and signed on at the flight operation office at 0126 LT. The SIC underwent a medical examination performed by a nurse provided by the company. The blood pressure and the heart rate of the PIC was normal, and the alcohol test was negative which then considered fit for the flight duty. The SIC then prepared the flight with the other crew members.

4. Aircraft Information

The Airbus A320 with serial number of 7673, was manufactured by Airbus, France aircraft company in 2017. The aircraft registered PK-LUV and had valid Certificate of Airworthiness (C of A) and Certificate of Registration (C of R).

Prior to the flight there were no records or reports of aircraft system malfunction. After the occurrence flight, the aircraft radio communication system was found in normal condition.

5. Flight Duty Time and Rest Policy

Batik Air Indonesia Operation Manual Volume A (OM-A) subchapter 7.1.2.2 described one of the crew member responsibilities and duties was:

Not operate the flight if he is fatigued, or if in his opinion his physical, emotional or mental wellbeing would render him unfit or unsafe during any part of his flight duty period. In this case, the pilot must advise Fleet Chief Pilot or his deputy, and for Flight Attendants, must advise Chief FA Assistant for Daily Operations at first possible opportunity;

The flight duty time limitation described in the OM-A subchapter 7.2 as follows:

BASIC LIMITATIONS WITHIN 24 CONSECUTIVE HOURS

MAX. FLIGHT DUTY TIME (ALL CREWMEMBERS)	MAX. FLIGHT TIME (FLIGHT CREW)	MAX. FLIGHT TIME (CABIN CREW)
14 Hrs.	9 Hrs.	12 Hrs.

SCHEDULING CUMULATIVE FLIGHT TIME LIMITATIONS FOR FLIGHT CREWS

	MAX. FLIGHT TIME (FT) (FLIGHT CREW ONLY)	MAX. FLIGHT DUTY TIME (FDT)
<i>In any 7 consecutive days</i>	30 Hrs.	NIL
<i>In any calendar month</i>	110 Hrs.	NIL
<i>In any 12 Calendar month</i>	1,050 Hrs	NIL

The flight crew rest requirements were described in the OM-A as follows:

7.4.1 ROSTERED DAY OFF (RDO)

All crewmembers (flight crews and flight attendants) must be relieved from all further duty for at least 24 consecutive hours within any 7 consecutive days. This period of 24 consecutive hours will commence after a FDP¹.

7.4.2 MINIMUM REST PERIODS BETWEEN TWO FLIGHT DUTY PERIODS

The minimum rest period must be given to each crew who has performed an assignment involving flying duty and before the next flight duty period. During rest period, the crewmember must not be given any assignment by the Company.

	MINIMUM REST PRIOR TO THE NEXT FLIGHT DUTY PERIODS
PREVIOUS FDT ²	FLIGHT CREWS
FOLLOWING STANDARD FDP	
< 14 Hrs.	9 Hrs.

¹ FDP is Flight Duty Periods.

² FDT is Flight Duty Times. The FDT is the total elapsed time from the time a crewmember is required to report for duty to the time that crewmember has completed all official duties with respect to a flight or series of flights and is released for an official crew rest.

7.4.3.1 ENTIRE DURATION OF THE FLIGHT

Flight Time Duty is considered to begin:

- Home base (Jakarta / CGK): 90 minutes before Block Off time (reporting time)
- Home base (Jakarta / HLP): 120 minutes before Block Off time (reporting time)
- Wide Body: 120 minutes before Block Off time (reporting time).
- Others stations: 60 minutes before Block Off time (reporting time).
- International Flight from Home base/other station: 120 minutes before Block Off time (reporting time).

Flight Time Duty is considered to end:

- Home base (Jakarta / CGK): 30 minutes after Block On Time (check-out time)
- Other stations: 30 minutes after Block On Time (check-out time)

Therefore, in order to ensure that crewmembers benefit from the minimum required rest period, purpose, the minimum BLOCK ON – BLOCK OFF time could not less than:

- Home base (Jakarta, CGK):

0.5 Hrs. (sign off) + 1.5 Hrs. (transportation to home + Physiological needs) + Minimum Rest + 1.5 Hrs. (traveling to airport) + 1.5 Hrs. (reporting time)

- Other stations:

0.5 Hrs. (sign off) + 1.5 Hrs. (transportation to the hotel + Physiological needs) + Minimum Rest + 1 Hrs. (traveling to airport) + 1Hrs. (reporting time)

All the flight duty and rest requirements described in the OM-A were in accordance with the Civil Aviation Safety Regulation (CASR) part 121.

6. Pilot Health and Medical Fitness Policy

OM-A subchapter 6.1 describes as follows:

...

BATIK AIR and all crewmembers are required to consider aero medical factors that may affect or be related to flying activities. Crewmembers have an obligation to remain fit for duty and to use every endeavor to maintain a level of fitness that supports safe operations.

All crewmembers have an obligation to inform their respective Chief or Manager of any medical condition that may interfere with flight safety, and take responsibility prior to being assigned to duty, will not be affected by factors that could impair human performance, to include, as a minimum:

- *Pregnancy*
- *Illness, surgery or use of medication(s);*
- *Blood donation.*
- *Deep underwater diving.*
- *Fatigue whether occurring in one flight, successive flights or accumulated over a period of time*

...

BATIK AIR pilots must develop a personal checklist, which includes all of the categories of pilot impairment as discussed in this section that can be easily committed to memory as a reminder before performing any flight duty.

<p style="text-align: center;">PERSONAL CHECKLIST</p> <p style="text-align: center;">“I’m physically and mentally safe to fly; not being impaired by:</p> <p>Illness</p> <p>Medication</p> <p>Stress</p> <p>Alcohol</p> <p>Fatigue</p> <p>Emotion</p>
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The investigation did not find any detailed guidance nor procedure for pilots when using the IM SAFE personal checklist, such as the assessment guidance for each impairment category.

OM-A subchapter 6.2.3.3 describes as follow:

6.2.3.3 BLOOD PRESSURE AND ALCOHOL CONTAMINATION

Batik Air examines medical condition of the crew on their first flight of the day, by conducting blood pressure and alcohol contamination check.

Refer to SMS (Blood Pressure and Alcohol Contamination Management Program and Preflight Health Check SOP).

7. Cockpit Check Policy

Batik Air Indonesia Safety Emergency Procedures (SEP) subchapter 1.1.24.1 (i) describes procedures to perform cabin checks which also contain policy for the FA to check the cockpit as follows:

...

The cockpit should be checked every 30 minutes.

...

The investigation did not find detailed procedures to conduct the cockpit check as mentioned in the SEP.

SAFETY ACTION

On 7 February 2024, issued Safety Notice to all pilots and flight attendants (FAs) with subject to enhancing vigilance and communication during flight operations. The notice included reminder as follows:

- to perform cabin and cockpit checks in accordance with the Safety Emergency Procedures (SEP) subchapter 1.1.24.1.
- to manage adequate rest periods before reporting time for flight duty, especially for early morning flights.

On 12 February 2024, issued Notice to Pilot for ensuring personal fitness prior to the flight duty, which including reminder for pilot to:

- implement sufficient, adequate, and good quality rest. For a red eye/midnight flight, flight crew must utilize the available rest given prior and understand the circadian rhythm effect on the body.
- review the IM SAFE personal checklist during the pre-flight briefing as described in the OM-A subchapter 6.1.

SAFETY RECOMMENDATIONS

The KNKT acknowledges the safety actions taken by the aircraft operator and considered that the safety actions were relevant to improve safety, however there still safety issues remain to be considered. Therefore, the KNKT issued safety recommendations to address safety issues identified in this report.

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Batik Air Indonesia Operation Manual Volume A (OM-A) described that pilots must develop a personal checklist, which includes the categories of pilot impairment – Illness, Medication, Stress, Alcohol, Fatigue and Emotion (IM SAFE) that can be easily committed to memory as a reminder before performing any flight duty.

The investigation did not find any detailed guidance nor procedure of the IM SAFE personal checklist, such as the assessment guidance for each impairment category. The absence of detailed guidance and procedure might have made pilots unable to assess their physical and mental condition properly.

Therefore, KNKT recommends Batik Air Indonesia to develop detailed guidance and procedure for ensuring that the IM SAFE personal checklist can be used to assess pilot physical and mental condition properly.

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Batik Air Indonesia Safety Emergency Procedures (SEP) describes procedures to perform cabin checks which also contain policy that cockpit should be checked every 30 minutes. However, the investigation did not find detailed procedures to conduct the cockpit check as mentioned in the SEP such as who is responsible and how to do it. The absence of detailed procedures might have made the cockpit check policy unable to be implemented properly.

Therefore, KNKT recommends Batik Air Indonesia to develop detailed procedures to conduct cockpit check for ensuring that the cockpit check can be implemented properly.

Jakarta, 27 February 2024

KOMITE NASIONAL
KESELAMATAN TRANSPORTASI
CHAIRMAN



SOERJANTO TJAHJONO