

KNKT Immediate Safety Recommendation
Aircraft Serious Incident Investigation
PT Sayap Garuda Indah, Bell 407, PK-ZGL
Denpasar, 4 May 2026

FACTUAL INFORMATION

1 History of the Flight

On 4 May 2026, a Bell 407 helicopter registration PK-ZGL was operated on a commercial non-scheduled passenger sightseeing flight departing from SGI Heliport, Denpasar, Indonesia (Benoa)¹. The flight was conducted on the Magical South sightseeing route² with one pilot and five passengers on board. Weather conditions were reported as clear.

At approximately 0800 UTC (1600 LT)³, the helicopter requested takeoff clearance from the I Gusti Ngurah Rai air traffic controller (ATCO) and departed Benoa. In accordance with the Letter of Operational Coordination Agreement (LOCA) between the operator and the Air Traffic Services Provider, the pilot proceed toward the Serangan holding area and maintained an altitude of not more than 500 feet, while awaiting clearance to cross the route south of I Gusti Ngurah Rai International Airport.

While approaching the Serangan area, the pilot observed approximately three kites operating near the intended flight path at an estimated altitude of 500 feet. To remain clear of the kites, the pilot held the helicopter near Benoa Heliport before entering the Serangan crossing route. After receiving crossing clearance from ATCO, the flight continued toward Tanjung Benoa and then proceeded to Garuda Wisnu Kencana (GWK), climbing to 1,000 feet. During the flight toward GWK, the pilot observed approximately four additional kites flying on the left-hand side of the helicopter near its operating altitude of 1,000 feet.

At approximately 1 nautical mile (NM) before reaching GWK, the pilot noticed a momentary decrease in airspeed and heard an abnormal sound originating from the main rotor blade area. The sound lasted for approximately five seconds before ceasing.

The pilot performed a flight control check to assess the helicopter's controllability and system response. The pilot confirmed that the helicopter remained fully controllable. No warning indications were observed, and no abnormal flight characteristics were identified on the instrument displays.

¹ SGI Heliport, Denpasar, Indonesia (Benoa) will be named as Benoa for the purpose of this report.

² The Magical South sightseeing route covers the South Coast sector, starting from Serangan Island and continuing to Tanjung Benoa, GWK, Melasti Beach, and Peninsula Island. The route then returns to Benoa via Tanjung Benoa and Serangan Island

³ The 24-hours clock in Local Time (LT) is used in this report to describe the time as specific events occurred. Local Time (LT) is Universal Time Coordinated (UTC)+8 hours.



Figure 1: Estimated occurrence location

The pilot was uncertain of the source of the abnormal sound. The pilot decided to discontinue the sightseeing flight as a precautionary measure and return to Bena. The pilot informed Flight Operations (FLOPs) and ATC of the intention to return due to a technical concern. At approximately 1609 LT, FLOPs received the report of the abnormal condition and initiated preparations for the helicopter's arrival and landing at Bena.

At approximately 1612 LT, the helicopter landed at Bena. Following engine shutdown, the pilot and maintenance engineer conducted a post-flight inspection of the helicopter. During the inspection, kite string material was found entangled around the pitch link and tail rotor mast area.

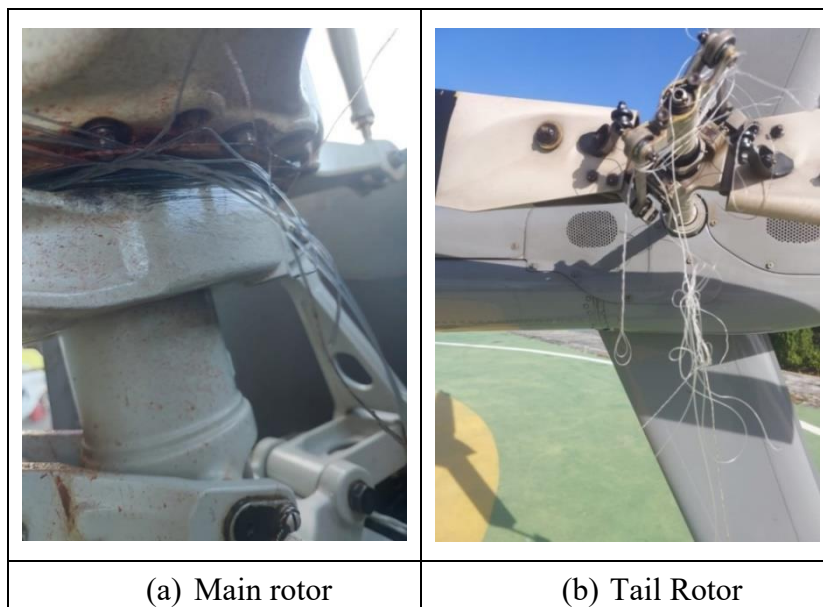


Figure 2: Kite string entanglement on PK-ZGL helicopter

There were no injuries to the pilot or passengers during the occurrence. No damage to the aircraft was identified during the ground inspection.

2 Aircraft Information

The Bell 407 helicopter, serial number 53455, was manufactured by Bell Helicopter Textron Canada Ltd. in 2000. The helicopter was registered as PK-ZGL and held valid Certificates of Airworthiness (C of A) and Registration (C of R). Prior to the occurrence flight, there were no records or reports of any malfunctions of the helicopter systems.

3 Flying Kite Regional Regulation

The Bali Provincial Government has identified kite-flying activities as a hazard to aviation. To mitigate this risk, Regional Regulation of Bali Province No. 9 Year 2000 was promulgated to regulate kite-flying activities within the Obstacle Limitation Surface of I Gusti Ngurah Rai International Airport. Article 2 of the regulation establishes the following prohibited and restricted zones for kite flying:

- Zone 1, within a radius of 5 NM (9 km) of I Gusti Ngurah Rai International Airport, kite flying is prohibited.
- Zone 2, within a radius of more than 5 NM and up to 10 NM (9 to 18 km) from I Gusti Ngurah Rai International Airport, kite flying is permitted up to a maximum height of 100 meters (300 feet).
- Zone 3, within a radius of more than 10 NM and up to 30 NM (18 to 54 km) from I Gusti Ngurah Rai International Airport, kite flying is permitted up to a maximum height of 300 meters (1,000 feet).

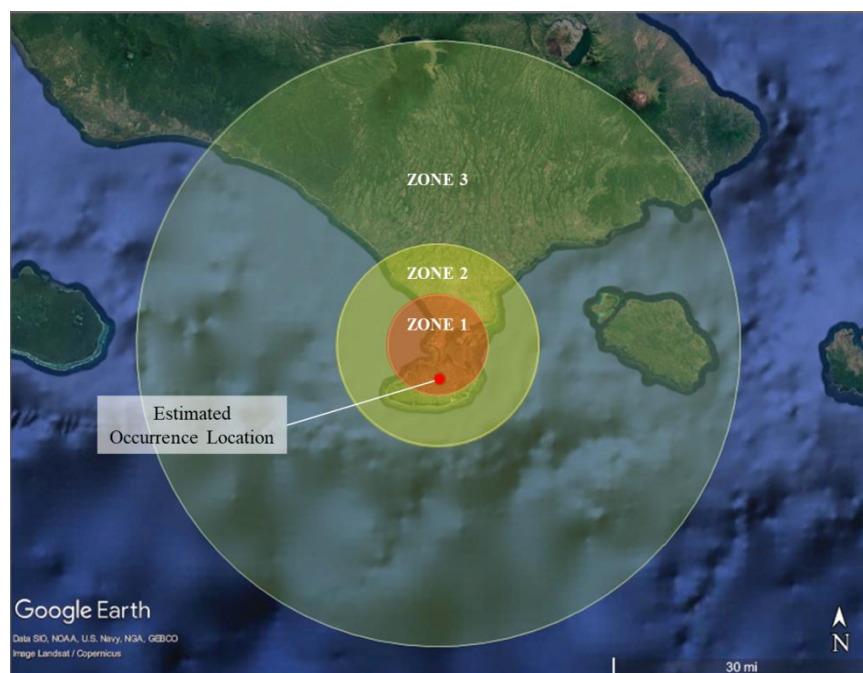


Figure3: Illustration of the flying kite regulated zone

Article 6 of the regulation stipulates that the Bali Provincial Government, in coordination with the airport operator, customary villages, and cultural organizations, is responsible for overseeing the implementation of the regulated kite-flying zones.

The Bali Provincial Government, in coordination with relevant stakeholders, conducted various oversight activities to promote compliance with the kite-flying restrictions and prohibitions. These included educational outreach to individuals, including children, who were found flying kites within prohibited areas.

On 2 August 2024, the Bali Provincial Government issued Governor Decree Number 649/03-G/HK/2024 establishing a task force for mitigating hazards posed by kites and other airborne objects to aircraft operations within Obstacle Limitation Surface of I Gusti Ngurah Rai International Airport. The task force consisted of three divisions: the Regulatory Division, the Empowerment Division, and the Law Enforcement Division. Its members included representatives from the Bali Provincial Government, Bali air traffic services provider, I Gusti Ngurah Rai International Airport operator, several aircraft operators which operated at Bali, the Indonesian National Police and the Bali municipal police.

Despite these measures, kite-flying activities continued to occur within prohibited and restricted zones, and kite strike incidents involving aircraft continued to be reported. In addition, the growth of helicopter sightseeing operations in Bali has resulted in the establishment of several heliports outside the areas covered by the existing regulatory framework. Consequently, the current kite-flying prohibitions and restrictions within Obstacle Limitation Surface of I Gusti Ngurah Rai International Airport may not be sufficient to mitigate the risk of kite strikes involving aircraft operating in the vicinity of these heliports.

4 Similar Occurrences

On 7 May 2026, a Robinson R66 helicopter, registration PK-VPY, operated by Volta Pasifik Aviasi, departed JAG Helipad at approximately 1445 LT to conduct a sightseeing flight with a planned duration of 10 minutes. Prior to departure, ground personnel informed the pilot of a kite observed approximately 0.5 NM north of the helipad at an estimated altitude of 400 feet.

Upon completing the sightseeing flight, the helicopter returned to JAG Helipad. During the approach and landing, the pilot did not observe any kites in the vicinity of the flight path. Following landing, maintenance and ground support personnel discovered kite-string material entangled around the main rotor pitch link and tail rotor assembly. The occurrence resulted in minor damage to the helicopter. No injuries were reported.

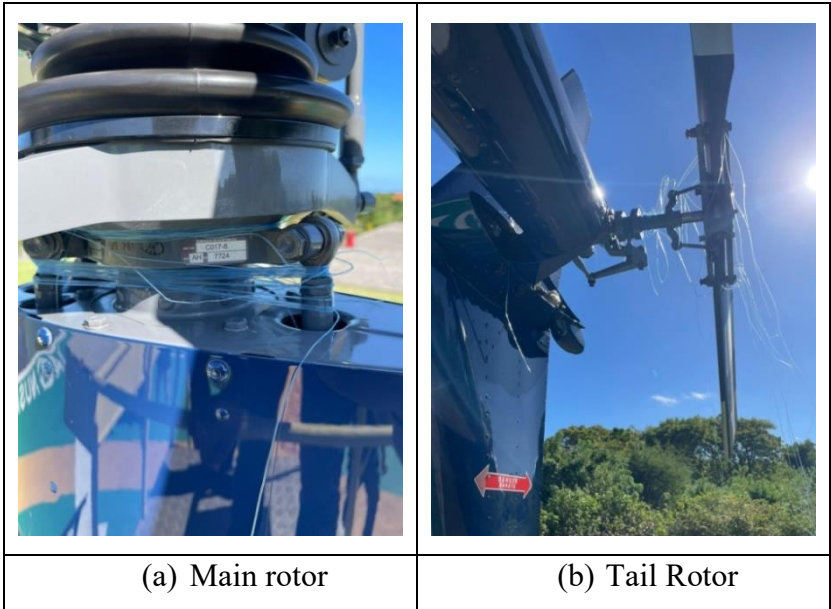


Figure 4: Kite string entanglement on PK-VPY helicopter

5 SAFETY RECOMMENDATIONS

On 19 July 2024, a Bell 505 helicopter, registration PK-WSP, operated by PT Whitesky Aviation, was conducting a non-scheduled sightseeing flight from the Garuda Wisnu Kencana (GWK) Helipad, Bali, when it experienced a kite strike. The helicopter encountered a kite flying above its altitude that was attached to a thin, transparent string. The pilot and passengers were unable to detect the kite string, preventing the pilot from taking evasive action. The kite string became entangled in the main and tail rotor systems, adversely affecting the helicopter's controllability.

The pilot initiated an emergency landing in an open area. During the emergency landing attempt, the helicopter struck the tops of trees near a cliff before coming to rest in a field. The helicopter sustained substantial damage, and two of the five occupants sustained serious injuries.

Following the investigation, the KNKT issued safety recommendations to the Bali Provincial Government to address the safety issues identified:

04-R-2024-17.02

Regional Regulation of Bali Province No. 9 Year 2000 was promulgated to restrict the kite flying activity and prohibit it in certain areas. Despite the efforts to remind community members of the risk of kite strike and to implement the restriction as well as prohibition of flying kite activity, the kite strike incidents continued to occur even after the accident.

According to Article 13 of the Regional Regulation of Bali Province No. 4 Year 2019, each head of customary village in Bali is authorized to issue customary law called Awig-Awig. Considering that within Balinese society, longstanding traditions, customs, and beliefs continue to hold significant influence, customary laws are often observed with greater adherence than regional regulations. However, the investigation did not find any prohibition and restriction of the kite-flying in customary law.

Therefore, KNKT recommends that the Bali Provincial Government strengthen the restrictions and prohibitions of the flying kite activity in certain areas through the development and implementation of customary law.

The safety recommendation has not yet been addressed and remains open. Therefore, the KNKT encourages the Bali Provincial Government to take appropriate action to implement the recommendation.

Furthermore, current investigation identified additional safety issues related to the implementation and scope of the mitigation measures established by the Bali Provincial Government. Therefore, KNKT issues the following additional safety recommendation:

04-R-2026-07.01

In 2024, the Bali Provincial Government established a task force to mitigate hazards posed by kites and other airborne objects to aircraft operations within Obstacle Limitation Surface of I Gusti Ngurah Rai International Airport. However, kite-flying activities continued to occur within the prohibited and restricted zones, and kite strike incidents involving aircraft continued to be reported.

Therefore, KNKT recommends that the Bali Provincial Government strengthen the implementation, coordination, oversight, and enforcement activities of the task force to improve compliance with kite-flying restrictions and reduce the risk of kite strikes and other airborne objects hazards to aircraft operations.

04-R-2026-07.02

In 2000, the Bali Provincial Government promulgated regulation governing kite-flying activities within the Obstacle Limitation Surface of I Gusti Ngurah Rai International Airport. Since then, the growth of helicopter sightseeing operations in Bali has led to the establishment of several heliports outside this regulated area. Consequently, the existing kite-flying prohibitions and restrictions established for the Obstacle Limitation Surface of I Gusti Ngurah Rai International Airport may not adequately mitigate the risk of kite strikes involving aircraft operating in the vicinity of these heliports.

Therefore, KNKT recommends that the Bali Provincial Government amend and implement regulations governing kite-flying activities and other airborne objects to ensure that hazards to aircraft operations are effectively mitigated, including consideration of areas surrounding heliports and established helicopter operating routes.

Jakarta, 26 June 2026

KOMITE NASIONAL
KESELAMATAN TRANSPORTASI
CHAIRMAN




SOERJANTO TJAHJONO