

**59th CONFERENCE OF
DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGIONS**

*Cebu, Philippines
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**AGENDA ITEM 7: THEME TOPIC
EFFECTIVE MITIGATION OF KITE FLYING, LASER,
AND DRONE FLYING HAZARDS**

(Presented by Philippines)

INFORMATION PAPER

SUMMARY

The flying of kites, drones, and pointing of laser lights are hazards to aircrafts especially during landing and take-off. The nature of these hazards demands a significant multi-level approach to safety promotion which involves not only within airport premises but also the surrounding community and regulatory governments. This approach to safety promotion as implemented by Mactan Cebu International Airport is not just innovative, cost effective, but also applicable to other airports.

EFFECTIVE MITIGATION OF KITE FLYING, LASER, AND DRONE FLYING HAZARDS

1. INTRODUCTION

1.1 Kite flying is not just a recreational activity in the Philippines but also a cultural marker of this tropical country where every growing child experiences to hold the kite lines, looking up to the high-flying kite in the skies, and celebrating the summer and windy season for a few months. Every Filipino today holds that kite-flying memory as an important cultural and social experience. However fun and important kite flying is to the country, nobody ever thought that kite lines would cause the death of innocent lives one summer day.

1.2 The flying of kites, drones, and pointing of laser lights are hazards to aircrafts especially during landing and take-off. Kites and drones may be ingested by aircraft engines or damage the propeller driven aircrafts. Laser lights may also cause flash blindness to pilots. As such, these common hazards pose significant risks to aircraft activity in and around the airport which may lead to serious accidents if not addressed and mitigated.

1.3 The nature of these hazards demands a significant multi-level approach to safety promotion which involves not only within airport premises but also the surrounding community and regulatory governments. As the hazards are usually created and sourced from outside the airport, there is a need to bring to the surrounding community not just an awareness but also harness their involvement together with strict regulations for an effective mitigation and sustainable safety solution. This paper presents this multi-perspective approach to safety promotion from a grassroots level, operational level, and up to regulatory level.

2. DISCUSSION

2.1 **Community Involvement** – The primary and grassroots level of safety promotional activities done by airport operations personnel was to involve the surrounding communities (called barangays in the Philippines), making them aware of the hazards, letting them realize the risks involved, informing them of the regulatory ordinance, and involving them of their participation and contribution for a safe airport and community.

2.2 **Regulatory Engagement** – The top-level engagement of safety promotion was to engage the local government to establish and enforce strict regulation involving kite-flying, laser, and drone flying in the airport vicinity. This involves lobbying to the city council and requesting them to create such city ordinance. As a result, the local government of Lapu-lapu city passed the Lapu-lapu City Ordinance No. 16-033-A-2022 last February 13, 2023 which was entitled, “An Ordinance Regulating the Use of Laser Lights and Laser Pointers, the Use and Installation of Light Displays Using Lasers and Searchlights, the Flying of Kites, Unmanned Aerial Vehicles (Drones), the Intentional Release of Free Balloons, the Use of Moored Balloons, or Any Flying Object Controlled by Remote Control Devices in the City of Lapu-lapu.”

2.3 **Operational Monitoring** – The airport operations together with the Safety Office conducts a daily inspection which involve monitoring of hazards that may pose a significant risk to airplane activity. Whenever there are hazards found, these are immediately addressed. For cases such as kite flying, laser lights, and drones, these are immediately acted upon by the safety office to remove the hazards once for all.

2.4 **Signages** – Various informational and promotional tarpaulin signages were posted in the airport perimeter fences facing the surrounding communities to remind everyone of the city ordinance, the hazards, and the risks brought by these hazards.

2.5 **Social Media Information** – The airport safety office created a social media page dedicated for safety promotional activities where everyone in the community will have access to relevant safety information about the airport. Educational and operational information related to hazards are also posted for a wider dissemination in the community.

2.6 **The mitigation measures** implemented by the airport personnel involves a mixed traditional and innovative approaches. Operational monitoring and the use of signages were still implemented. Safety promotion and awareness activities within the airport community were still conducted. However, the team also made use of innovative approaches such as an aggressive penetration of all surrounding communities/barangays in a grassroots level for a comprehensive safety orientation which involves soliciting their involvement and ownership in ensuring safety in airport operations. Secondly, the team also made use of social media to reach out widely not just to the immediate community stakeholders but also to other provinces. Lastly, the team engaged the top local government to create a stronger enforcement through a local regulation for the mitigation of hazards such as kite flying, laser lights, and drone flying.

2.7 **The safety promotion mitigation** measures implemented by the airport did not involve any capital expense or purchase of any equipment. No significant costs were incurred by implementing these safety promotional activities. Thus, the measures were cost effective and can be immediately implemented without waiting for any purchase or procedural changes.

2.8 In addition, the safety promotional measures presented in this paper can be easily duplicated by other airports. The mentioned hazards are not just common, but the mitigating measures and procedures are also applicable in any airport wishing to intensify and multiply their safety promotion aspect.

3. **ACTION BY THE CONFERENCE**

- 3.1 The Conference is invited to
- a) Discuss and note the information contained in this paper
 - b) Encourage States and International Organizations to share their best practices in order to enhance safety promotional activities

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