International Civil Aviation Organization

AN-Conf/13-WP/136
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WORKING PAPER

THIRTEENTH AIR NAVIGATION CONFERENCE

Montréal, Canada, 9 to 19 October 2018

COMMITTEE A

Agenda Item 5: Emerging issues
5.1: Operations above Flight Level 600

LOON OPERATIONS IN THE LIMA FLIGHT INFORMATION REGION (FIR)

(Presented by Peru)

EXECUTIVE SUMMARY

This paper presents the Peruvian experience with Project Loon, a high-altitude, heavy, free unmanned balloon network that aims to bring the internet to underserved parts of the world. It outlines recent achievements in the aftermath of natural disasters and needs for further expansion.

Action: The Conference is invited to:
a) note the Peruvian experience;
b) agree to the recommendation in AN-Conf/13-WP/16: Recommendation 5.1/x — Higher airspace operations.

1. INTRODUCTION

1.1 As a country, Peru has been very open to innovation and continues to partner with key industries which bring life improving capabilities to its citizens. As such, Peru's Director General of Civil Aviation (DGCA) was open to Project Loon, and provided a proving ground for its initial operations which seek to enable education, investment, remote medical information and emergency services by expanding the telecommunications and internet capability of local service providers to areas of the world which are currently underserved.

1.2 Through the use of effective safety management by civil aviation authorities, air navigation service providers (ANSPs) and by Project Loon itself, the program has safely flown more than 1385 flights, over 835,800 flight hours, traveling more than 33 million kilometers testing its systems.

2. DISCUSSION

2.1 Peru established an operational Letter of Agreement (LOA), with specific flight procedures with Project Loon in May of 2016 and since then, more than 108,700 overflight hours were

spent within in the Lima flight information region (FIR), of which 68,600 hours over the broader country territory.

2.2 Although telecommunications and internet services were not anticipated until 2018, in 2017 Peru was hit with devastating flooding, caused by "Coastal El Niño." In partnership with the Peruvian government, and the local telecommunications service provider, Loon offered to use a series of balloons which were already airborne for operational testing to provide free mobile telecommunications and internet capability by those effected.

2.3 This partnership provided free mobile internet connectivity to tens of thousands of people in the most affected areas in the center and northwest of the country, the highlands of Lima, Chimbote and Piura. This was the first time that balloon powered internet has connected so many in need.

3. CONCLUSION

3.1 Aviation's newest entrants provide new capabilities that can serve our citizens. Working cooperatively with these new products and services to prove their aviation safety is in the interest of both States and the industry.

3.2 As a consequence of the Peruvian government's openness to innovation, Peru will be a first adopter of this technology.

3.3 As the balloons operations are going to grow not only in Peruvian airspace as well as in many areas around the world, this paper supports the recommendation in the Secretariat working paper (AN-Conf/13-WP/16), that requests ICAO to provide guidance on the regulatory aspects of these operations.

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