



International Civil Aviation Organization

ICAO

**FIFTH MEETING OF SPECTRUM REVIEW WORKING
GROUP (SRWG/5)**

Video Teleconference, 15 – 17 March 2021

Agenda Item 7: State and regional updates

**STATUS REPORT
RADIO FREQUENCY INTERFERENCE IN THE BAND 117.975 – 137 MHz**

(Presented by Thailand)

SUMMARY

This paper provides a status report on the current interference situation in the band 117.975 – 137 MHz in Thailand

1. INTRODUCTION

1.1 This paper provides a status report on the radio frequency interference in Thailand from unlicensed FM community radio stations in the band 117.975 – 137 MHz.

2. CURRENT STATUS

2.1 Radio frequency interferences from unlicensed FM community radio stations have been one of the major issues affecting the safety of aircraft operating into Thailand. The operation of aircraft into major and high traffic density airports such as Suvarnabhumi Airport, Donmueang Airport, Phuket International Airport and Chiang Mai International Airport, have been particularly affected. The interference has often resulted in the pilot being unable to communicate or obtain instructions from the air traffic controllers on the ground. This is especially undesirable at critical phases of flight.

2.2 Resolving the issue was a challenge. FM radio transmitter could be easily and cheaply built 'in-house' and, more importantly, setting up an illegal radio station was driven by advertising revenue. The higher the audience size, the greater the advertising revenue. This worsened the situation. The FM community radio stations were competing with each other to gain a larger audience, by increasing their transmitter power and mounting their antennas high, to boost the coverage area. There was also a lack of cooperation from the radio station owners to resolve the issue. Lack of financial means to make the necessary repairs was another factor.

2.3 The Office of the National Broadcasting and Telecommunications Commission (NBTC), the telecommunication regulator, collaborated with Aeronautical Radio of Thailand (AEROTHAI) to resolve the interference issue. The core strategy was stakeholder engagement. This encompassed a range of activities such as advising and providing consultation on technical issues, educating the radio stations owners on the effect of radio interference on aircraft operations. Other measures were also implemented such as, an air navigation safety zone was declared where community radio stations within 50 NM from international airports and 30 NM from domestic airports would need to be free from interference. A database of radio stations located around the airport was created to contact station owners for prompt remedial action. Spare frequencies were also assigned by NBTC to AEROTHAI for use in the event of severe interference to the main frequency.

2.3 The number of interferences from 2016 to 2020 is provided in figure 1 below. After the above measures were implemented there seems to be a downward trend to the number of interferences.

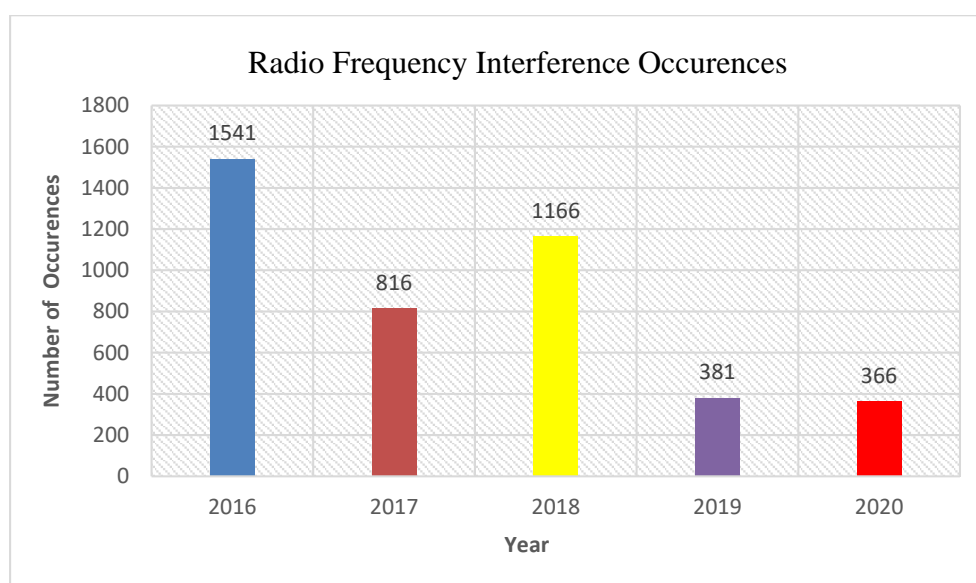


Figure 1: Radio Frequency Interference Occurrences within Bangkok FIR

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information contained in this paper.
