

International Civil Aviation Organization

EIGHTH MEETING OF SPECTRUM REVIEW WORKING GROUP (SRWG/8)

Bangkok, Thailand, 05 – 07 March 2024

Agenda Item 6: Frequency use by oil platform

ISSUES IN AERONAUTICAL FREQUENCY USE BY OIL RIGS

(Presented by the Secretariat)

SUMMARY

This paper presents the observations on the issues in aeronautical frequency use by oil rigs, and the planning of the Seminar by ICAO for information and action by the meeting.

1. INTRODUCTION

- 1.1 Oil rigs usually use NDB and VHF COM (AOC) for operation. With more and more oil platforms are being implemented over the south China sea, and the need for assignment of AOC frequency to ship for mobile service, the current procedure, and the way to use frequency are depleting the resource quickly and projecting risks to the safety and regularity of air transportation in Southeast Asia.
- 1.2 ICAO is requested to organize a seminar to share the best practice in this regard to further improve the efficiency in using aeronautical frequency in APAC without compromising aviation safety.

2. DISCUSSION

- 2.1 The oil rigs over the sea would use designated aeronautical frequencies for operations that involve aviation activities, such as helicopter operations for transport to and from the rigs, emergency medical services, and search and rescue operations. These frequencies are typically managed and assigned by relevant national and international regulatory bodies to ensure safe and efficient communication and navigation for aviation-related activities in offshore environments.
- 2.2 In APAC, States/Administrations approach ICAO APAC Office for NDB and AOC frequencies in case-by-case mode, as a long-standing practice, one oil platform may be assigned with one NDB frequency and one AOC frequency on most occasions. This practice has served the region satisfactorily for many years.
- 2.3 With more and more requests from States/Administration for aeronautical frequency coordination in this regard, this existing practice is no longer sustainable with the consideration of the efficiency of frequency use. It also introduced an unusually high percentage of AOC registration in the frequency database for concerned Administrations.
- 2.4 Table 1 is prepared from the data in Frequency Finder as of 13 February 2024, which presents the difference among States/Administrations in utilizing the AOC frequencies.

S/N	State/Administration	Total number of records	AOC records	AOC percentage
1	Australia	1320	0	0
2	Bangladesh	59	4	7%
3	China	2455	127	5%
4	Hong Kong, China	96	12	12%
5	India	1094	205	18%
6	Indonesia	614	81	13%
7	Japan	789	0	0
8	Malaysia	443	151	34%
9	Myanmar	54	2	4%
10	New Zealand	133	1	1%
11	Pakistan	201	16	8%
12	Philippines	210	68	32%
13	Republic of Korea	280	38	13%
14	Singapore	84	11	13%
15	Thailand	231	17	7%
16	Viet Nam	208	13	6%
17	APAC Region	8791	799	9%

Table 1: AOC Percentage in VHF COM Registrations

- 2.5 Considering the efficiency in utilizing spectrum, if the usage of the frequency is low, the AOC frequencies should be shared, even between different companies. This practice has been widely implemented in States.
- 2.6 From a technical viewpoint, time-sharing of NDB frequency might be possible where the actual usage and "turn-on-time" of each NDB is low and "planned-use-only". However, the final determination should be made upon the operational requirements.
- 2.7 Oil rigs are operated in the Gulf of Mexico, the Persian Gulf, North Sea and some other places around the world. Some Administrations, like CAA UK, have established well developed procedure in managing offshore VHF and NDB assignments, including guidance for fixed and mobile offshore / platform installations. Relevant information can be accessed by visiting CAA UK website and the online AIP. The relevant Civil Aviation Publication is CAP 452, **Title**: *Aeronautical Radio Station Operator's Guide*, which is available for downloading in PDF at:

https://publicapps.caa.co.uk/modalapplication.aspx?appid=11&mode=detail&id=7561

- 2.8 The CAP 452 contains links to the AIP for more specific information.
- 2.9 ICAO is planning a Seminar on Frequency Use by Oilrigs in Q3 2024 to analyse the existing frequency management process and planning criteria for oilrigs, as well as the need of frequency

assignment for oilrigs and ships in aeronautical bands. The Seminar will discuss operational risks in this regard, invite experience sharing from States and other regions, and propose a solution for south China sea.

- 2.10 The Seminar is expected to revise relevant procedure and planning criteria for APAC region and propose specifications for upgrading the Frequency Finder tool to accommodate the new requirements if necessary.
- 2.11 The invitation package will be issued to States/Administrations 3 months prior to the Seminar.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) note the information contained in this paper;
 - b) urge States/Administrations to register all aeronautical frequencies for NDB and AOC on oil rigs with ICAO APAC Office;
 - c) share the best practice in States/Administrations to regional forum, e.g. SRWG;
 - d) nominate experts to support and participate in the Seminar; and
 - e) discuss any relevant matter as appropriate.
