



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**SECOND MEETING OF WATER AERODROME SMALL WORKING GROUP
(WASWG/2)**

Colombo, Sri Lanka, 29 February to 2 March 2016

Agenda Item 4: Discuss draft water aerodrome standards

CASE STUDY OF WATER AERODROME OPERATIONS IN SRI LANKA

(Presented by the Sri Lanka)

SUMMARY

This paper presents a case study of water aerodrome operations in Sri Lanka and the limitations of water bodies used for water aerodromes in Sri Lanka which need to be considered when developing Standards for Water Aerodromes.

1. INTRODUCTION

1.1 Float Plane Operations in Sri Lanka started in year 1980. At present there are 19 approved water aerodromes and two float plane operators in Sri Lanka. Scheduled flights to 7 destinations are operated daily with approximately 25 to 30 flights per week.

2. DISCUSSION

2.1 Float planes operations has become a vital service to promote tourism in Sri Lanka. Sri Lanka has plenty of reservoirs constructed by the ancient kings in rural villages to store rain water for paddy cultivation. In addition there are reservoirs constructed in the central province of Sri Lanka to store water for the generation of hydropower. These reservoirs are used as water aerodromes for float plane operations. As Sri Lanka has these reservoirs in almost every part of the country, these reservoirs can be used as Water Aerodromes. Therefore float plane operations has become an easy means of connecting cities with rural villages in Sri Lanka.

2.2 However these reservoirs are used for irrigation of paddy fields, generation of electricity and cultivation of fisheries.

2.3 As such in order to use above water bodies as Water Aerodromes permission need to be obtained from the owners of the water bodies and different government organizations as per existing rules in Sri Lanka.

2.4 CAA faces lots of constrains to obtain permission from some organizations due to some miss conceptions of general public regarding the operation of float planes.

2.5 On the request of CAASL, National Aquatic Resources Research & Development Agency (NARA) conducted a scientific study to determine the effect of float plane operations on the aquatic life in the water bodies used for float plane operations and damage caused to water bodies due to float plane operations.

2.6 The final conclusion of the above study was that there is no factual basis for the restriction or prohibition of floatplane operation on the grounds of impacting fisheries or distracting to the water supply for irrigational activities. Further it has stated that they are not causing significant physiochemical and biological effects on the water quality and biota in the reservoir (Conclusions of the survey are attached as **Annex 1** to this Working Paper).

2.7 The water bodies explained above are comparatively small reservoirs. This is the main difference of water aerodromes in Sri Lanka and most of the other States.

2.8 These reservoirs are situated in mountainous areas, remote villages and sometimes urban areas too. Therefore some limitations in these water aerodromes exist such as;

2.8.1 The width of the water body

2.8.2 The height of objects around the water body

2.8.3 Limitations in Approach path

2.8.4 Using the water body for different purposes by different users

3. ACTION BY THE MEETING

3.1 The Meeting is invited to note:

- a) the case study; and
- b) the conclusions of the Scientific Study conducted by NARA regarding Float Plane Operations.

3.2 Limitations of Water Aerodromes in Sri Lanka when developing standards for Water Aerodromes.

The Conclusions of the Survey Conducted by NARA;

1. The floatplanes excel at providing fast, safer and ecologically friendlier transportation to remote and sensitive areas where conventional transportation are limited.
2. They are not causing significant physiochemical and biological effects on the water quality and biota in the reservoir.
3. The noise generating level may comparable to large motorboats, but it is site specific, brief and transitory, lasts for only the 20 to 60 seconds that a floatplane requires to takeoff and depart the area.
4. Site appraisal study enabled to identify most acceptable five Mahaweli reservoirs; Kotmale, Polgolla, Victoria, Randenigala, Maduru Oya to develop floatplane bases.
5. Site selection for water aerodromes could be permitted further minimizing likely impacts and safer landing.
6. There is no factual basis for the restriction or prohibition of floatplane operation on the grounds of impacting fisheries or distracting to the water supply for irrigational activities
7. Floatplane operation does not agitate the water and disturbs fish and aquatic life.
8. Under water noise generation is insignificant to make any impact to fish behavior.
9. The water aerodrome is assigned in deep central part of the reservoir occupying only a small strip of the water surface where fishing is rarely conducted. Except a floating jetty no other on-shore development is allowed at the base. All these will lead to minimize the likely impact to the land, forests, animals and birds.
10. Floatplane operation is allowed only for limited hours during the daytime avoiding fishing time, so the impact is minimal.
11. No direct relationship is observed in the issue of rationalization of water released for cultivation with the intention of retaining water to facilitating floatplane operation. Mahaweli Development Scheme provides water for irrigation as well producing hydropower for the country and has given rise to conflicting demands of water requirements from the two sectors. Floatplane operation never demands large volume of water and also never competes with either hydropower generation or irrigating paddy fields. It can operate at an even minimum water depth of 2 m. This much of reduction of water level has never been reported since these reservoirs have been constructed.
12. Although attitudes and perceptions of stakeholders are different, a relationship would be developed through supporting enhancement of their livelihoods in which the operational use of floatplanes must be coordinated with all users and interested parties of the community.