

**After Action Report (AAR) from the 26 March 2018 Meeting of the
International Civil Aviation Organization (ICAO)
Aerodrome Design and Operations Panel (ADOP)**

The 3rd plenary meeting of the ADOP was held 26-29 March 2018 in Montreal, Canada. This AAR is provided to International Federation of Helicopter Associations (IFHA) affiliates for purposes of situational awareness relating to ICAO actions.

The Aerodrome Panel (AP) was the successor of a Visual Aids Panel established in 1958, the former Aerodrome Reference Code and RFF Panels, and several existing study groups on aerodrome facilities and services. The AP was renamed to the ADOP in 2014 with greater emphasis on efficiency and capacity issues through enhanced aerodrome operations.

Annex 14 – Aerodromes, was created in 1947 as a design document to guide States in the development of their aerodrome infrastructure. The ADOP has started a holistic review of Annex 14, and its related documents, to facilitate their use with modern aerodrome operations.

The ADOP's main challenges include review of:

- Aerodrome design characteristics to take advantage of the enhanced performance of modern aircraft;
- Aerodrome reference code design methods and governing parameters;
- Obstacle Limitation Surfaces (OLS) concept to make it an effective regulation; and,
- Pertinence and adequacy of many visual aids which were developed in the 1950s -1960s.

In their work, the ADOP is mindful of modern technologies, both surface and airborne, which offer improved safety, efficiency and capacity.

These challenges have required the ADOP to adapt to effectively address:

- Provisions for Ground Handling Services;
- Airport Collaborative Decision Making (A-CDM); and,
- Advanced Surface Movement Guidance and Control Systems (ASMGCS).

Current ADOP challenges require tight collaboration with the Air Traffic Management Operations Panel (ATMOPSP), the Flight Operations Panel (FLTOPSP) and other Panels, with an aggressive timescale to ensure success.

As a member of ICAO's ADOP, the Heliport Design Working Group (HDWG) Rapporteur addressed the work group's recent efforts in development of proposals related to ICAO Annex 14, Volume II, Chapters 1-6: Heliport Design and Operations.

The ADOP addressed an HDWG review of Annex 14, Volume II, Chapter 3, to include physical characteristics for onshore heliports. In support of the proposed amendment to Chapter 3, an Impact Assessment and Implementation Plan was also provided.

Work in this area included final approach and takeoff (FATO) surface characteristics and slopes. A single common standard for ground level and elevated heliports has been introduced to

minimize unnecessary design complexities and reduce the overall number of ICAO standards and recommended practices (SARPS) in Annex 14 Vol II. Various additions and edits to existing definitions were addressed.

The ADOP's review of Annex 14, Volume II, Sections 5.2 and 5.3 addressed visual aids, to include marking and lighting. Discussion arose regarding some lighting systems that need to be provided at all heliports, while others need only be utilized where certain operational constraints occur.

A deeper review of Annex 14, Vol II will address light intensity, luminance, profile, color, pattern, serviceability, dimming and application of new lighting technologies including those which are compatible with Night Vision Imaging Systems (NVIS).

The ADOP assessed an HDWG review of Annex 14, Volume II, Section 6.2, Rescue and Fire-Fighting that originated at HDWG/9. In support of the proposed amendments, there is essential supporting guidance material for the forthcoming Heliport Design & Operations Manual, as well as an Impact Assessment and Implementation Plan. The proposed amendment represents a complete re-write of section 6.2, given that the present text has been in-force since 1990 and does not reflect current practices.

Heliport Manual guidance, from the 2nd edition of ICAO Doc. 9261 originated in 1985, following work completed in the 1980's by a study group on rescue and fire-fighting. Five years later, in March 1990, recommended practices for rescue and fire-fighting at onshore heliports were, for the first time, adopted in Annex 14 Volume II. After an additional five years, guidance material was added for offshore helidecks and published in the third edition of Doc. 9261 in 1995. It should be noted that there have never been corresponding SARPS published in Annex 14 Volume II for offshore helidecks. Recently, the ICAO Secretariat withdrew Doc. 9261, as much of the content is now obsolete and the Heliport Design & Operations Manual, as it is to be renamed, is in the process of being redrafted in two parts: an "Offshore" Manual, and an "Onshore" Manual; with a small section containing generic material applicable to all heliports.

These new proposals will seek to embrace the many technological advances, especially in the distribution methods for primary agents that have been developed since the SARPS were last revised in 1990. For the categorization of heliports, distribution methods are developed that in some cases are based on overall D-values (or FATO size) and in others, on fuselage length and width dimensions. The range of options presented by the scheme:

- allows for the most efficient solution to be selected in every case;
- accounts for the diversity of heliports addressed;
- addresses whether a foam application system is regarded fixed or portable; and,
- specifies whether the heliport is designed as a solid plate (i.e., impervious to liquids) or is porous (i.e., equipped with drain holes in the surface).

Note: Per ICAO policy, working group papers of any type (e.g., decision papers, working papers, flimsies, drafts, etc.) cannot be disseminated outside of their ICAO Panels and Working

Groups. Working group papers often contain sensitive materials that reflect initial thoughts and/or immature proposals that may not evolve into approved provisions.

Many issues are discussed within ICAO Panels and Work/Study Groups where information is restricted for release. Providing a high-level overview of ICAO issues covered within a Panel is acceptable if there are no actual copies of job cards, working papers, issue papers, etc. distributed.

IFHA organizations and representatives should keep discussions limited to the topic and the areas that are being examined, rather than presenting work which may not be complete. For example, an IFHA organization or representative can describe an issue that the ICAO's Air Navigation Commission (ANC) has specified for review via a Job Card, and what an ICAO Panel or Working Group is attempting to do that might be backed up with a manual, guide or risk analysis. This would be acceptable, but showing the proposed text for an Annex which has yet to be vetted through the ICAO review process would not be.