

REPORT – DEVELOPMENT CONSENT B50

Reference:

- A. NSW Department of Planning and Environment SSD requirement B50
- B. NSW Health GL2018_010 Guidelines for Hospital Helicopter Landing Sites in NSW

Background

Reference A has stipulated condition B50 (Proposed Helipad Design). This condition is:

Prior to the construction of the proposed helipad, a report prepared by a suitably qualified and experienced aviation professional must be submitted to the satisfaction of the Certifying Authority which states that the design of the helipad incorporates the relevant details outlined in Civil Aviation Safety Authority Civil Aviation Advisory Publication CAAP 92-2(2) Guidelines for the establishment and other relevant National and International guidelines.

AviPro Qualifications

In our capacity as a suitably qualified and experienced aviation organisation, the design and operational interface for the conduct of helicopter emergency medical services (HEMS) into and from the proposed development rooftop HLS have been developed to the standards required by Reference B.

Helipad Design – Relevant National and International Guidelines

Currently within Australia, there are no set rules or regulations applicable to the design, construction or placement of HLSs. There may however be local council planning, location and movement Approvals required.

The appropriate legislation at present for the use of HLSs is Civil Aviation Regulation (CAR) 92 which places the onus on the helicopter pilot to determine the suitability of a landing site. The Civil Aviation Safety Authority as the regulator of aviation in Australia divested itself of direct responsibility in the early 1990s and currently provides only basic operating guidelines via Civil Aviation Advisory Publication (CAAP) 92-2 (2) Guidelines for the Establishment and Operation of Onshore Helicopter Landing Sites.

CASA does not provide design, structural information or advice beyond that provided in the advisory publication (CAAP).

CASA, as a component of a Regulatory Reform Program, does propose to prepare rules for helicopter landing sites and currently has a panel established for this purpose. The new rules will form CASR Part 139R, however it is not expected that they will be completed any time soon. If and when they are introduced, there will be an implementation phase and “grandfather” clauses. Standards set by NSW Ambulance were established to meet or exceed those requirements.

Considerable work internationally has been undertaken over many years in this area, particularly through the International Civil Aviation Organisation (ICAO) and the US Federal Aviation Administration (FAA). The resulting documents on the subject provide excellent advisory material, guidelines and best practice standards.

ICAO sets out international Standards and Recommended Practices (SARPS) for the safe conduct of civil aviation activities in the Annexes to the Convention on International Civil Aviation (Chicago, 1944), with the following Annexes applicable to helicopter operations:

- Annex 6: Operation of Aircraft - Part III: International
- Operations - Helicopters 6th Edition July 2004
- Annex 14: Aerodromes - Volume II: Heliports 4th Edition 2013

Even though the current edition of Annex 14 is dated 2013, recent amendments are largely superficial and the basic document goes back to 1995. Additional guidance on the design of heliports and Helicopter Landing Sites is provided in ICAO's Heliport Manual (Doc. No. 9261-AN/903), although this document is also somewhat dated as it was last amended as the 3rd Edition in 1995.

ICAO Annex 14 Volume II provides SARPS for the planning, design, operation and maintenance of HLS facilities for use by the providers of these facilities, CAAP 92-2(2) provides only limited guidance material on the minimum physical parameters required to assist helicopter pilots and operators in meeting their obligations under CAR 92.

As a signatory to the Convention on International Civil Aviation, Australia has undertaken to apply the ICAO SARPS, except where specific differences have been notified to ICAO.

The Supplement (Second Edition, Amendment No.1, 18 February 1999) to Annex 14 Volume II, lists seven CASA Australia recommended differences to the ICAO SARPS relating to heliports. This document is now out-of-date and the differences remain. Subject to differences, CASA supported the adoption of Annex 14, SARPS for heliports.

Although CASA has not historically been active in the HLS field, many countries have, and in particular the US. Many years of experience operating large numbers of helicopters in a range of roles, have resulted in the production of comprehensive helicopter landing site and heliport design and operating procedures. The US Federal Aviation Administration (FAA) has produced an Advisory Circular, the content of which is actually required in the US, detailing the necessary standards. Within the AC is a comprehensive section devoted to hospital based "helicopter landing sites", and where more than one HLS is co-located, "heliports".

The resulting documents on the subject provide excellent advisory material, guidelines and best practice standards. Key current documents are as follows:

- ICAO Annex 14, Vol II, Heliports.
- ICAO Heliport Manual Doc 9261-AN/903.
- US FAA Advisory Circular AC 150/5390-2C, Heliport Design, (covers both operational and design criteria, particularly for hospital-based HLSs in Chapter 4, Hospital Heliports).
- Australian Civil Aviation Safety Authority (CASA) Civil Aviation Advisory Publication (CAAP) 92-2 (2) Guidelines for the Establishment and Operation of Onshore Helicopter Landing Sites. (covers essentially operational specifications only and is produced around European commercial helicopter airport-based operations).

- NSW Health GL2018_010 Guidelines for Hospital Helicopter Landing Sites in NSW dated 26 April 2018.

The Guidelines for Hospital Helicopter Landing Sites in NSW were prepared primarily around the ICAO and FAA guidelines and standards, utilising the most appropriate recommendations and practical HEMS operating procedures. The NSW Guidelines for Hospital Helicopter Landing Sites in NSW are the standards that exceed the requirements of CAAP 92.2 (2).

Summary

The creation and subsequent use of Reference B, NSW Health GL2018_010 Guidelines for Hospital Helicopter Landing Sites in NSW, in the design phase of the development has set a standard that exceeds the CAAP document.

The Guidelines provide detailed and specific operational, design, HLS marking and safety information that has been incorporated into the aviation reports, consultant information sessions and stakeholder meetings that together have resulted in a safe, functional and service delivery focused HLS capability.

Further Information

For further information on this Report, please contact the undersigned.

A handwritten signature in blue ink, appearing to read "Steve Graham".

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