DRONES

Will the murmur become a roar?

Flying a drone for recreational purposes has become as simple as walking into a camera store, hobby shop or electrical goods retailer to buy the drone, and then finding a local park to fly it around in. While flying a drone for commercial gain in Australia is not quite the same 'walk in the park', the Civil Aviation Safety Authority (CASA) has announced a long-awaited relaxation of regulations on the operation of drones that could have a major impact on the local drone industry.

Australia was the first nation in the world, in 2000, to begin drafting laws in anticipation of civil operations of unmanned aircraft, or drones. The Civil Aviation Safety Regulation (CASR) Part 101, introduced in 2002, covers the regulation of unmanned aerial vehicles (UAV) alongside balloons, model aircraft, rockets and fireworks. Since then, CASA has modernised the CASR to align with International Civil Aviation Organization (ICAO) terminology, in particular by replacing the term 'unmanned aerial vehicle' with 'remotely piloted aircraft' (RPA), now the official term used to describe drones in Australia.

Standard operating conditions

As long as there is no commercial gain from flying a RPA, then it may be flown without certification; however, standard operating conditions must still be observed for uncertified RPA use. Such flights are restricted to:

- an altitude of less than 120 m above ground level (AGL) and over water;
- locations outside of controlled airspace and prohibited and restricted areas;
- locations more than 5.5 km from an aerodrome or helipad;
- daytime use only;
- use within visual line of sight (VLOS);
- use in non populous areas; and
- use more than 30 horizontal metres from other people.

Certification requirements for commercial use

It is worth noting that 'commercial gain' in respect of RPAs is defined quite loosely. It can include flights for advertising purposes or even uploading videos to YouTube; in other words, any use of drones by a business is considered to be commercial in nature and it does not have to involve direct payment.

Unless they have CASA approval that permits them otherwise, commercial operators must adhere to the standard operating conditions listed above and, in addition, certification of both the business entity or company conducting the operation and the pilot flying the drone is required. The company must hold a UAV Operator Certificate (UOC) and the pilot of the drone must hold a UAV Controller Certificate (UAV CC) or Remote Pilot Certificate (RPC). The absence of either the UOC

or UAV CC/RPC renders the drone operations non-compliant with the current CASA regulations. (Note that although CASA has modernised the terminology, as mentioned above, they continue to use the term 'UAV' instead of "RPA" in association with controller and operator certificates.)

A UOC authorises a business to conduct RPA operations for commercial gain or profit. In order to be accredited, a business must show that they have met the mandatory requirements set by CASA and have a suitable organisational culture and business model for safe RPA operations. To obtain a UOC, the company is required to:

- develop their operations manual and operational library, detailing how they will operate the drone(s) safely and legally;
- submit these documents to CASA (along with the requisite forms and appropriate fee); and
- attend a CASA assessment, when the pilot's flying skills and knowledge of safety practices will be determined.

Even if the company holds a UOC, all pilots must hold either a RPC (often inaccurately referred to as a 'pilot's licence'), or a UAVCC, which is also not a licence. There are some differences between these certificates; however, both include a practical assessment component, the 'pilot competency test'.

New legislation, new challenges

Legislation that comes into effect on 29 September 2016 will allow a person to operate a very small RPA (that is, one weighing less than 2 kg) without certification – even if the flights are for commercial gain - as long as it is being operated under standard RPA operating conditions. This type of RPA used in this way will be known as an 'excluded RPA'.

Under the new legislation, such operators will simply be required to notify the CASA of their intention to fly a very small RPA for commercial flights under the standard operating conditions. An online notification system to be developed by CASA for the purpose is expected to further simplify and speed up the process.

These changes (and others not discussed here) are likely to have a significant impact on the drone industry. Currently CASA-licenced operators that provide drone services to others can expect increased competition from operators of very small RPAs that will be able to provide the equivalent standard of services (such as aerial photography and inspections) without the regulatory overhead. In addition, they may also find that existing clients are opting to purchase and operate their own very small RPAs instead of engaging their services.

The forecast changes to the legislation are also likely to have an impact on the insurance industry. The volume of requests for insurance cover from existing clients is likely to increase, and the quality of the controls used for risk assessments is likely to be affected, since commercial operators of very small RPA will no longer need to obtain regulatory approvals as long as they adhere to the standard operating conditions.

Examples of existing clients who may elect to purchase and operate their own drones include: construction companies and contractors (who may use drones for inspections at project sites); tree loppers (tree inspections); utility companies (asset inspections); and engineering companies (surveys of hard-to-reach infrastructure, such as bridge supports).

The Liberty International Underwriters (LIU) risk engineering advantage

The ease of purchasing very small RPAs (which are now both low cost and readily available) and the absence of experienced operators, operations manuals, job and flight risk assessments, pre- and post-flight checks, and flight manuals together contribute towards an elevated risk around very small RPA operations.

At LIU, underwriters work closely with risk engineers to better understand the risk exposures and controls associated with our clients' operations. Our risk engineers are committed to keeping abreast of this fast-developing industry and the regulatory changes impacting it and, in order to gain first-hand knowledge, they attend drone flight demonstrations and engage with existing drone operators.

If your clients are ready to launch themselves into the drone space, and need the reassurance of robust insurance cover, contact LIU to discuss the benefits of a General Liability policy, or visit: www.liuaustralia.com.au/risk-engineering/overview

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