

## **SAFETY ALERT: Lithium Batteries. 3-7-14**

RA-Aus have received an accident report submitted after the in-flight failure of a Lithium battery. On investigation the failure has been attributed to the incorrect charging and maintenance procedures of the Lithium battery.

This notice is to remind all operators using LITHIUM ION AND LITHIUM POLYMER BATTERIES to follow the manufacturer's charging and operations procedures.

Because batteries utilize a chemical reaction, battery performance will deteriorate over time even if stored for long periods of time without use. In addition, if the various usage conditions such as charge, discharge and ambient temperature, are not maintained within the specified ranges, the life expectancy of the battery may be shortened. If the battery cannot maintain a charge for long periods of time, even when it is charged correctly, this may indicate it is time to change the battery.

To charge lithium-ion and lithium polymer batteries, please use the "CVCC" or constant voltage/constant current. Lithium-ion and lithium polymer cells and battery packs may get hot, explode or ignite and cause serious injury if exposed to abuse conditions. Be sure to follow the safety warnings listed below:

- Do not install the battery backwards so the polarity is reversed.
- Do not connect the positive terminal and negative terminal of the battery to each other with any metal object (such as wire).
- Do not pierce the battery, strike the battery with a hammer, step on the battery or otherwise subject it to strong impacts or shocks.
- Do not solder directly onto the battery.

Do not disassemble or modify the battery. The battery contains safety and protection devices, which, if damaged, may cause the battery to generate heat, explode or ignite.

Darren Barnfield

Technical Manager

Recreational Aviation Australia