

New Safety Equipment Standards Lift Off



Photo: Courtesy of Vic PAW

How Its Used

The SETS equipment consists of a Restraint Harness that can be used in a dual purpose manner and a rescue strop for use in a "double lift". Firstly, it is used as a restraint harness by crewman such as the winch operator within the aircraft while attached to hardpoints with a "wander-lead". Also it is used by crewmen (winchman) on the Utility hoist during external lift or deployment operations. The separate Rescue Strop is used by the winchman during a "double lift" recovery of rescues. (as shown in the adjacent image).

In order to obtain ATSO authorisation the crew harness must, amongst other things, withstand the dynamic drop test requirements of AS1891, which includes a 3.8m freefall, typically resulting in lanyard loads of the order of 15-20kN (or 3500-4500 lbf).

The ATSO Authorisation will now enable SETS to sell their safety equipment in an "Off The Shelf" form for installation and use by aircraft operators within Australia.

It is also likely that the ATSO authorisation will make it simpler for manufacturers like SETS to export their product to countries such as the USA, Canada and New Zealand.

Anyone seeking further information on CASA authorisations under CASR 1998 Part 21 for should contact the Engineering Support Section of CASA for further information.

- Stephen Mahoney, Senior Airworthiness Engineer, CASA Engineering Support Section.

A GROUP OF EIGHT schoolgirls and two teachers rescued from rugged terrain in the Grampians were undoubtedly relieved to be found and lifted to safety by the Victoria Police Rescue Chopper in the early hours of 25 August.

Meanwhile behind the scenes at the Police Air Wing, John Berman of Safety Equipment Technical Services Pty Ltd was also relieved, but for quite different reasons. SETS had recently concluded the process of obtaining an ATSO Authorisation from CASA to manufacture his custom made safety equipment.

According to the Officer In Charge, Inspector Bruce Thomas, the Police Air Wing is one of the busiest search and rescue Operators in Australia and relies heavily on safety equipment such as that supplied by SETS.

Co-incidentally on the same day that the SETS equipment was used for the first time "in anger" by the Victoria Police, CASA officially presented SETS with their letters of Authorisation.

The occasion was significant as SETS are the first company to obtain CASA authorisation for production under ATSO C1003, the new standard for External Personnel lifting devices used in aviation applications.

New Standard Up until January 2003, when ATSO C1003 was published there was no minimum performance standard for Helicopter Rescue Equipment of the type produced by SETS and other manufacturers.

Although the FAA, as of January 2003 have published a draft TSO for similar equipment, their rule making process has not been completed yet.

The CASA rule making process, like the FAA's, now ensures that representatives of Industry have an opportunity to participate in the rule development phase prior to the draft CASA requirements being passed as legislation by the parliament.

As an original member of the consultative committee for ATSO C1003, John has volunteered many hours of his time to contribute to the rule making process.

Increased Costs It has been a long road to approval for SETS, not made any easier by the Government policy of cost recovery for CASA Production Approvals, recently increased by 70% under the recent changes to the Civil Aviation Fees Regulations

This situation puts Australian manufacturers at a disadvantage compared to their US counterparts. Although, it is hoped that the recent alignment of CASA and FAA requirements for production approvals under part 21 will give Australian manufacturers more reason to be optimistic about export opportunities.



Photo: Stephen Mahoney, permission Inspector Bruce Thomas, OIC PAW

Ready To Go. Mr Neville Probert (left), Head, Airworthiness Standards Branch presents John Berman (centre), Operations Manager, S.E.T.S Pty Ltd with letters of authorisation for Crew Harness & Rescue Strop as worn by Senior Constable Robert Russell (right), Air Crewman, Victoria Police Airwing.