

INQUIRY INTO REMOTELY PILOTED AIRCRAFT SYSTEMS

We have been following the proceedings of the Senate Committee into the Remotely Piloted Aircraft Systems and have not previously put in a submission.

From our reading of the Hansard and other submissions we feel that we have information, viewpoints and the necessary background to provide information on the area that is continually brought up regarding education and training in this area.

As an introduction, we have provided the following individual information as well as some of our major viewpoints.

We would be pleased to answer any questions from the Committee.

Jackie Slaviero Introduction.

- I have over 25 years of successful education experience and leadership.
- I am the international ambassador for the Honeywell Educators @ Space Academy program (HE@SA) where I represent over 3000 educators throughout the world and over 2 million students impacted by the program.
- I am a science, technology, engineering and mathematics consultant for local, national and international schools and systems.
- I have left the education system to allow me to concentrate full time on working to improve high tech skills education for our work force of the future.
- I believe that the educational use of drones in schools is essential if we are to empower our students of today to be the innovators of tomorrow.

Robert Carpenter OAM Introduction.

- I started remote flying Instruction in 1970
- I was the first Development and Test Pilot for the University of Sydney when they commenced their UAV program in the early 80's
- I have been involved at executive and council level with the MAAA since the early 1970's
- I was the Chief Flying Instructor for MAAA for a number of years and designed the Instructors course during that time
- I was on the executive of "Aeromodellers NSW" for 24 years, majority of that time as President and Chief Instructor. I stepped down in May of this year to concentrate on full time development of training and education in STEM with an emphasis on Drones.
- In my professional life, of over 25 years in the RAAF and continued work in this area following retirement, I was involved primarily with Training and Instruction of Military Aviation, including course development, with the RAAF. This is the area for which I was awarded the OAM.
- I have been employed in, and owned and managed, simulation and training companies in South East Asia for 16 years
- I have trained aviation personnel, both military and civilian from 14 different countries.

- The transcripts of these hearings have shown an ongoing message that we need to educate and train everyone in the use of drones. We need to embrace this but we need specialists in both education and aviation. One Giant Leap Australia has this capability.
- Since devoting full time to the drones area, we at One Giant Leap Australia, have been working with various personnel and educational faculties at Sydney Uni, UNSW, Wollongong Uni and Western Sydney. Recently we provided presentations on the regulations and use of drones for the University of Wollongong at a 2 day 'Drones in Research' conference. A side note here is that with all the research and development using drones, there is an extreme lack of knowledge on the regulations and especially where they fit into the different categories.
- We are now working with CASA on development of training and education programmes that will focus on working with educational institutions throughout Australia. Our first program was held with CASA involvement last Friday and was highly successful. 100% of the participants deemed the course as excellent with many asking for more workshops to develop their understanding of drones in an educational setting.
- We are finding that due to the exponential growth of drones and their easy retail access without any formal requirements for training or regulation that there is extreme confusion or a 'plug and play' attitude. Drones are now being used as the latest toy with no attention to aviation safety.
- The change in regulations last September that deregulated the sub 2kg category is contributing to this lack of knowledge. A major unintended consequence will be the lack of insurance cover as members of the insurance industry are being asked to insure something where there are no training requirements, which they are reluctant to do.
- The CASA drone education programs we are developing are integrated into the Australian National Curriculum. By providing quality teacher professional development and a set of policies and procedures that comply with school, curriculum and legislative requirements, we are able to make an impact on the safe use of drones in our community. By working with CASA and state and territory education systems, we aim to ensure the safe, responsible and ethical use of this kind of technology in the education setting. These programs will allow all Australian students and academics to develop skills, innovate, collaborate, delve further into research and development but at the same time ensure our best to keep the skies safe. Ultimately, this can only have great benefits for all involved both now and in the future.

Robert Carpenter and Jackie Slaviero

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