16 April 2008

Committee Secretary
Senate Economics Committee
Department of the Senate
PO Box 6100
Parliament House
CANBERRA ACT 2600

Dear Sir

AUSTRALIAN HYPERSONICS - SENATE INQUIRY

Australians involved with the science of hypersonics have established a world leading position and are presently capable of designing and building in Australia –

- Scramjet propelled missiles with capability to outperform anything on earth known in respect of speed and manoeuvrability.
- Scramjet propelled aircraft capable of Mach 8 operation and
- Scramjet assisted space access vehicles.

I am indebted to Prof. Ray Stalker who introduced me to hypersonics approx. 25 years ago. Since then, my company NQEA (now AIMTEK) has provided approx. $0.5 m support to the UQ Research Programme for Hypersonics through the design, construction and supply of research test equipment and rocket components.

During the 25 year association with UQ, AIMTEK has acquired significant knowledge of the aerospace industry.

AIMTEK has built a significant amount of components for the hypersonic test apparatus for UQ and components for all of the UQ research rockets launched from Woomera.

AIMTEK has designed and built a new hypersonic test chamber for ADFA capable of MACH 10 operation.

I was a member of the Queensland Government Industry Tour of the US space program as part of an initiative to build a spaceport in North Queensland.

AIMTEK research towards establishing an alternative space launch facility in North Queensland is ongoing.

In late 2006, I travelled to the USA in company with Prof. Allan Paull (then head of Hypersonic Research at UQ) for discussions with the Head of ONR, Admiral Jay Cohen. As a result of these discussions, the US Office of Naval Research gave a commitment to build a prototype scramjet missile capable of delivering a pay load (explosive type) to a target at a distance of 1000 km in 7 minutes.

One million US dollars was offered to start the research subject to a commitment from the Australian Government being given to guarantee the IP would be always available to the USA. Additional US funds were to follow.

Soon after the commitment was given, Admiral Cohen was redeployed to head research of US homeland security and DSTO took over the UQ principal hypersonic experts. As a consequence, the opportunity to take commercial advantage of the US requirement and Australian initiative and expertise was derailed.

I have since formed the company, Scramjet Pty Ltd, and have continued with the design of a Scramjet propelled missile capable of meeting the ONR requirements and alternative hypersonic vehicles with range and speed suited for other deployment.

The development and manufacture of Scramjet propelled missiles in Australia would enhance the capability of Australia's Defence force capability and do much to rebuild the Australian high tech manufacturing industry which is surely needed.

Scramjet Pty Ltd is currently preparing a submission for presentation to the Australian Government to support the development of an all Australian built Scramjet propelled missile.

The proposal will outline a time scale and cost estimate to develop the 1000 km in 7 minutes missile (the Firestalker SCM-8) as a partnership between the Australian Government and Australian industry.

It is proposed that the IP would be jointly owned and export would be on the basis of "as approved" by the Australian Government.

The recent takeover of the UQ Hypersonic Flight Centre by DSTO has put the private sector interest in Scramjet propelled craft on hold.

Hopefully this Senate inquiry will find Australians do have a world lead in hypersonics and the Australian Department of Defence would have a significant advantage through deployment of Scramjet propelled missiles.

Members of the Senate Inquiry should remember the Spitfire was designed by an English fitter and turner tradesman with a Diploma in Engineering attained at night school. He only achieved success because of his passion to succeed and the funds provided by a benevolent English lady. It took World War II to realise the potential.

Times have changed but we still have the Mitchell ingredient for success through combining similarly qualified, capable persons with a passion for hypersonics.

It only requires an Australian Government and Defence Force who believe Australians can, when put to the test, be the best. It is time to show the world leaders that Australians are world leaders in Hypersonic Technology and derive value from past efforts.

Yours faithfully

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