

TRACK 3: PROPULSION**“TESTING & COMMERCIALIZATION OF SUPERSONIC AND HYPERSONIC AIR BREATHING ENGINE”**

BY
MR PRADEEP DASS
SPACE ENGINE SYSTEMS INC.

ABSTRACT

Space Engine Systems Inc. (SES) is in the final stages of testing the full scale air breathing engine for proof of concept and commercialization by Q1/Q2 2018 for both aerospace and space applications. The DASS GN1 is for aerospace and can go up to Mach 3.2 and with some modifications, go up to Mach 5 at 30 kms altitude. The DASS GNX is for Space Applications and is expected to reach close to Mach 25 in vacuum conditions. It is a single stage to orbit design. It uses multiple fuels consisting of Jet Fuel, nano particle solid fuel and Liquid Hydrogen. The state-of-the-art test facility can test multiple fuels in an air breathing engine for full scale air breathing engine generating between 12 to 21 kN.

BIOGRAPHY OF SPEAKER

Pradeep Dass is the President & CTO of Space Engine Systems Inc., Canada www.spaceenginesystems.com. He is a Mechanical Engineer and has been working on Air breathing engines for 100 % reusable engines for space and high altitude flying of planes for more than two decades. The DASS GNX is for space applications and the DASS GN1 is for aerospace high altitude flying. The technology is expected to complete full scale demonstration for commercialization in 2018. He is also the President & CTO of Oil & Gas equipment company CAN-K. www.can-k.com where they manufacture all types of custom pumps for Oil & Gas, cryogenic and other high pressure custom made pumps for multiphase fluids.