THE HINDU BusinessLine

Godrej Aerospace to make semi-cryogenic engines

M RAMESH

Has been supplying the Vikas engines for ISRO's rockets

CHENNAI, DECEMBER 18: Godrej Aerospace, a division of Godrej & Boyce Ltd, has been mandated by the Indian Space Research Organisation (ISRO) to produce the more powerful and environment-friendly semi-cryogenic engines for it, the company's Executive Vice-President and Business Head, SM Vaidya told *BusinessLine*.

Godrej has been supplying the Vikas engines for ISRO's rockets, including two for the GSLV Mk III that flew today. Vaidya said the company has supplied over a hundred Vikas engines (which are, incidentally, named after Vikram Ambalal Sarabhai, India's renowned space scientist.)

Long delay

While cryogenic engines use liquid oxygen and liquid hydrogen, semi cryogenic engines (SME) use a combination of liquid oxygen and kerosene.

These engines have been used in American and Russian rockets for long. They powered the Saturn V rockets that took Americans to the moon; the Russian RD-180 engines have been used in Boeing's Atlas V rockets.

The SME project was approved by the Government of India in January 2009 at a sanctioned cost of ☐1,798 crore. Department of Space's Outcome Budget for 2014-15 says that the project is "in the initial stages".

It expects the engine to be fully developed "after six years".

Till the end of March 2013, ISRO had spent ☐155 crore on the project. Godrej will make six engines for ISRO. Vaidya said the company had begun work on three.

The SME is meant to power the future GSLV Mk III rockets as well as the heavy-life Unified Launch Vehicles, or ULV, which is today only a concept. The ULV will be a modular vehicle where the number of engines used will be based on the weight of the satellite or spacecraft.

The rocket will feature a combination of SME and an Indian cryogenic engine.