Aerospace and Defence (cont.)

Slated for launch in 2014, the
James Webb Space Telescope (JWST) will probe even
further into the Universe than the Hubble Space
Telescope. Designed to detect the first stars and
quasars of the early universe, Canada's contributions
to the JWST include the Tuneable Filter Imager (TFI).
The TFI is a unique, narrow-band camera that will
allow astronomers to search for extrasolar planets by
blocking out starlight so that they can see what
is in the star's neighbourhood.



Space

Canada's space sector consists of over 200 private-sector companies, research organizations, universities and government departments and agencies. Over 6,700 highly skilled professionals work in Canada's space sector. In 2008, over \$2.8 billion in revenues were generated annually by this sector, 50% originating from export sales. Canada's space sector has established a world-class reputation in areas such as earth observation, space robotics, space science and exploration, and satellite communications. A world leader in satellite communications. Canada is home to the fourth-largest fixed satellite service provider in the world. Canadian technology is also used in over 80% of all commercial communications satellites launched internationally.

KEY VALUE-CHAIN STRENGTHS

Upstream:

Composites and other advanced materials, robotics, defence electronics, space sciences, components, satellite technology

Midstream:

Manufacture of aircraft, helicopters, flight and visual simulators, command and control systems, unmanned vehicle systems (UVS)

Downstream:

Maintenance, repair and overhaul (MRO) services, aviation and aerospace training

KEY SEGMENT STRENGTHS

- Regional and corporate aircraft, commercial helicopters
- Commercial flight and visual simulators
- Gas turbine engines, landing gear systems, structural assemblies, precision sheet metal fabrication, component plating and coating
- Civil and military avionics
- UVS
- Satellite communications

