## **30TH SPACE STUDIES PROGRAM**

## Company is reaching for the stars

DUBLIN based company is certainly reaching for the stars as it does business with some of the major operators in the space industry. High profile space missions, such as the International Space Station is just one of those.

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Curtiss-Wright is located in Clonskeagh in Dublin and carries out engineering development, integration and test and sales support for a range of networked aerospace instrumentation products aimed at the international aircraft flight test and operational monitoring markets and space markets.

Over the last 10 years, Curtiss-Wright in Ireland has worked closely with the

## **CURTISS-WRIGHT**

European Space Agency to expand the market for its aircraft instrumentation into the space market through a structured program of test and adaptation called Space COTS (Commercial Off The Shelf).

The Dublin based facility has been successful in developing the market for Space COTS and is now a leading supplier of data acquisition avionics for space vehicles worldwide, providing fully integrated data acquisition systems aboard launchers and re-entry space vehicles.

"These innovative products, developed with the assistance of Irish ESA funding through Enterprise Ireland, have resulted in sustainable, export driven business and jobs growth. The company's space industry customers include ESA, NASA, Airbus DS, Thales Alenia Space, Boeing, Sierra Nevada, ELV and SpaceX," said a company spokesper-

Curtiss-Wright supplied the ESA IXV (Intermediate eXperimental Vehicle) spacecraft program with its rugged data handling and telemetry subsystem technology. Staff at the Dublinbased operation provided data acquisition, networking and recording subsystems that were installed on the IXV spacecraft to acquire sensor data throughout the duration of the mission including the critical re-entry phase.

"The IXV program is the

"The IXV program is the intermediate segment of the ESA's requirement to develop and flight test the technologies and critical systems required to autonomously return future missions from low earth orbit. In order to test new reentry technologies for future space vehicles, the IXV spacecraft was launched into a suborbital path by a Vega rocket from Europe's Spaceport in Kourou, French Guiana in February 2015," the spokesperson said

Curtiss-Wright, with support from Enterprise Ireland, developed and manufactured the mission critical data handling and telemetry



Danny Gleeson, Space Development Manager of Curtiss-Wright Dublin, demonstrates the Payload Data Router developed in Dublin, to former taoiseach Enda Kenny, director general of ESA Jan Woerner, and CEO of Enterprise Ireland, Julie Sinnamon. Below: The Payload Data Router. This was the first time an Irish company was the prime contractor for a payload sub-system delivered to the ISS.



units for the IXV spacecraft at its facilities in Dublin. Ireland joined the Vega launcher programme at the ESA Ministerial Council in December, investing in both the Ariane 6 and the Vega C development programmes. Because of this investment, Curtiss-Wright secured a contract with ELV, the Italian prime contractor for Vega, to provide the multichannel acquisition unit for Vega C, with a maiden launch in 2019. The company will also supply this technology for use as development flight instrumentation on the initial Ariane 6 flights. Curtiss-Wright will supply the video telemetry system to Ariane 6 in full

commercial exploitation. The expected launch rate for Vega-C is four per year and commercial revenue will start in 2019 enabling the further commercial exploitation of the technology in non-European launchers. In addition, the acquisition unit is common with the commercially focused Space Rider re-entry vehicle, which Ireland also sub-scribed to at the ESA Ministerial Council 2016. Irish sub-suppliers including Real-time Technologies in Dublin and Schivo in Waterford will also be involved in the development and ensuing commercial production activities.

Curtiss-Wright Dublin delivered the flight hardware for the Payload Data Router (PLDR), for launch to the International Space Station (ISS) in 2017. This is the first time an Irish company has been the prime contractor for a payload sub-system delivered to the ISS. PLDR will be used by astronauts to measure gravity acceleration and other variables in experiments in the Columbus module, Europe's research facility on the ISS.