

Job Title: Payload Opto-Mechanical AIT Engineer

Requisition ID 11893 - Posted 23/12/2020



EUROPEAN SPACE AGENCY

Vacancy in the Directorate of Science.

ESA is an equal opportunity employer, committed to achieving diversity within the workforce and creating an inclusive working environment. For this purpose, we welcome applications from all qualified candidates irrespective of gender, sexual orientation, ethnicity, beliefs, age, disability or other characteristics. Applications from women are encouraged.

Post

Payload Opto-Mechanical AIT Engineer

This post is classified A2-A4 on the Coordinated Organisations' salary scale.

Location

ESTEC, Noordwijk, The Netherlands

Description

PLATO is the third medium-size mission under the Agency's Cosmic Vision Science programme and its goals are to search for and characterise exoplanets around Sun-like stars in their habitable zone.

As the successful incumbent, you will report to the Mission Performance & Operations Manager (SCI-PLM), in the PLATO Project, Projects Department, Directorate of Science.

Duties

You will be responsible for ensuring the adequate and timely assembly, integration and testing of the PLATO payload opto-mechanical elements consisting of 26 visible-light cameras.

Specific duties include:

- Leading the camera manufacturing and integration capability assessment:
 - Evaluating the manufacturing capability assessment for the camera elements;
 - Consolidating, in collaboration with camera team partners, the mechanical AIT activities relating to the production of cameras for the flight model;
 - Defining and monitoring development of the early model, focusing on the feasibility of manufacturing and testing;
 - Ensuring robustness of the camera flight mechanical AIT schedule, including contingency scenarios to meet the programme schedule;
- Coordinating the camera alignment and test campaign preparation:
 - Providing support to the camera team partners with regard to definition and optimisation of the alignment procedures, and related Ground Segment Equipment (GSE) definition;
 - Leading the definition of the camera thermo-mechanical test procedures;
 - Providing support to the Mission System Performance Engineer, Mission & Payload Verification Engineer and camera partners with regard to definition of the opto-mechanical performance verification campaign;
 - Providing support with respect to the definition and implementation of functional test procedures, as required;
- Leading the camera mechanical AIT logistics aspects:
 - Supporting the camera team with regard to the definition, development and tracking of flight camera hardware traceability (serialisation, documentation, inventory, etc.);
 - Ensuring efficient procedures are established for transport, handling and control across parallel integration and testing sites;
 - Supporting camera team partners as required regarding logistics aspects: transport, storage arrangements, customs clearance, etc.;
 - Defining, in collaboration with the Mission & Payload Manager, the process and logistics for incremental camera delivery to the prime contractor;

Duties continued

- Following up the camera AIT campaign:

- Acting as the day-to-day project interface with the PLATO camera AIT team regarding all aspects of integration, alignment and testing of the PLATO cameras;
- Participating, as required, in the critical AIT camera development and flight model activities;
- Coordinating, along with the camera lead engineer, the participation of the ESA Payload team in the AIT campaign;
- Ensuring adequate documentation, traceability and resolution of AIT anomalies following agreed processes, and coordinating involvement of the required expertise;
- Ensuring the timely delivery of camera systems through close monitoring of the schedule, early identification of potential bottlenecks and delays, and the swift definition of alternatives with the Mission & Payload Manager;

- Supporting AIT interfaces and activities at spacecraft level:

- Acting as Payload Systems Team representative with respect to the definition, control and verification of AIT interfaces between cameras and spacecraft;
- Providing support to the PLATO AIV and Spacecraft section with regard to the review and definition of alignment and integration procedures at spacecraft level;
- Coordinating the delivery of development and flight model cameras to the spacecraft team;
- Providing post-delivery support and participating, as requested, in the spacecraft level camera integration and testing.

Participating in other Project and Science Projects Departmental tasks when required.

You will coordinate and work closely with members of the Section and with those of the AIV and Spacecraft Sections. You will be supported by Directorate of Technical and Quality Management engineers, as required.

Technical competencies

Systems engineering

Definition and execution of opto-mechanical systems testing

Optical mechanical integration and alignment activities

Optical GSE at scientific instrument level

Thermo-mechanical AIV/AIT background including test facilities

Optical instrument functional test definition and assessment

Behavioural competencies

Result Orientation

Operational Efficiency

Fostering Cooperation

Relationship Management

Continuous Improvement

Forward Thinking

Education

A Master's degree or equivalent qualification in a relevant engineering discipline is required.

Additional requirements

Effective communication skills are of the utmost importance in building up successful professional relationships with the many interfaces.

Operational efficiency includes strong planning capabilities to optimise and adapt the schedule.

Other information

For behavioural competencies expected from ESA staff in general, please refer to the ESA Competency Framework.

The working languages of the Agency are English and French. A good knowledge of one of these is required. Knowledge of another Member State language would be an asset.

The Agency may require applicants to undergo selection tests.

The closing date for applications is 27 January 2021.

At the Agency we value diversity and we welcome people with disabilities. Whenever possible, we seek to accommodate individuals with disabilities by providing the necessary support at the workplace. The Human Resources Department can also provide assistance during the recruitment process. If you would like to discuss this further please contact us at contact.human.resources@esa.int.

Please note that applications are only considered from nationals of one of the following States: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, the United Kingdom and Canada, Latvia and Slovenia.

According to the ESA Convention the recruitment of staff must take into account an adequate distribution of posts among nationals of the ESA Member States. When short-listing for an interview, priority will first be given to internal candidates and secondly to external candidates from under-represented Member States. (<https://esamultimedia.esa.int/docs/careers/NationalityTargets.pdf>)

In accordance with the European Space Agency's security procedures and as part of the selection process, successful candidates will be required to undergo basic screening before appointment.

Recruitment will normally be at the first grade in the band (A2); however, if the candidate selected has little or no experience, the position may be filled at A1 level.