



# ISS PAYLOADS DESIGN AND OPERATIONS SAFETY

Code 004



## The Challenge

The course is designed to provide the participant with an understanding of safety requirements, procedures and processes that are used for design and operations of payloads for the International Space Station.

## Scope of the course

This course is designed as a guide to the ISS payload/cargo safety review process. The student will gain an understanding of the applicable safety documents and key safety technical requirements, of payload/cargo safety as it relates to the overall development and integration process, how the payload/cargo safety review process works, and the roles and responsibilities of the various players. In addition the student will be instructed in the hands-on fundamentals of hazard analysis, hazard documentation, and presentation to the Payload Safety Review Panel.

Through this IAASS course the participant will acquire a detailed understanding of concepts and requirements in SSP 51721, SSP 30599, and supporting guidelines, and will familiarize with the preparation and presentation of hazard reports.

Completion of the IAASS course "Human Spaceflight Safety" is a mandatory prerequisite to attend this course.

## Target Audience

- Safety engineers and managers, system engineers, QA personnel, project managers responsible for development, integration and operation of payloads/cargo for ISS;
- Other technical discipline personnel who contribute to the design and operations of ISS payload/cargo and need to understand the process by which hazards are identified and controlled.

## What You Will Learn

- The ISS payload safety documentation
- Where to find requirements
- hazard reports and supporting data
- Common mistakes



Tommaso Sgobba



Paul Kirkpatrick

- The Phased Review Process
- How to prepare for the Safety Panel Meeting

## How You Will Learn It

- Verbal instructions using Power Point Presentations
- Videos & Photographs
- Case studies
- Group exercises & problem solving
- Preparing/completing forms
- Mock presentation to safety panel

## Why You Need to Know this

- To design your payload/cargo for safety
- To understand the significance and procedures of the safety process
- To identify resources for implementing payload safety
- To know what the ISS Safety Review Panel (SRP) expects from you
- To get safety certification to fly

## What You Will Take With You

- The course presentation charts.
- A selected set of documents.
- A USB flash drive with all the above.
- A Certificate of Course Completion.

## Course Duration

6 modules of 90 minutes each on 1 and 1/2 days.

## Instructors

**T. Sgobba** (ESA Ret. – Flight Safety Chair)

**P. Kirkpatrick** (NASA Ret. – Ground Safety Chair)