

Ali Guarneros Luna
NASA Ames Research Center 1/2020
Project Manager, Aerospace and System Engineer

Summary

Experience in building Space Hardware for on man and unman missions.
Project Manager for space technology development that is state of the art.
Program Manager for a quality and workmanship process to build flight hardware
Deputy Project Manager-Leading effort to build and certify suborbital rockets experiment,
CubeSats bound to the ISS
Space systems engineer – Currently leading efforts for TechEdSat Series, and SOAREX
experiments.
Lead the teams of engineers working on human rated vehicles like Nodes spacecraft and
SPHERES Batteries to the international Space Stations, and TechEdSat Project various
technical areas: TechEdSat is a NASA/Ames-

Serves as an authoritative source of information for hardware development, integration and testing and for decisions and guidance concerning changes in ISS program requirements, scheduling and budgeting which will affect the development of Cubesat bound to the ISS.

-Initiate investigations of ESD Non Conformances found in EPAS at the center and to find solutions to critical problems in design, fabrication, assembly, integration and test operations related to ESD work.

Oversite contracts for research and to evaluate new product for ESD NASA Ames Research Center

NASA AMES RESEARCH CENTER

June 2018 to December 2019

Safety and Deputy Manager, System Engineer TechEdSat 8

Managerial/oversight on all technical and programmatic aspects of the TechEdSat-8 Project; made technical contributions to both speed the development and meet ISS requirements.

Co-manages all project elements and phases for TechEdSat 8 hardware and software, which had eight subsystem which demonstrated technology for the 1st time that support major subjects for NASA SSTP program route map.

Makes technical presentations on behalf of project management, to NASA personnel, contractors, and other government representatives

Manages the technology transition process for technology and research project activities to flight hardware and validation of technology

Manage and lead the evaluation and alignment of technology activities for flight hardware

Communicates with the project management, technical leads, technology innovator(s)/principal investigators, external industry and other Government

Agency experts for the development of 1st Virtual reality experiment for small satellite and the 1st NOAA radio for small satellites

Coordinate with Principal Investigator to assist in the determination of technology maturation value and alignment to mission and project goals.

Evaluates project and technology development plans to prioritize and recommend options for steps to follow and mature technology

Establish and maintain the TechEdSat's ISS Hazard Report system that identifies Safety details, hazards and controls

Lead Safety requirements of fast turnaround build spacecraft and develop documentation for ISS.

Co-author technical papers for small cubesat and payload including project plan mission –D, SmallSat Conference, among others

Develop and Author of ISS standard document for Small SpaceCraft

-Led the efforts to successfully meet the requirements from ISS program and Ames Engineering requirements

Author of Safety Data packet for PSRP

Leading the efforts to certify and build the next generation of TechEdSats hardware for ISS

Develop project

Lead coordination of the group to ensure feasibility studies, design, development, applied research, fabrication, integration, testing and operations of space light systems are applied during the development of the satellite.

Develops, negotiates, and coordinates partnerships via Space Act Agreements, Cooperative Research and Development Agreements, or other agreement mechanisms for the SAA with San Jose State University to advance the capabilities of development of satellite by adding new ideas of experiment/subsystem/sensor and promoted state of the art technology.

Suggest modifications to test procedures and techniques are developed and implemented as necessary to increase reliability and reduce the number of failures

Make substantial and continuing contribution to TechEdSat 8 project planning and to the formulation, modification, and determination of overall objectives.

Oversight of scheduling and budgeting for the program.

Co Directs and manages budget and resource planning activities for TechEdsat 8 project.

Plan, guides, coordinates, and manages the work of the team and ensure that the resource were engaged to accomplishing the missions and functions of the project

Provides guidance, recommendations and advice to PI project management of the subsystems for TechEdSat on strategic and tactical direction for technology maturity

leading work in compliance with NASA policies and procedures such as safety and mission assurance guidelines and among others

Supervises and controls the work of the mission when PI is not available

Create, plans and contributes to long-range TES project planning, including proposal preparation, requirements development, formulation, modification, and determination of overall Technologies and Science demonstration for each satellite.

Responsible for evaluating procurement activities, including technical purchase orders and controlled laboratory purchases for chemicals and/or biological agents to the lab.

Ensures that Flight lab and equipment are certified and operated in accordance with safety standards described by local, state, and federal regulations and NASA Standards.

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June 2017 to Present

Safety and Deputy Manager, System Engineer TechEdSat 7

Managerial/oversight on all technical and programmatic aspects of the TechEdSat Project; made technical contributions to both speed the development and meet ISS requirements,

Lead Safety requirements of fast turnaround build spacecraft and develop documentation for ISS.

Co-author technical papers for small cubesat and payload including project plan mission –D, Safety Data Package, among others -Develop and Author of ISS standard document for Small SpaceCraft

led the efforts to successfully meet the requirements from IS

related to safety, costs, and project performance during the design, build and test of the satellites.

Manages the technology transition process for technology and research project activities to flight hardware and validation of technology

Manage and lead the evaluation and alignment of technology activities for flight hardware

Coordinate with Principal Investigator to assist in the determination of technology maturation value and alignment to mission and project goals.

Coordinator with group from ISS office to perform design, analysis, development, fabrication, integration, testing and operations of TechEdSat 5 and 6 flight system to ensure that it meets all requirements for the ISS office.

Evaluates project and technology development plans to prioritize and recommend options for steps to follow and mature technology

Lead investigations, and risk management studies to find solutions to issues that during

Oversight of scheduling and budgeting for the program.

Plan, guides, coordinates, and manages the work of the team and ensure that the resource were engaged to accomplishing the missions and functions of the project

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Deputy Project Manager for SOAREX 8
System Engineering

March 2014 to Sep 2015

Managerial/oversight on all technical and programmatic aspects of the NASA documentation and requirements for Sounding Rocket SOAREX

Lead Engineer for Integration of Main Payload

Manage the budgets of the project

-Responsible of project plans

-Lead trade studies, and risk management to find solutions to issues for resource allocation and technical engineering operations

Overseeing the development of payload and build up

Overseeing the development of spacecraft and build up

Develop project management work breakdown structures, budgets, project plans, and risk and

Coordinate and supported with partners and collaborate understand design, development, fabrication, integration, testing and operations of flight payload system

Oversight of scheduling and budgeting for the battery development.

Plan, guides, coordinates, and manages the work of the team and ensure that the resource were engaged to accomplishing the missions and functions of the project

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Co-PI and System Engineer TechEdSat 4

August 2013 to June 2014

Managerial/oversight on all technical and programmatic aspects of the NASA/Ames-SJSU-IoU, TechEdSat Project; made technical contributions to both speed the development and meet ISS requirements,

Lead integration Engineer and solder- six-week turn around build spacecraft and develop documentation for ISS.

Co-author technical papers for small cubesat and payload including project plan mission –D, Safety Data Package, among others

Led the efforts to successfully meet the requirements from ISS program and Ames Engineering requirements

Author of Safety Data packet for PSRP

Leading the efforts to certify and build the next generation of TechEdSats hardware for ISS

Develop project management project plans for class D

Co-author technical papers for small cubesat and payload including project plan mission –D, Safety Data Package, among others
 Led the efforts to successfully meet the requirements from ISS program and Ames Engineering requirements
 Lead Engineer on safety requirements for ISS,
 Co-author technical papers for small cubesat and payload including project plan mission –D, Safety Data Package, among others
 Leading effort to up-mass and certify the next generation of spacecraft
 Overseeing the development of spacecraft and build up
 Responsible for system Safety and Mission Assurance of the mission and environment
 Core team member of system and integration of flight hardware
 Author of Safety Data packet for PSRP

September 2012-Present

Systems Engineer

**NASA/ Metis Technology Solutions, Inc. Mountain View, CA
 SPHERES National Lab**

Expert on Safety requirements for the ISS
 Member of engineering staff for SPHERES National Lab at ARC: responsible for flight and ground consumables and hardware.
 Author of Configuration Management Process for SPHERES Project
 Author of Procedures for Battery Build
 Flight Time Experience: Active participant in SPHERES ISS flight experiment sessions, and documented experiment outcomes
 Over site procurement and service request for SPHERES Lab
 Leading the efforts to certify and build ISS SPHERES National Lab and Engineering Batteries and CO2 Tanks

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June 2010 to June 2012

Edison Program

Mission Manager and System Engineer TechEdSat

Mission Manager for TechEdSat (managerial/oversight on all technical and programmatic aspects of the NASA/Ames-SJSU TechEdSat Project; made technical contributions to both speed the development and avoid ISS hazard obstacles, through innovative design, lab test, and qualification methods of the TechEdSat flight hardware)

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Led SNAPS project from initial proposal and project award, and became the SNAPS Project Manager at San Jose State University, which was sponsored by NASA AMES.
Lead investigator for a High School educational Balloon Payload for the State of Alaska Educational Department.

**SPHERES National Lab
Program Office-Engineering Support**

June 2010 to Present

Member of engineering staff for SPHERES National Lab at ARC: responsible for flight and ground consumables and hardware.

Flight Time Experience: Active participant in SPHERES ISS flight experiment sessions, and documented experiment outcomes

Over site procurement and service request for SPHERES Lab

Leading the efforts to certify and build ISS SPHERES National Lab and Engineering Batteries

Other Related Experience

Feb. 2010 to May 2010

**San Jose State University
Front Desk at college of Engineering, Deans Office**

Coordinated and supported outreach events at San Jose State University

Member of and Organizational coordinator of AIAA Space Student Workshop at San Jose State University in August 2011 and 2012

Leading and coordination outreach events thought the year promoting science, technology, engineering, and mathematics (STEM)

Helping Universidad Autonoma de Baja California develop an outreach program for Aerospace Engineering field by developing projects

Recruit and Develop students for technical work with in the Aerospace Industry

Retail Work History

Pottery Barn Kids

November 2004 – May 2019

Valley Fair

Customer Service Sales Associate

Sales associate: Assist customers in developing, completing, and designing children's rooms on educate customer on the product and maximize the sale. Assist managers on floor sets and visual changes. • Customer Service Associate: Supervise sales associates on the floor, delegate of floor sets to employees, Decision making on visual merchandise. Increase sales in the store by calling customers about future sales

Gymboree:

June 2005 – October 2006

Valley Fair Store

Assistant Manager

Assistant Manager: Human Resources: Interview, Hire, and Develop personal in company's standards and polices. Operational: Receiving, Shipping, and Inventory of product. Filling and organization of paperwork. Manage and delegate tasking among personal. Decision making on visual merchandise. Planning on new lines and special events occurring (sales, promotions, etc.) Sales associate: Assist and educated customers on the product and maximized the sale.

Sharper Image

November 2001 – January 2003

Los Gatos Store

1st Assistant Manager

August 2002 – January 2003

Interview, Hire, and develop personal in company's standards and polices. Operational: Receiving, Shipping, and Inventory of product. Filling and organization of paperwork. Manage and delegate tasking among personal. Decision-making on visual merchandise and inventory need for store. Follow up with costumer's orders and product.

Palo Alto Store

2nd Assistant Manager

February 2002 – August 2002

Interview, Hire, and Develop personal in company's standards and polices. Operational: Receiving, Shipping, and Inventory of product. Filling and organization of paperwork. Manage and delegate tasking among personal. Decision-making on visual merchandise and inventory need for store. Follow up with costumer's orders and product.

Valley Fair Store

Senior sales

November 2001 – January 2002

Operational: Supervise the sales floor and employee productivity.

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