





# SERVOCONTROLS AEROSPACE INDIA PVT. LTD

AN "AS 9100 C " CERTIFIED COMPANY

# **Desktop Sat Sims** (Make in Belgaum)

# Fully integrated hardware and ground system simulation.

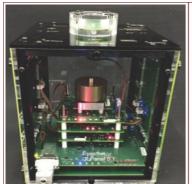
A better way to learn how to build and control operational space craft.

#### **Users get hands-on, practical experience in:**

Sytems, Mechanical, Electrical, E & E, Aeronautical, Space instrumentation & Thermal Engineering Integration and Verification & Validation

Attitude Determination & Control in a simulated frictionless, environment, using 2 types of actuators Command & Data Handling

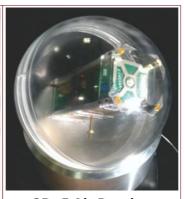
Ground System Interface for Telemetry and Command & Control



Traditional EyasSat Model Code: SCAIPL5001



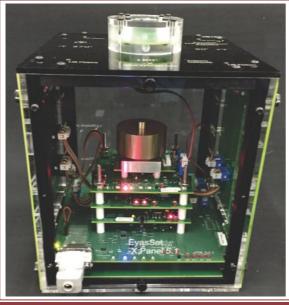
EyasSat<sup>3</sup> Cube Sat In Development



**3DoF Air Bearing** In Development

### **Applications in Real World**

- ▶ Cyber Security
- **▶** Telecommunication
- ▶ Tele-Medicine
- ▶ Tele-Education
- ▶ Mobile Satellite Services
- ▶ Radio Networking
- ► Village Resource Centre
- ▶ Satellite Aided Search and Rescue
- ► Satellite Navigation Programme
- Satellite News Gathering and Dissemination
- Standard Time and Frequency Signal Dissemination Services
- **▶** Television
- Training and Developmental Communications Channel (TDCC)
- ▶ Satellites for Communication
- ► Disaster Management Support Programme
- ► Satellite Navigation Programme
- Climate & Environment



## Model Code: SCAIPL5001

- There is no other training kit like this in the world!
- For students and ongoing professional development
- Affordable and durable
- Includes all major satellite subsystems & ground support system
- User Guide contains lab exercises for easy to build curriculum
- ► Comes with customized COSMOS<sup>™</sup> ground system
- Other optional accessories include Accelerometer/Magnetometer,
  Center of Gravity Transducer Board, Kapton Tapes for further thermal studies, and single axis air bearing (currently being beta tested)
  Payloads, additional radio and solar array can be added easily

(LICENSE PRODUCTION IN INDIA FROM EyasSat)

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# **Personnel Behind the Technology**





Mr. Deepak V, Dhadoti, Genah Murphy Burditt, Dr. Sharan Asundi, Gerry Murphy

#### Mr. Deepak V, Dhadoti

Chairman and Managing Director, Servocontrols Aerospace India Pvt ltd

He was working in USA at Moog and was inspired by His Excellency by Late Bharat Ratna Dr Abdul Kalam's call to serve the Mother Land. So he took leave from his lucrative job and returned to India in the year 2002 with a vision, for his country India and hometown Belgaum. His vision bloomed as a Company named Servocontrols at their Home Garage in Bhagya Nagar in Belgaum. And today the Company with an Employment strength of 250+ boasts of a world class state of Art Facility at Udyambagh, Belgaum. It caters to the industries in the field of Aerospace, Defence, Steel Mills, Powergen, Petrochemicals, Construction Equipments and Plastics etc. across the world and in India. And has developed eminent clientele. Servocontrols is in technical alliance with various No 1 leading Companies across the world & especially from Japan, Israel, Germany, UK and USA.

Today as India is cherishing into the glory of successfully maneuvering its satellite to its respective orbit around the Mars, 'Servocontrols feels gratified that its cryogenic position sensors were used on this mission named MOM (Mars Orbiter Mission). As Servocontrols is the proud Industrial partner of ISRO. ISRO also reacted and reciprocated their gratification towards Servocontrols Aerospace India Pvt. Ltd. Recently Servocontrols has been recognized by LCA (Light Combat Aircraft) group of HAL as indigenous partner among 30 major suppliers. The Company has won many meritorious awards for Sales and Technology in USA, Germany and in India. Servocontrols has been selected by Prime Minister to comprise his Business Delegations several times to many developed Nations. The US Consulate General Jennifer McIntyre has visited Servocontrols in Feb 2014 and congratulated Servocontrols as trustworthy business partner to its US companies.Mr Deepak Dhadoti is recipient of prestigious "Industrial Jewel Award "for the year 2012 constituted by Karnataka Government and has received many felicitations from various Institutions of Government of India. The Karnataka Lingayat Education Society recognizing the contributions made by its illustrious alumni Mr Deepak V Dhadoti to Mars Orbiter Mission conferred upon him the first ever "KLE, RATNA".

#### Genah Murphy Burditt, COO EyasSat

Received her Bachelor of Science from a University of California School in 1996. The most significant period she spent at Denver Museum of Nature & Science where she had the opportunity to mingle with the likes of Jane Goodall and John Glenn She was Coordinat or for the Liberty Bell 7 Temporary Exhibition (2002-2003) and for the permanent Space Odyssey Flagship Exhibit when it opened in 2003.

#### Dr. Sharan Asundi

Dr. Sharan Asundi, a native of Belgaum, INDIA and a proud product of St Paul's High School (Camp, Belgaum), is a Ph.D. from University of Florida. He has partnered with Servocontrols Aerospace India Pvt Ltd. Also Currently, he is engaged in several teaching and research activities, largely focused around initiating a Small Satellite (SmallSat) Program at Tuskegee University. As part of this effort to establish a SmallSat program, Dr. Asundi has engaged in research collaboration with NASA Goddard Space Flight Center (GSFC) as a Visiting Researcher (Science Collaborator). Based on preliminary research conducted at NASA GSFC, Dr. Asundi has been awarded grants by the U.S. Air Force Office of Scientific Research (\$151,370 awarded to Dr. Asundi as PI) and National Science Foundation (\$299,907 awarded to Dr. Asundi as PI) to set up a Magnet Coil Test Facility and research Magnetic Mapping of Pico/Nano/Micro-Satellites (PNMSats) at Tuskegee University. Dr. Asundi has also set up an Amateur Radio Station through an award from Rockwell Collins (\$16,000 awarded to Dr. Asundi as a PI) at Tuskegee University to track satellites and contribute not just in developing relevant technologies but also in atmospheric studies. Dr. Asundi teaches courses in Orbital/Space Mechanics, Automatic Flight Controls, and Satellite Design, among others. Dr. Asundi has actively engaged in research/teaching collaboration with academic institutions in India (PES University, Gujarat Technological University, Madanapalle Institute of Technology and Science, etc). As part of these invited visits across India, Dr. Asundi has conducted several short courses and workshops in Systems Engineering and Design of PNMSats.

#### Gerry Murphy, Chief Technology Officer.

Mr. Murphy has two Masters Degrees one in Astrophysics and the other in Electrical Engineering, from the University of Iowa. Mr. Murphy transitioned to the field of Space Physics at UI under supervision of Dr. James Van Allen and has since spent 35 years in the field of space technology covering everything from sensors to spacecraft to launch vehicles. After working a number of unmanned programs at the University of Iowa he developed instruments for the shuttle program and worked as operations manager for two different SpaceLab missions. Following the Challenger Accident Mr. Murphy began work at Jet Propulsion Laboratory in Pasadena where he worked in Space Environments (radiation specialty), realiability, and also developed sensors for space plasma applications under which he holds several patents.

Website: www.servocontrolsindia.com E-mail: deepak@servocontrolsindia.com, aerospace@servocontrolsindia.com

### **Building Satellite at Metropolitin State University of Denver**



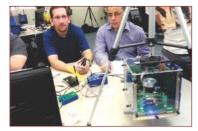






MAKE IN INDIA

## Let us Skill India with Today's Technologies for our Schools & Colleges



Learning EyasSat Satellite building working and controlling at Various US Schools and Universities across USA



School Children Learning Eyassat India

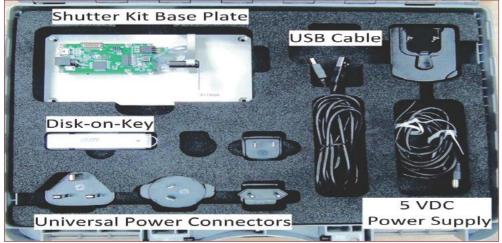


Subject Class rooms



Subject eyassat training and building by US airforce personnel

### Understanding and operating of Nano technology Ex. to open & close satellite camera shutter



Nanotechnology piezoelectric based Rotary shutter simulation kit Simulation kit Model No: SCAIPL7150

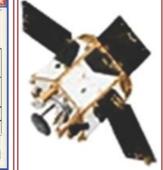
### **Applications:**

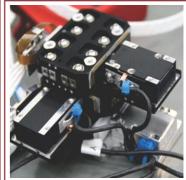
- Thermal Imaging
- **▶** Hyper spectral image
- **▶** Geospatical mapping
- **▶** Wind anemometry
- **→** Theodolites
- **▶** Night vision goggles
- **→** Gimbals
- **→** Target locators
- **▶** Low Earth orbiting satellites



Assembled view







Low Earth Orbiting Imaging System

Programming software

### Address for Correspondence:

# SERVOCONTROLS AEROSPACE INDIA PVT. LTD.,

#### Closing The Loop

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Tel: 91-83102407501/2/3, 4219555, 4201132

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E-mail: aerospace@servocontrolsindia.com Website: www.servocontrolsindia.com

## A thrilling Journey from Home Garage to Mars Orbit

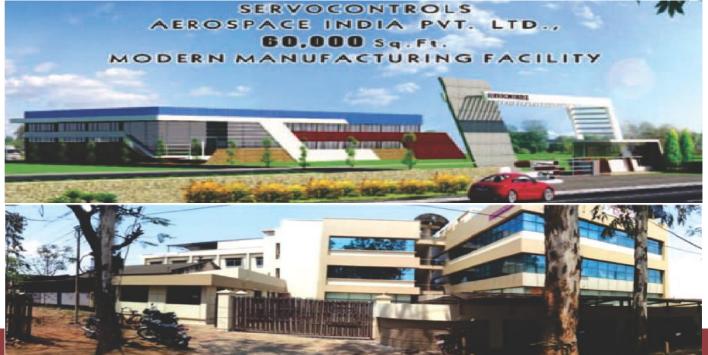


In 2002 Dinesh & Deepak at their House Garage launching the Service Center and Company



Cryogenic Position Sensors working at Mars Orbit

SERVOCONTROLS 100% EOU unit in 12 acres of land near Hattargi Belgaum Special economy Zone



Part No. SC 10500217

