

# Discover Space Technology

Use these resources to explore what is going on in the world of aerospace.

## Read About It:

*Aerospace Design: Aircraft, Spacecraft, and the Art of Modern Flight* by Anthony M. Springer

*Air and Space: The National Air and Space Museum Story of Flight* by the Smithsonian Institution and Andrew Chaikin

*Barons of the Sky: From Early Flight to Strategic Warfare: The Story of the American Aerospace Industry* by Wayne Biddle

*The Enterprise of Flight: The American Aviation and Aerospace Industry* by Roger Bilstein

*Rocket Boys* by Homer H. Hickam, Jr.

## Log on:

<http://origins.jpl.nasa.gov>  
This fascinating Web site describes how NASA is searching for life on other planets, including detailed descriptions of the technical challenges involved.

[www.space.com/searchforlife](http://www.space.com/searchforlife)  
News, blogs, and columns about the search for life on other planets.

[www.seti.org](http://www.seti.org)  
The mission of the nonprofit SETI Institute is to explore, understand, and explain the origin, nature, and prevalence of life in the universe.



## How do you define the future?

Picture yourself in one of these careers:

### Electrical Engineer/Physicist

Integrate electrical and electronic designs with ship systems. Work on heating, ventilation, air conditioning, power, dry air, and chilled-water systems in fields such as navigation, weapon-fire control, sonar, radar, communications, propulsion controls, and shipboard instrumentation.

### Mission/Systems Engineer

Perform systems engineering for government-sponsored satellite programs. Support the design, launch, and on-orbit operations of space and ground systems. Perform trade studies and analyses, simulation and modeling, reliability and safety checks, and integration and test activities.

### Structural Engineer

Perform structural-design-utilizing systems to develop parametric solids for conceptual layouts, parts, assemblies, and installations. Perform detailed analysis, structural-integrity evaluations, acoustic/dynamic evaluations, and weight control.

## Does AEROSPACE ENGINEERING sound exciting?

Check out these books and Web sites to find out about this and other cool careers in space!

## Read About It:

*Advice to Rocket Scientists: A Career Survival Guide for Scientists and Engineers* by Jim Longuski

*Career Opportunities in Aviation and the Aerospace Industry* by Susan Echaore-McDavid

*Opportunities in Aerospace Careers* by Wallace R. Maples

## Log on:

[www.nasa.gov](http://www.nasa.gov)  
See what's new in the world of NASA. Log on to find out about new missions and discoveries.

[http://questdb.arc.nasa.gov/bio\\_search.htm](http://questdb.arc.nasa.gov/bio_search.htm)  
Use this search engine to find biographies of NASA employees and learn about the rewards and challenges of their daily work.

[www.engineeringk12.org/students/have\\_you\\_got\\_what\\_it\\_takes/top\\_ten\\_benefits.htm](http://www.engineeringk12.org/students/have_you_got_what_it_takes/top_ten_benefits.htm)  
Log on to find the top 10 benefits of having a career in engineering.

## How do you define the future?

Picture yourself in one of these careers:

### Flight Control System Engineer

Build and update air-vehicle models and flight-control-systems-computer models. Perform control law analysis/synthesis and non-real-time digital simulation and flight-test data analysis support. Support engineering teams to develop electrical and instrumentation systems, detailed designs of special test equipment, and interfaces for laboratories and air vehicles.

### Vehicle Systems Engineer

Use knowledge of fluid mechanics, thermodynamics, and heat transfer to participate in specifying, designing, and prototyping new Vehicle Management System computer architectures for control-systems applications. Participate in development of simulation models, flight safety-critical systems verification and validation testing in laboratory and vehicle environments. Create drawings, charts, and computer programs.