Company Profile

Overview
• Mature Small Business
• Privately-held, founded in 1996

Core Capabilities
• Space Mission Engineering
• Mission Systems Assurance
• FreeFlyer® & Space Applications
• Launch Services
• Emergency Management
• Commercial Space

Certifications & Awards
• ISO 9001:2015 / AS9100 Rev D
• CMMI-Dev ML3
• 2018 NASA Agency & KSC Large Business Prime Contractor of the Year
• 2014 NASA Agency & KSC Small Business Prime Contractor of the Year
• 2010 NASA Agency & GSFC Small Business Prime Contractor of the Year

Headquarters
Lanham, MD

Customer Facility
Washington, DC

Regional Office
Cape Canaveral, FL

Customer Facility
Albuquerque, NM

Regional Office
Huntsville, AL

Regional Office
Colorado Springs, CO

Customer Facility
Vandenberg, CA

Regional Office
Houston, TX

Regional Office
Cape Canaveral, FL

- Denotes other Customer/Company Locations
Selected Current Government Contracts

Prime Contracts
- NASA KSC, Expendable Launch Vehicle Integrated Support 3 (ELVIS 3)
- MDA Technical, Engineering, Advisory, and Management Support (TEAMS), Quality and Mission Assurance (QMA)
- USSF SMC/ECX, Simulated Space Data for Testing, Training & Exercises (SBIR Phase II)

Subcontracts
- Integration Support Contract (ISC) for Future ICBM Sustainment and Acquisition Construct (FISAC)
- US Army, Reagan Test Site (RTS) Engineering & Technical Services (RETS)
- USAF, NORAD Cheyenne Mountain Complex (NCMC) Integrated Threat Warning/Attack Assessment (ITW/AA) and Space Support Contract (NISSC)
- USAF, Space & Missile Systems Center (SMC), Space Test and Engineering Contract (STEC 14)
- NASA GSFC, Flight Dynamics Support Services 3 (FDSS 3)
- NASA GSFC, Space Network Ground Segment Sustainment (SGSS)
- NASA GSFC, Space Exploration Network Services & Evolutions (SENSE)
- USGS/NASA GSFC, Landsat Mission Operations (LMO)
FreeFlyer® Software

FreeFlyer provides end-to-end support for the full satellite mission lifecycle.

- Design mission parameters, refine requirements and study constraints
- Perform analyses and trade studies to model optimal flight plans and contingency scenarios
- Integrate FreeFlyer into operational ground systems and automate flight dynamics system functionality
FreeFlyer Heritage

• 24 years as a COTS product
• Flight tested - proven reliability and accuracy
  – FreeFlyer COTS software is TRL 9
  – Support for 225+ satellite missions
  – Integrated into 30+ ground systems
• Customers include NASA, US Air Force/DoD, international governments, commercial, academia

FreeFlyer-Supported Missions

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<tr>
<th>GEO</th>
<th>MEO</th>
<th>HEO/BEO</th>
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<tbody>
<tr>
<td>• NOAA GOES N,O,P,R,S</td>
<td>• USAF GPS Constellation</td>
<td>• NASA MMS</td>
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<td>• AFRL EAGLE</td>
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<td>• NASA James Webb Space Telescope</td>
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<table>
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<tr>
<th>LEO</th>
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<tr>
<td>• International Space Station</td>
<td>• Boeing CST-100</td>
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<td>• SNC Dream Chaser</td>
<td>• USGS Landsat 7,8,9</td>
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<td>• NASA Orion</td>
<td>• USAF SBSS</td>
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Other

• NASA CARA

• DARPA R3D2

• USAF ORS5

• USGS Landsat 7,8,9

• DARPA R3D2

• NASA Gateway

• International Space Station

• SNC Dream Chaser

• USAF SBSS

• USAF ORS5

• USGS Landsat 7,8,9
FreeFlyer University Program

• University Guide provided
  • Helps you reinforce concepts using the software, not teach the software using the concepts
  • Loosely follows Orbital Mechanics for Engineering Students by Curtis
• Online and available for student download
• Solution Mission Plans available for professors and TAs
• YouTube tutorials
  • 3 videos totaling 90 minutes of basic instruction for new users.
• Always open to ideas and feedback
Agenda

- Monday: FreeFlyer Updates
- Tuesday: Optimization in FreeFlyer 7.6
- Wednesday: Relative Motion in FreeFlyer 7.6
- Thursday: FreeFlyer on the Moon!
- Friday: FreeFlyer for Constellation Analysis

(Click to Register)