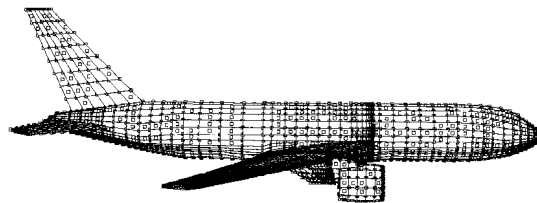


# Integral Strategies, LLC

## Aerospace Sciences Group

Integral Strategies, LLC  
Aerospace Sciences Group  
Burbank, CA  
(818) 515-0325  
info@isaero.com

Integral Strategies, Aerospace Sciences Group, is an engineering services company providing aircraft structural engineering analysis and testing to the aerospace industry. ASG provides state of the art engineering analysis in a cost effective manner by utilizing a team of highly experienced engineers who love what they do.



# Integral Strategies, LLC

## Aerospace Sciences Group

Specific areas of expertise include:

- Aeroelastic flight and ground loads analysis
- Dynamic gust loads analysis
- Substantiation of freedom from flutter analysis
- Stability and control analysis
- Static loads test planning and analysis
- Flight test planning and data analysis
- Wind tunnel testing and data analysis
- Finite element modeling and internal loads analysis
- Stress analysis
- DER support and FAA/EASA STC coordination
- Compartment pressurization and venting analysis including rapid decompression



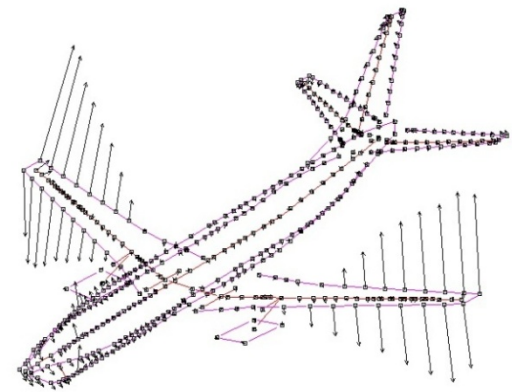
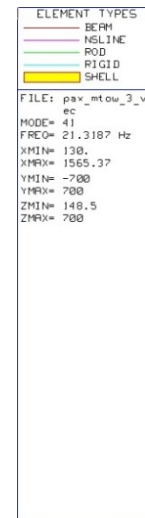
email: [info@isaero.com](mailto:info@isaero.com)

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## Aerospace Sciences Group

### Aeroelastic flight and ground loads analyses

- Develop aerodynamic coefficients from theoretical, flight test, and/or wind tunnel data
- Dynamic gust loads analysis
- Dynamic taxi and braking analysis
- Substantiation of freedom from flutter analysis



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Static loads test planning and analysis

- Deflection tests for stiffness evaluation
- Strain gauge load calibration tests

Flight test planning and data analysis

- Strain gauge loads tests
- Pressure distribution tests

Wind tunnel test and data analysis

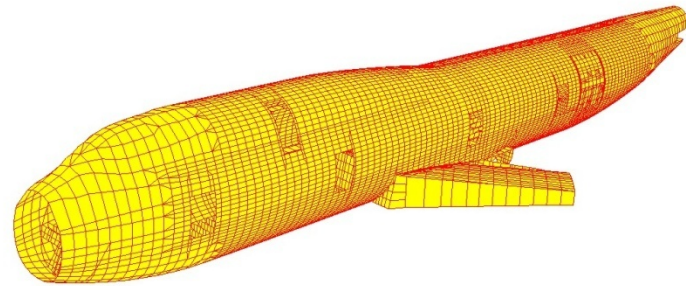
- Stability and control test and analysis
- Loads test and analysis
- Pressure distribution test and analysis

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### Finite Element Modeling (FEM)

- Two and three dimensional stress analyses
- Frequencies and mode shapes of flutter/vibration and dynamic gust analyses
- FEM used in the freighter conversion projects include:
  - Boeing 727-200
  - Boeing 737-300/-400
  - Boeing 747-200/-400
  - Boeing 767-200/-300



Stress analysis using FEM or classical methods

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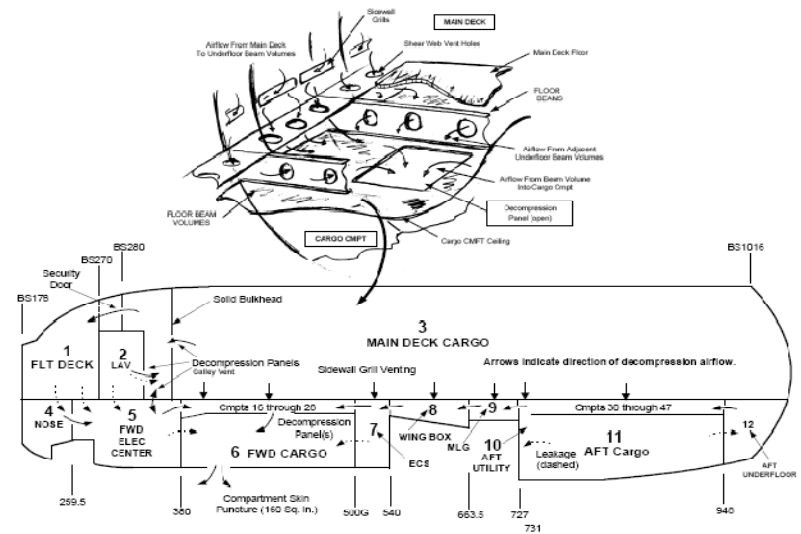
- DER support and FAA/EASA STC coordination
- Regulatory approval of work through issuance of STCs by FAA, EASA, and Israel CAA
- Passenger to freighter conversions include:
  - 737-300/-400
  - 747-200/-400
  - 767-200/-300
- Winglet installation projects include:
  - 737-300
  - 737-500
  - 737-700
  - Hawker 800
- Weight upgrade projects include:
  - 727-200
  - 737-300
  - 747-400
  - 767-200/-300

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Compartment pressurization and venting analysis including rapid decompression

- Evaluate venting airflow paths
- Determine differential pressure loads
- Blowout panel sizing
- Projects include:
  - 737-300/-400
  - 767-200/-300
  - 747-400



# Integral Strategies, LLC

## Aerospace Sciences Group

Reverse engineering or a brand new design we look forward to solving any challenge you might have. Whether you need specific expertise or someone to handle routine extra workload, we have the staff ready and able.

Please email or call to discuss how we can help you with your engineering needs.

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