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Z/I Mission

Image courtesy of Beijing Xing Tian Di Information Technology Company Ltd., Beijing, China.

Z/I Mission, Intergraph's Z/I Imaging® software for airborne mission planning and reporting, has the ability to perform either 2D or 3D mission planning and reporting. Z/I Mission can interface with Z/I InFlight and T-Flight, Z/I Imaging Digital Mapping Camera (DMC®) Post Processing Software (PPS), and DMC Image Analyst (DIA) software. In addition, Z/I Mission has the ability to produce AFL file output and will automatically create and populate the project files for Intergraph's ImageStation® suite of photogrammetry production software.

From creating initial flight plans to generating reports and indices for the final exposures, Z/I Mission provides a rich data environment that can access any geo-referenced raster backdrop, vector mapping data, and digital orthophotos for flight planning. This mission planning system addresses functions such as flying a particular azimuth, planning the most efficient mission for a region of interest, 3D mission planning, and more.

Z/I Mission facilitates such basic functions as project viewing, data import or export, definition of coordinate systems, display layout definition through legend manipulation, explorer functionality, and catalogue handling. More advanced capabilities include 3D planning and reporting as well as the program starter functions.

Z/I Mission allows you to:

- Plan missions for block or corridor flights
- Perform 3D planning using digital terrain model information
- Perform 3D planning analysis
- Use reference maps for 2D planning
- Check planning results for correct side and end lap
- Compute stereo coverage of planned or flown missions based on underlying digital terrain model
- Interface to TerraShare® for reference and image data handling

- Integrate seamlessly with Z/I InFlight; supports other flight management systems
- Control DMC Post Processing System (PPS) and DMC Image Analyst (DIA)
- Display processing results as a mosaic, and process select images and LUT generation using seamless integration with the DMC Post Processing System (PPS)
- Use geo-referenced maps as raster backdrops
- Provide flexible coordinate system definition
- Import several data types, including flown mission and thumbnails from video camera
- Use ASCII coordinate import for project area, flight lines, or exposures
- Export project data to .dgn, IS Project, ASCII files, Google Earth files, AutoCAD, and ESRI Shape export. Exported project data is available for further use with ImageStation software.

Z/I MISSION CAPABILITIES

Mission Planning & Reporting – Function supports interactive mission planning based on raster backdrops for frame cameras and definition device-specific constraints. Wizard supports the collection of camera-, mission-, or project-specific parameters or requirements. Planning accounts for project border polygon, line intersection, definition of favored flight directions, and cut out polygons. Supports planning of projects consisting of multiple missions and comparisons of planned versus after photo flight situation. Generation of mission reports and graphical overviews and statistics. Offers various functions to edit planned missions, add flight lines, or optimize mission layout. Supports definition of project-related metadata. Comes with device definitions for DMC and RMK-TOP sensors.

3D Mission Planning & reporting – In addition to 2D mission planning and reporting, this function supports 3D planning and reporting based on underlying DTM information. Features projection of planned and actual footprint to the surface and allows real 3D check of side and end lap. Allows assessing mission success based on projection of real image footprints.

Program Starter – Supports the scheduling of PPS batch jobs to run at specific times from the project viewer. Scheduling of full missions or parts either selected in the project viewer or the explorer display. Guides the PPS user through the workflow of "look up table generation" and subsequent processing of missions or parts of it.

Project Viewer – Core module for the sensor software suite. Allows handling projects and subprojects, tracking project status and change history. Includes functions to visualize project status for planned or actual situations. Allows display of image thumbnails from RMK-TOP and DMC cameras or post-processing. Supports raster backdrops of geo-referenced maps and printout of displayed views. Interfaces with TerraShare.

Import/Export – Import of airborne sensor management system (ASMS) databases and AFL files (T-NAV Format). Supports export of selected features/objects to Z/I Inflight or ASMS databases, AFL files, ASCII files, as well as import and export of ImageStation project files. Through ASCII interface, the exchange of planned and flown missions with CCNS4 and Track Air systems is supported.

Coordinate Systems – Supports generation and modification of user-specific coordinate systems, such as planar grid or geographical reference systems. Allows modifying projections and properties online.

Legend display – Interactive legend display to support display priorities and element property definition.

Explorer display – Explorer visualizes mission contents in a logical structure. Interactive list with direct connection to the graphics. Supports selection and element property display.

Catalogue handling – Import of geo-referenced images from any folder; generation of database. Support of ImageStation basic tools to view, reformat, and display image information.

Z/I Mission enables you to export image footprints to Google Earth.

ABOUT INTERGRAPH

Intergraph Corporation is the leading global provider of spatial information management (SIM) software. Security organizations, businesses and governments in more than 60 countries rely on the company's spatial technology and services to make better and faster operational decisions. Intergraph's customers organize vast amounts of complex data into understandable visual representations, creating intelligent maps, managing assets, building and operating better plants and ships and protecting critical infrastructure and millions of people around the world. For more information, visit www.intergraph.com.

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