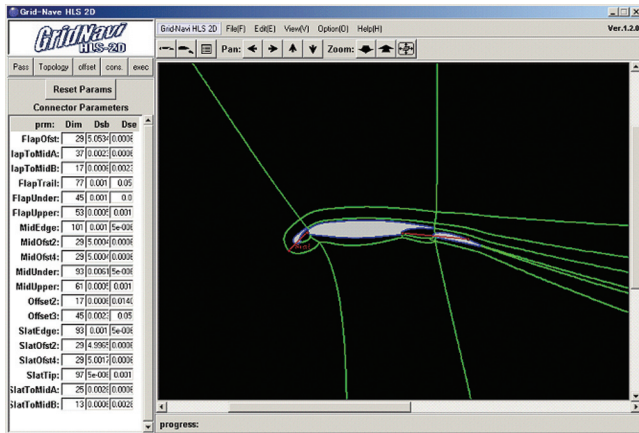


# GridgenApp

A Unique Gridgen® Application



## Innovative Automatic Grid Generating System for High-lift System of Aircraft



GridNAVI-HLS automatically generates grids for high-lift configurations.

Japan Aerospace Exploration Agency (JAXA), a long time client of VINAS Co., Ltd. (VINAS), Gridgen's distributor in Japan, has developed GridNAVI-HLS, an add-on utility program to Gridgen. GridNAVI-HLS is programmed using the GridgenGlyph scripting language capability, and is used for semi-automatic mesh generation around a high-lift-wing-system of a typical modern commercial aircraft. JAXA has been working on developing this

program to improve the efficiency of CFD work, to streamline the analysis cycle, and to promote sharing of grid generation know-how.

JAXA entered into a contract with VINAS to commercialize GridNAVI-HLS. High quality mesh generation is essential for accurate flow analysis in aircraft engineering. GridNAVI-HLS is capable of quickly generating high quality meshes for CFD analysis of the high lift system with complicated geometry.

Features of GridNAVI-HLS include:

- Easy to understand user-interface.
- User-friendly menu for design parameter entry that enables even CFD beginners to generate high quality hexahedral mesh in shorter time.
- Hexahedral mesh generation suitable for high quality CFD analysis.

JAXA initially developed the 2D version of GridNAVI-HLS. Vinas currently sells the 2D version. Based on JAXA's development achievement, VINAS has commercialized the 3D version, whose release is being prepared as of May 2004.

Courtesy of Japan Aerospace Exploration Agency and Dr. Yuichi Matuso. Reprinted from an article from *Focal Point Spring* 2004.