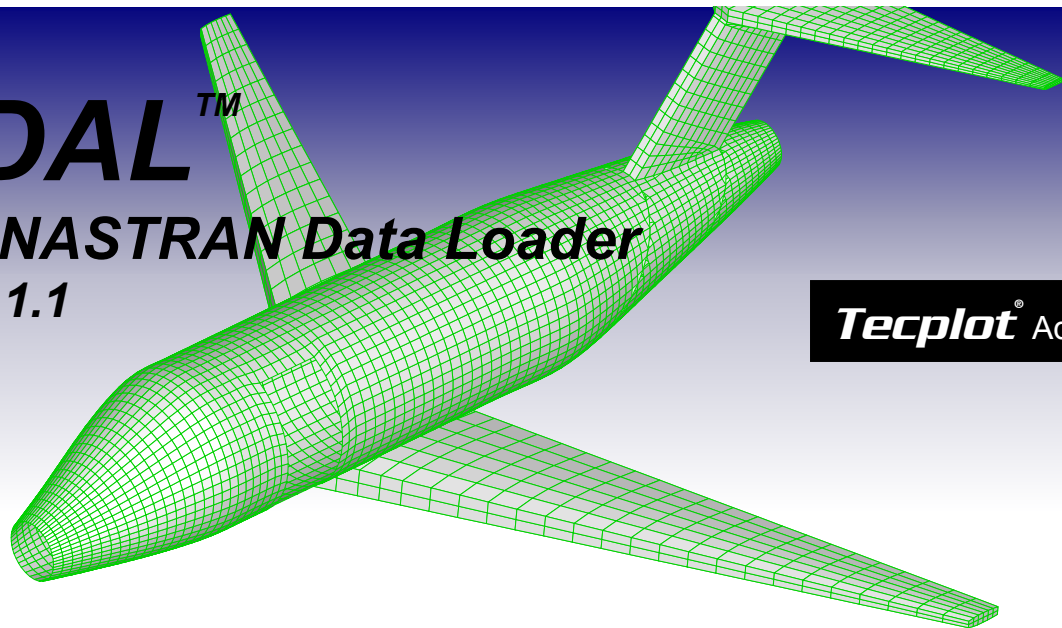


# ZNDAL<sup>TM</sup>

## ZONA NASTRAN Data Loader

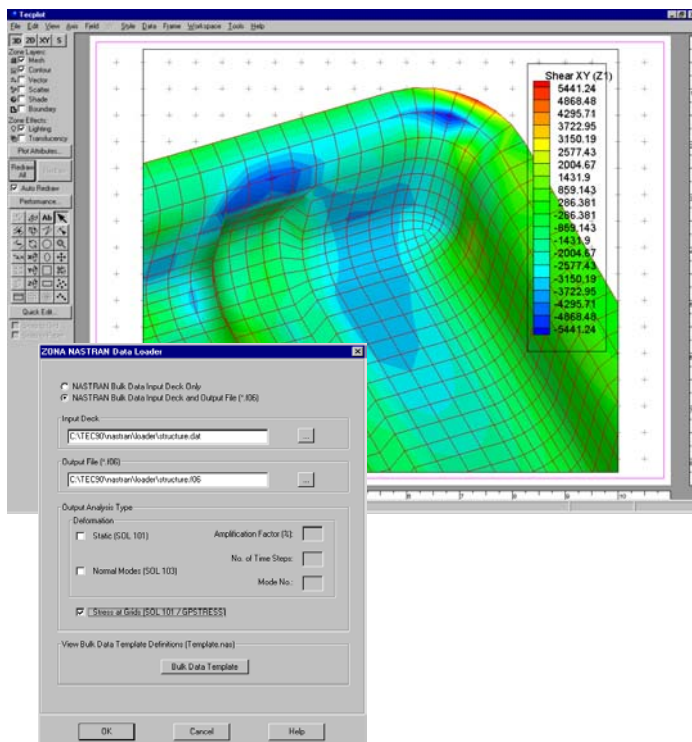
### Version 1.1

Tecplot<sup>®</sup> Add-on



## A Graphical User Interface for Finite Element Analysis Software

The ZONA NASTRAN Data Loader (ZNDAL) is a Tecplot add-on developed by ZONA Technology, Inc. that allows for viewing of NASTRAN finite element models and basic output analysis results. As an input bulk data translator, ZNDAL can be used to view models to ensure modeling accuracy before submitting a NASTRAN job or to copy three dimensional model images to other windows applications (e.g., Microsoft Word, PowerPoint, etc.). As a tool to view basic output analysis results, ZNDAL can be used to view structural displacements due to loads (static analysis), structural free vibration solutions (dynamic analysis), and stress contour plots (stress analysis).



## Advantages

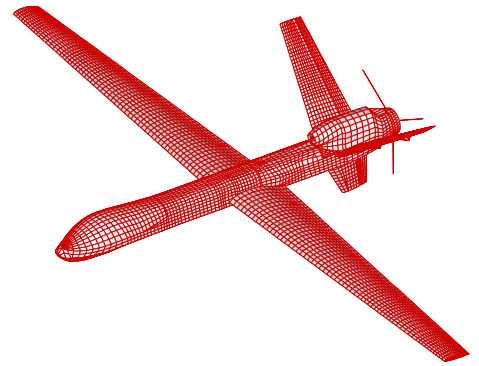
- **Quick NASTRAN Input and Results Loader**  
*Displays large degrees of freedom models in a short time.*
- **Short Learning Curve**  
*Takes a Tecplot user only minutes to learn.*
- **High Quality Image Transfers**  
*Maintains high quality images when exporting to other Windows applications.*
- **Excellent Tool for Presentations and Reports Involving FEA**  
*Can utilize all of Tecplot's visualization features for enhanced image quality.*

 ZONA TECHNOLOGY  
1.480.945.9988

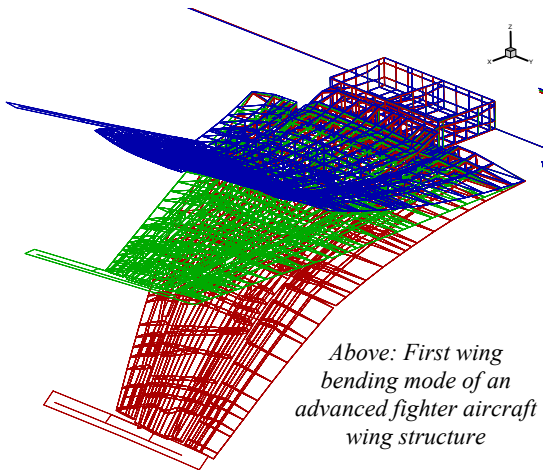
Visit [www.amtec.com/zndal](http://www.amtec.com/zndal) for more information.

## Features

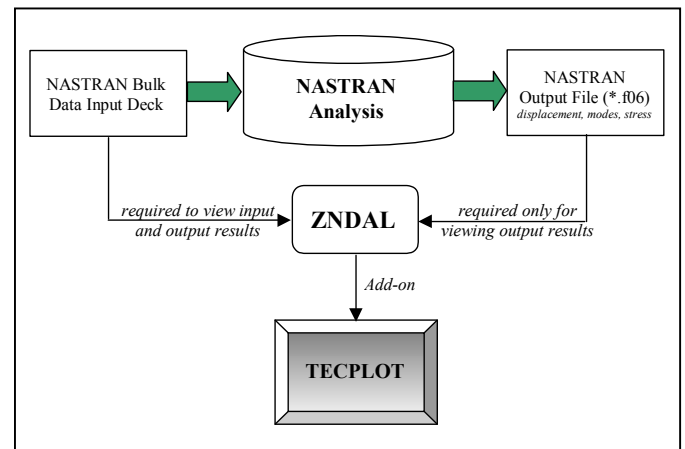
- Different elements are loaded into separate zones in unique colors for easy identification
- Utilizes a general bulk data template definition file that can easily be altered to process virtually any FEA bulk data input
- Reads "free formatted" input
- Accepts INCLUDE statements for insertion of external files
- Allows for the display of external grid identification numbers
- Accounts for GRID point coordinate transformations including those specified via the GRDSET bulk data card
- Displays both undeformed and deformed models from a static analysis
- Allows for animation of free vibration solutions from a dynamic analysis
- Displays stress contours from grid point stress output
- Allows scaling of static or dynamic analysis deformations
- Automatically accounts for the displacement coordinate system transformations



*Above: Predator B structural model provided courtesy of General Atomics Aeronautical Systems*



*Above: First wing bending mode of an advanced fighter aircraft wing structure*



**Overall NASTRAN Data Loader Process of ZNDAL within Tecplot**

## System Requirements

Windows  
95/98/2000/NT/XP

Tecplot 8.0 or later license is required to run the ZNDAL Add-on.

## About Tecplot Add-ons

Tecplot is Amtec's award winning data visualization software. The Add-on Developer's Kit, included with Tecplot Version 7.5 and later, is a development tool set that allows users to create add-ons that enhance and extend Tecplot's capabilities. ZNDAL is just one of many add-ons that Amtec is developing for the engineering community.

Visit [www.amtec.com/zndal](http://www.amtec.com/zndal) for more information.

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**1.800.763.6794**

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