PostGEBT Software for Modeling Composite Beams Available for Download on AnalySwift Website

Salt Lake City, Utah (USA), March 25, 2014- AnalySwift, LLC, a leading provider of efficient high-fidelity modeling software for aerospace and energy composites and other advanced materials, announced today that the PostGEBT program is available for free download on its website.

PostGEBT is a post-processing code which can effectively visualize mass data generated by GEBT, which is a powerful beam solver to calculate the 1D quantities, including displacements and rotations, force and moment resultants, and linear and angular momenta. These results can be used for optimization and design for displacements or stresses constraints or fatigue constraints. Moreover, the recovery of the 3D mechanical field over the whole cross-section also needs these 1D global information. PostGEBT reads and visualizes the results produced by GEBT for static, steady-state, transient dynamic, and eigenvalue analyses.

The PostGEBT program has applications for helicopter rotor blades, wind turbine blades, gas turbine blades, high-aspect ratio wings, and other structures (beams, shafts, rods, columns, bars) made from composite or other smart materials. For both static and dynamic analyses, PostGEBT visualizes both displacements and rotations, as well as force and moment resultants in each member defined in GEBT. For eigenvalue analysis, PostGEBT visualizes mode shapes (eigen displacements/rotations and eigen forces/moments) in each member.

PostGEBT is distributed and developed by Dr. Qi Wang of the National Renewable Energy Laboratory (NREL), and it is available for download from the AnalySwift website. The source code is available for both PostGEBT and GEBT so users can run the source code on any machine. PostGEBT and GEBT are companion codes of VABS, a general-purpose cross-sectional analysis tool, to enable efficient yet high-fidelity analysis of slender structures, whether they are made of composites or not. VABS is a mature software technology used in highly rigorous modeling of helicopter rotor blades, wind turbines blades, and propellers made from composites.

About AnalySwift

AnalySwift, LLC, is a leading provider of efficient high-fidelity design and analysis software for composite materials and structures, particularly cutting-edge technology for structural modeling and micromechanics modeling. AnalySwift's revolutionary solutions are based on a powerful mathematical approach, providing customers a competitive advantage through dramatic reductions in engineering time, without sacrificing accuracy in multiphysics modeling. Utilizing technology licensed from Utah State University, as well as software developed at Georgia Institute of Technology, AnalySwift offers the best compromise between efficiency, accuracy, and versatility for multiphysics analysis of composite materials and structures. The technology has been supported, in part, by US Army, US National Science Foundation, US Air Force, Utah Science Technology and Research Initiative (USTAR), and industry. Additional information about AnalySwift can be found on the web at www.analyswift.com. For more information, contact Allan Wood, President and CEO of AnalySwift, 801-599-5879 or email allanwood@analyswift.com.