Announcing the Release of PRODAS Version 3.6.5

Arrow Tech is pleased to announce the release of Version 3.6.5. Even though we didn't bump the minor rev number, this is an update you will want to get. Besides the usual bug fixes, we have recompiled all of the analysis engines for more speed and have added extensions to the base PRODAS engine so a macro can have even more control of your projectile. Can you say, "Automated Projectile Design"? If this interests you, take a look at the note in this newsletter, "Model Building Macro".

Have a great summer,

Mark Steinhoff
VP Software Products
Arrow Tech Associates

## MATLAB/Simulink Trajectory Module

 If you use PRODAS and you use MATLAB and you haven't tried the new MATLAB/Simulink 6DOF-7DOF Trajectory module, you really should.

Imagine the flexibility of Simulink tightly coupled with the PRODAS infrastructure. New fin design, no problem. Test aeros, easy. Have system errors and need to run a Monte-Carlo, we have you covered.

This is the tool we have developed to use for all of our guided projectile development, and it works very well.

In this latest version we have added extensions to support Hardware In the Loop (HIL) development. So now you can port your system simulation directly to your HIL hardware. You can even use the PRODAS 3D Visualizer to see exactly what is going on within the simulation.

Call Arrow Tech for a free evaluation today.
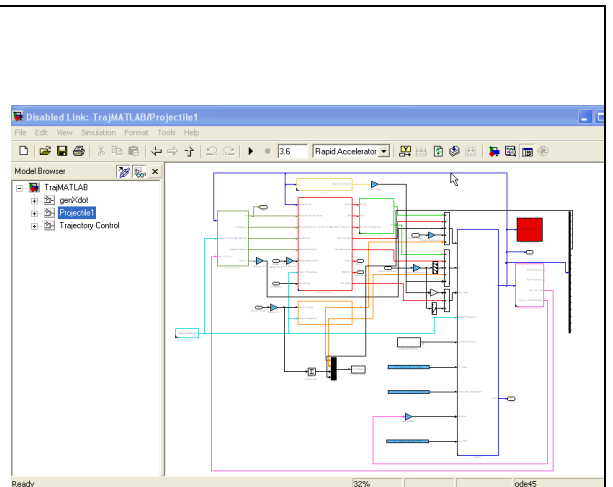
4D Aeros

The PRODAS aerodynamic model is a result of decades of ballistic modeling and test data analysis. The model's physics-based simplifications provide the minimum number of coefficients to accurately predict a projectile's trajectory. This model is ideal for incorporation of spark range and telemetry flight data. However, for guided munitions where fin interference effects need to be modeled and for more exotic airframes, we now offer 4D aero modeling. This format is available for the MATLAB/Simulink Trajectory Module and provides extreme versatility with four-dimensional table look-ups for all the aero coefficients.


Model Building Macro

In the last newsletter we provided a link to a paper, "Automated Projectile Design Software" that was presented at the 2010 NDIA Guns and Ammo conference in Dallas. (Link to Paper) It talks about a system that varied the boatail and the ogive to study wind sensitivity.

We started with this concept and expanded it to handle just about anything. Starting with a basic template projectile any number of different configurations can be produced. Then mass properties can be calculated, aeros estimated and any number of other performance requirements evaluated.

If you would like to become an expert user and learn how macros can make you more productive, you might want to sign up for our **Advanced Macro PRODAS User Course**. Two days of making PRODAS dance with code. At your place or ours, just give us a call.
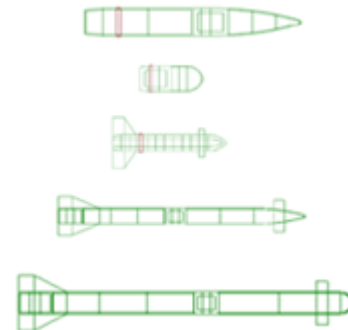
All of these rounds started life from the template in the middle. They vary from 25mm to 70mm and were auto-constructed with a macro.
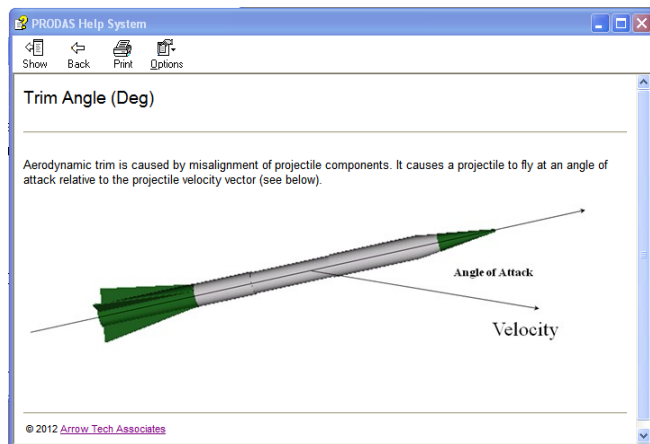
New Help Feature

When setting up inputs or interpreting outputs on PRODAS forms, our new Help Feature can provide the answers to your questions. Click the caption of the field you are interested in and then press "F1".

Click on caption, press F1

How can I get PRODAS V3.6.5 now?

Current PRODAS maintenance customers can go to our support site and download!

If you would like to purchase PRODAS please contact Lin White (lin@prodas.com) or John Whyte (jwhyte@prodas.com).

My Product Support has expired, how can I bring it up to date?

PRODAS product support is paid on an annual basis and covers all PRODAS Software on a per site basis. Per our published PRODAS Maintenance Agreement product support can be re-instated if there has been a lapse in coverage with defined penalties. To access the Maintenance Agreement terms click on the following link: Maintenance Agreement

For a quote to reinstate your product support please contact Lin White (lin@prodas.com) or John Whyte (jwhyte@prodas.com).