

New Line of Hybrid-Ready Kits!

Public Missiles Ltd. is proud to offer a brand new line of Hybrid-Ready kits to the rocketry community! Hybrid motors have come of age and the designers at PML have met the challenge. Hybrid motors were developed some time ago and have now become *the* alternative to the strictly regulated composite motors. As you may already know, hybrid motor ready rockets must have three features not found in most other rockets:

- An extended motor tube to accommodate the longer length of the hybrid system.
- An electronic recovery system since hybrid motors do not have an ejection charge built in.
- Rail lugs since most hybrid launch pads use a guide rail rather than launch rod.

Our new line of Hybrid Ready rockets kits incorporate all of the above! They also feature a new Electronic Recovery Module (ERM) system (discussed in more detail later in this PML News). In addition to all the usual features of a PML rocket kit, almost all of the kits have a full 36" motor tube allowing the use of even the longest hybrid motor. Apogee parachute deployment is accomplished via the ERM system. The ERM-Based Hybrid kits Andromeda, Eagle, and Cygnus come with 54mm MMTs, and the Ion, Gamma, Delta, and Orion with 38mm MMTs. Some can even be flown with 29mm hybrids using a 29mm adapter. You can see all these kits at www.publicmissiles.com on the Hybrid Ready page in the Webstore.

Now, one thing we must mention is that we do not yet have 38mm Hybrid motors on the new Motor Recommendations Chart you'll find posted on the Specs Page of the site. This is because the new 38mm hybrids from Sky Ripper have not yet been certified (but should be very, very soon!). Our policy is that we do not release simulations or Motor Recommendations Chart data for motors that have not yet been certified and have officially-tested motor data available. As soon as the Sky Ripper 38's are certified and we have official engine data for them for RockSim, you can bet we'll get the ERM-Based Hybrids on Sky Ripper 38s on the chart right away! (See the Hybrid Ready page in the webstore at www.publicmissiles.com for more information and a link to Sky Ripper's website).

However, we DO have simulations on 29mm RATT Works hybrids and 54mm Hypertek hybrids (and a huge array of 29, 38 and 54mm composites) available for you already. Check out the Motor Recommendations Chart on the Specs Page of our site. Also be sure to see the Kit Specs chart on the Specs Page for all the details on the new ERM-Based Hybrid kits. The RockSim files that created the data shown in the Motor Recommendations Chart are posted on the RockSim page of our site.

ERM Electronic Recovery Module

The ERM is an apogee-only electronic based recovery system. It is primarily intended for motors that do not have a delay/ejection system built in such as a Hybrid or liquid motor. This new system allows you to use the Accu-Fire Timer or the Co-Pilot Altimeter that you may already own (in addition to other timers and altimeters; see the CPR/ERM page in the Webstore for details). This system uses many of the same features and components that have made our CPR system so popular, yet is more compact and quicker to prep than CPR.

Of course, the ERM can be used with composite motors as well but the motor's ejection charge must be removed. This system is very convenient when motors with the proper delay are not available.

In addition to the complete ERM-Equipped Hybrid Ready kits, we also have ERM-Retrofit and ERM-Complete systems available. These are ERM equipment packages from 2.1 through 3.9” that allow you to easily incorporate the ERM concept into your rockets, whether an existing kit or a scratchbuild.

ERM-Complete: This series is useful when designing and building a ERM rocket from scratch. In addition to the electronics bay, this kit includes the Recovery Airframe and the modified nosecone (the base if the nosecone shoulder is removed). All you need to complete the rocket is the booster section and parachute. (The website has information on the CPR/ERM page to help you with the booster configuration).

ERM-RetroFit: This series is useful when modifying an existing rocket. This system includes everything you need to build the electronics bay. You must use your existing rocket’s airframe and nosecone to complete the system.

C’mon over to www.publicmissiles.com and go into the webstore...click on Hybrid Ready for the new kits, and CPR/ERM for the details on the ERM system and ERM-Retrofit and –Complete kits. Enjoy, and thanks again for your support of Public Missiles!