

# HM Review

Jeff Troy

## Oracle DVC Rocket

*Estes' new digital video camera rocket rings a new level excitement to the launchpad.*



### Specifications

- Electronics: CMOS sensor
- Resolution: 320 x 240
- Frame rate: 9 FPS
- Runtime: 30 seconds
- Height: 36 inches
- Diameter: 1.64 inches
- Weight: 7.6 ounces
- Recovery: 18-inch parachute
- Altitude: 600 feet
- Engines: D12-3 or D12-5

### ARF Kit Includes

- Factory-built video nose cone
- 18-inch Nylon parachute
- VideoCam software
- USB interface cable
- One-year warranty
- Fold-out instruction manual

Estes Industries adds another first to their long list of innovations in model rocketry, and this one may even be more fun than it is innovating. Estes' new Oracle is a three-foot-tall, single-stage rocket that's equipped with a digital video camera. This camera setup comes factory mounted in the rocket's nose cone, and requires no assembly or maintenance other than installing a single AAA alkaline battery. With 30 full seconds of digital video to watch on the PC after each flight, model rocketry can be more exciting than ever.

The Oracle is an almost-ready-to-fly rocket, and completion of the project shouldn't take anyone, not even an inexperienced purchaser, any more than 15 minutes. Most of that will be spent in reading the foldout instruction sheet, and there's really very little assembly needed. The model comes completely decorated, so all the modeler has to do is join the upper body tube with a few dabs of plastic cement, tie the parachute shrouds and shock cord to the nose cone, then attach the shock cord inside the upper tube. After just a few minutes on the kitchen table, the modeler will have a three-foot rocket, ready to go and looking good.



*Upper tube is joined to the body with Testor's model cement.*

Oracle comes with a USB interface to connect the camera unit in the nose cone to a personal computer. The Oracle also includes Windows-compatible software that will operate with anything from WIN98 forward. I have XP on my home office machine and 98SE on my laptop, and the software installed easily in both systems. The rocket's digital video camera is designed for simplicity, so each video must be downloaded before the camera is turned off. Because of this, installing the software on a laptop and keeping it on hand at the launch site is the video rocketeer's smartest bet.

The heart of the Oracle is the one-piece, integrated digital camera and nose cone. The cone and camera unit slips over the upper body tube in the same

manner as a normal model rocket nose cone, and it requires no special skill to operate. One simply flips the on-off switch to the on position to get a glowing "ready" signal from the red LED. Once the operator is prepared to launch, the start switch is pressed and the green LED begins to blink, signaling that the camera is armed. Fifteen seconds later, the green light stops blinking and glows steadily, then the camera begins its



*Oracle uses 18-inch Nylon parachute*



30-second, digital video recording stage.

After the start button is pressed and the green LED begins to blink, the operator has 15 seconds to determine how the flight will be shot. Estes suggests that the liftoff phase of a flight is best captured by waiting a second or two after the green light has stopped blinking and glows steadily before launching the Oracle. This way, the camera will already be running when the rocket lifts off the launch pad. If capturing the recovery and landing phase is more important, the Oracle should be launched just after start is pressed and the green LED begins to blink. This delays the start of the video until after the model is airborne.

*Switch power to ON and red LED glows. Press START and green LED blinks for 15 seconds, then glows steadily as camera begins to record.*

So, the camera runs and the Oracle makes its altitude, then the ejection charge hits, the parachute opens and the rocket's descent to Earth begins. After recovering the Oracle, the camera switch must remain in the on position. If it is turned off, the camera's memory will be lost and the video cannot be recovered. With the switch still on and the red LED still glowing, remove the plastic port cover on the nose cone, then plug the USB cable into the camera port.



*Launch Controller, Porta-Pad, HD Launch Rod, D12-3 or D12-5 Engines, Recovery Wadding and Igniters are required and available through Estes Industries.*

Double-clicking on the TWAINAPPS screen icon opens the video capturing software, then the flight can be downloaded into the computer. Following the download, the camera can be turned off, which will automatically clear the memory for Oracle's next exciting flight.

It's snowing here right now, and too cold to enjoy being outside. However, I'll be sure to have some terrific screen shots for you in another issue. Meanwhile, get a few of these rockets into stock. I think the Oracle will do very

well for you. Purchasers will also require one AA alkaline battery, an Estes Launch Controller and Porta-Pad, a heavy duty launch rod, D12-3 or D12-5 engines, igniters and recovery wadding.

For more information about Estes's new Oracle, see the ad on page 5, or telephone Estes Industries in Penrose, Colorado, at 719-372-6565. **HM**



*Oracle Digital Camera Rocket by Estes Industries.*