... or Shift the C/G

The third recovery method involves shifting the center of gravity or balance point of the rocket. When the engine is in place in the Orange Bullet, the center of gravity is ahead of the center of pressure and the model is stable. (See Technical Report TR-1.) When the engine is ejected at the end of the upward travel of the rocket, weight is removed from the nose, shifting the center of gravity to the rear. With the center of gravity moved rearward, air forces on the nose are greater than the forces on the fins, and the model starts to tumble. Because the model is very light and the tumbling creates high air drag, it drifts to a gentle landing.

