

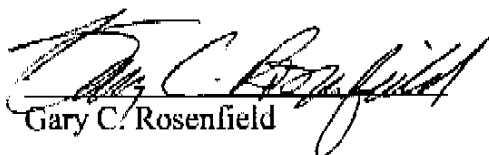
motor consists generally of supplemental metals, such as aluminum or magnesium for fuel, various other chemicals that serve as burn rate catalysts and antioxidants, and a synthetic rubber binder. The synthetic rubber binder in the motors effectively passivates the ammonium perchlorate rendering the resultant composite non-explosive.

4. Consistent with longstanding industry practice, the motors used in the rocket hobby, including those sold by Aerotech, can be classified according to their amount of propellant contained in the motor. Motors classified at the "G" size or smaller (*i.e.*, corresponding to an alphabetical designation from "A" to "G") contain less than 62.5 grams of APCP. Motors classified at the "H" size or greater contain more than 62.5 grams of APCP. Aerotech is the largest supplier of rocket motors using APCP classified from the "D" through "N" size in the world today.
5. The motors used in the rocket hobby, including those sold by Aerotech, serve only one intended function. Specifically, when ignited, the propellant in the motor burns and the burning produces gas, which is then expelled through the rocket motor's nozzle. As a result of the gas being expelled from the rocket motor's nozzle, thrust is generated, and if the thrust is of sufficient magnitude the rocket will be launched skyward.


6. The APCP rocket motors sold by Aerotech for use by the hobby are specifically designed and tested to insure that they function properly. As part of the development effort, Aerotech performs testing to determine the rate at which the APCP burns. Although our design and testing data is proprietary, I can reveal that in my 20 years of experience with Aerotech the tests performed on APCP rocket motors under pressure used for the hobby have produced burn rates in the range of 0.13 to 0.5 inches per second. Our test results are fully consistent with general industry test data, which is presented in Chapter 11, and particularly Figure 11-6, of the current authoritative treatise on the subject, ROCKET PROPULSION ELEMENTS, 7TH ED., written by George Sutton and Oscar Biblarz.
7. I am fully aware of the positions taken by the United States Bureau of Alcohol, Tobacco & Firearms ("ATF") with regard to the rocket hobby and its use of APCP rocket motors, including those sold by Aerotech. For example, I was the recipient of two letters written by ATF in 1994 – one dated April 20, 1994, and the other dated June 20, 1994 – that are considered by the hobby, Aerotech, and the industry in general as the first written indication that ATF would regulate rocket motors containing more than 62.5 grams of APCP as the propellant. In addition, I have reviewed the letter written by ATF to Joseph R. Egan dated December 22, 2000, which further explains its positions regarding its regulation of the rocket hobby.

8. In light of the above, it is my opinion that none of the APCP rocket motors (including reload kits) used by the rocket hobby, including those sold by Aerotech, should be classified an "explosive" as that word is interpreted and applied by ATF. It is also my opinion that none of the APCP rocket motors (including reload kits) used by the rocket hobby, including those sold by Aerotech, should be considered to "detonate" or to "deflagrate" (as those words are interpreted and applied by ATF) when ignited. Rather, when ignited APCP rocket motors merely "burn," as that word is interpreted and applied by ATF. Finally, it is my opinion, consistent with what had been the practice in the industry before April 1994, that APCP rocket motors (including reload kits) used by the hobby, including those sold by Aerotech, should be classified as "propellant actuated devices," as that phrase is defined by and exempted in ATF's regulations at 27 C.F.R. Part 55, and therefore should not be regulated by ATF regardless of the amount of APCP contained in those motors.

Further affiant saith not.


 Gary C. Rosenfield

Subscribed and sworn to before me this 27 day of August, 2002.


 Notary Public

My Commission expires: 6/12/04

