

NAR Expired Motor Testing Program

as of October 2012

The NAR Board of Trustees in 2005 authorized a special program to permit NAR members under certain specific conditions to fly old model rocket motors that were once certified by the NAR but whose certification has expired solely due to the motor being out of production. Motors flown under an authorization from this program are considered to be NAR certified for insurance purposes on a specific date and at a specific launch site, but may not be flown in NAR competition flights. This program will remain in effect until terminated by specific notification by the NAR Board.

The purpose of the program is to permit old motors that are believed to be still safe to be flown for non-competition purposes, and to collect data on the performance of old motors for safety analysis. Hundreds of motors have been tested to date. However, due to the variety of motor types that are still available, we need more data in order to determine whether decertification of out of production motors is prudent or overly conservative. The NAR Board intends for this activity to be productive (i.e., to provide valid data on the question of the safety of old motors), but there is no reason why it can not also be fun. We're hoping that Sections will be interested in supporting this activity and will find ways to increase the data collected.

Any NAR member can apply to test any number of motors, and can apply any time. Send the authorization request to the Chair of the NAR Safety Committee, Steve Lubliner, at <StephenLubliner@compuserve.com>. Provide a week or so of advance notice before the intended launch so that the motor list you send can be checked out for prior certification and for results from prior test flights under this program. Authorization to conduct the test will be provided in writing (by e-mail). Motor test flights shall not be conducted without specific written authorization for specific motors at a specific time and place.

To fly under this program, you need to send Steve Lubliner the following information:

- The name and NAR number of the person responsible for conducting the test and reporting on the results,
- The date and place of the test (include a brief description of the field, e.g., "school football field," "25 square miles of desert"),
- An itemized list of model rocket motors to be tested, and
- A statement of agreement to comply with the conditions listed below, and any other conditions that may be attached to the authorization (e.g., safe distances, restrictions on the list of motors to be tested).

You may NOT fly decertified motors unless you comply with the following rules that are part of this program:

- 1) Testing will be restricted to those clubs and NAR members, on insured sites, and at specific times and places, who agree to comply with these conditions.
- 2) Motors must have been certified as model rocket motors, shall have been decertified only due to being out of production, and shall not have been decertified for safety reasons
- 3) Minimum launch standoff distances shall be at least doubled, depending on the characteristics of the vehicle under test. Tests shall not be conducted when elevated fire hazard conditions are present, and appropriate firefighting equipment shall be available.
- 4) All test flights will be conducted with spectators alerted and aware.

5) All test flights shall use a single motor. The sole exception to this restriction is that black powder booster motors may be staged to an appropriate, currently certified black powder sustainer motor. No clustered motors shall be used.

6) The following data shall be provided to the chair of the Safety Committee no later than seven days following the event, for each motor tested, regardless of outcome:

a) Motor designation

b) Date of manufacture and/or motor coding

c) Any available information on storage (e.g., "it's been in my cool, dry basement for 10 years.")

d) Flight outcome, including timed delay. If the outcome was a failure motor, details of the failure AND A MESS REPORT shall be submitted.

7) In the event two motors from the same date and of the same type CATO, no further testing of motors of that date and type shall be conducted.