AEROTECH F16–RCJ

CERTIFIED VALUES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Impulse</td>
<td>80 newton-seconds</td>
</tr>
<tr>
<td>Delays</td>
<td>None</td>
</tr>
<tr>
<td>Propellant Type</td>
<td>Composite</td>
</tr>
<tr>
<td>Propellant Mass</td>
<td>62.5 grams</td>
</tr>
<tr>
<td>Casing Dimensions</td>
<td>32 mm × 107 mm</td>
</tr>
<tr>
<td>Certification Date</td>
<td>94-April-17</td>
</tr>
<tr>
<td>Contest Use Date</td>
<td>94-July-16</td>
</tr>
<tr>
<td>Certification Type</td>
<td>Model Rocket</td>
</tr>
</tbody>
</table>

STATIC TEST DATA

<table>
<thead>
<tr>
<th>Date Tested</th>
<th>94-April-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Impulse</td>
<td>75.48 newton-seconds</td>
</tr>
<tr>
<td>(σ 3.94)</td>
<td></td>
</tr>
<tr>
<td>Peak Thrust</td>
<td>26.35 newtons</td>
</tr>
<tr>
<td>(σ 1.73)</td>
<td></td>
</tr>
<tr>
<td>Burn Time</td>
<td>5.69 seconds</td>
</tr>
<tr>
<td>(σ 0.23)</td>
<td></td>
</tr>
<tr>
<td>Average Thrust</td>
<td>13.27 newtons</td>
</tr>
<tr>
<td>Mass After Firing</td>
<td>81.9 grams</td>
</tr>
</tbody>
</table>

TYPICAL THRUST-TIME CURVE

<table>
<thead>
<tr>
<th>Delay Time</th>
<th>Average Measured Delay</th>
<th>Initial Mass</th>
<th>Mfg Recommended Max Liftoff Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td>140.4g</td>
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</table>

REMARKS

The total impulse, peak thrust, average thrust and burn time are the same as the averaged static test data on the NAR web site in the certification file. The curve drawn with these data points is as close to the certification curve as can be with such a limited number of points (32) allowed with wRASP up to v1.6.

<table>
<thead>
<tr>
<th>Time (Sec)</th>
<th>Thrust (N)</th>
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<tbody>
<tr>
<td>0.046</td>
<td>26.350</td>
</tr>
<tr>
<td>0.116</td>
<td>22.388</td>
</tr>
<tr>
<td>0.139</td>
<td>21.374</td>
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<tr>
<td>0.185</td>
<td>21.886</td>
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<td>0.220</td>
<td>20.540</td>
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<tr>
<td>0.301</td>
<td>19.696</td>
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<tr>
<td>0.498</td>
<td>18.350</td>
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<td>0.579</td>
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<td>0.637</td>
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<tr>
<td>0.718</td>
<td>18.350</td>
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<td>0.834</td>
<td>18.350</td>
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<tr>
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<tr>
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<tr>
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<tr>
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<td>5.891</td>
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<tr>
<td>5.690</td>
<td>0.000</td>
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