



Figure 4. Filter Factor Results for Representative Configurations of Atlas

In summary, it must be recognized that there is no "correct" value for  $F$ , and that it is even difficult to argue generally that one value of  $F$  is better than another. In RTI's view, values of  $F$  below 0.97 place too much emphasis on a relatively small sample of recent launches. Values above 0.99 extend the sample so far back in time that too little emphasis is placed on improvements in design, materials, and operational procedures. In any event, the value chosen for  $F$  is crucial in arriving at a predicted failure probability. For the more conservative, a value of 0.99 can be chosen; the optimistic might chose 0.97.

Since most risk-analysis studies that RTI makes are concerned with the launch area, failure probabilities beyond flight-phase 2 are of minor interest. The overall failure probabilities shown in Table 6 have, with one exception, been extracted from Table 2 for  $F = 0.98$ . Where a best estimate is called for, RTI plans to use these probabilities in future launch-area risk analyses for the 45 SW/SE unless directed otherwise, or until additions to the data samples in Appendix D justify changes.