General Statistical Process Control Requirements

In addition to the quality requirements of the technical data package, the Contractor shall implement Statistical Process Control (SPC) in accordance with a government accepted SPC Program Plan. Control chart techniques shall be in accordance with the American National Standards Institute (ANSI) B1, B2 and B3. Alternate SPC charting methods may be proposed and submitted to ATK/Government for review. The detailed SPC Program Plan shall detail specific manufacturing process/operation parameters under control.

The SPC plan shall include, at a minimum, the following for each process/operation by name or characteristic under control:

1. Identify process/operation by name or characteristic and provide rationale for selection; justification for non-selection if the parameter controls or influences characteristics identified as critical, special and/or major.
2. Describe how the characteristic is produced; provide details on the manufacturing steps involved, type and number of machines involved, location of manufacturing facility, tolerances maintained and current controls in place to maintain product tolerances.
3. Production and inspection machinery used. Include the production rate, number of shifts and length of shifts plus whether inspection is fully or semi-automated or manual.
4. Identify the type of charts to be maintained and whether the process/operation is performed in-house or subcontracted out; identify facility/vendor where process operation parameters are targeted for SPC. Statistical evidence in the form of Control Charts shall be prepared and maintained for each process or operation parameter identified in the detailed plan. These charts shall identify all corrective actions taken on statistical signals and shall be maintained in such a manner to assure product is traceable to the Control Charts. Control Charts shall be maintained for a minimum period of 3 years following the production run.

The Subcontractor must ensure that the SPC detailed Program Plan is approved by ATK/Government prior to manufacturing production hardware.

The Subcontractor shall complete Form OP-280 for all Critical, Special, and/or Major characteristics. Completed OP-280 Form shall be formally submitted to ATK. A copy of this form is available at http://www.atk.com/suppliers/?supplier-type=current under Rocket Center, WV.