## EXAMPLE X-CHART

## The X-chart

The chart below is one example of the use of this generic chart. The processing times for the first 39 work packages written in 1997 have been gathered and plotted.

An initial average was calculated for all 39 packages, but it revealed that the most recent seven packages in a row were above average. Therefore, the baseline average was cut back to packages 1 through 32. Packages 33 through 39 are annotated as seven months in a row above average.

Note that the average line is annotated with the basis for the average. The control limits were set at three standard deviations above and below the average line. Packages 1 through 32 were also used in the standard deviation calculation.

The $x$-axis is annotated as being the work package number. It is assumed that this is a time sequence. The next package written will be 97-0039. One warning on cycle time graphs - only plot the cycle times for those items which have completed the cycle. If you plot items which are still within the cycle, their times will be artificially low.


Future Actions: A decision will need to be made as to whether to create a new baseline average for packages 97-0033 through 97-00??, or whether to keep the current average. This decision will depend on if future data returns to the current average or not.

