October 8, 1976

MEMORANDUM FOR RECORD

Re: Design Status of QAIS (TSO Version)

Introduction

During the Second Rating Period of 1976, all wired equipment QA locations were introduced to the TSO version of the Quality Assurance Information System (QAIS). The main emphasis of design concern during the subsequent four rating periods has been directed toward the production of the QA 667.2 Report. Since most problems associated with the computation of satisfactory T-rates for the QA 667.2 Report have been resolved, it is appropriate to discuss the future design emphasis of QAIS (TSO). Such a discussion can logically be divided into cost, new output and data entry considerations.

Cost Considerations

Eleven QA locations are using the TSO version of QAIS. BTL/QAC is billed for the location's use of the IBM System 370/TSO computer. The average cost per data line processed by the system is used to compare the effiency of each location's effort. Most locations achieve an average cost between ten and twenty cents per line. The common characteristic of locations exceeding an average cost of 20 cents per line is their insistance that they are responsible for the weekly computation of T-rates for "the shop". Such a practice is clearly more of a Quality Control than a Quality Assurance function and it's elimination could save BTL several thousand dollars per year. It is also appropriate to note a common characteristic of locations achieving an average cost of less than 10 cents per line. These locations are using data terminals capable of creating a magnetic tape of input data "off line", thus reducing both connect time charges and cornet line usage. Promotion of this practice would result in additional savings.

New Output Considerations

In addition to the rating and sampling class T-rates, we receive each period, BTL/QAC should make a concerted effort to provide additional outputs from this system. One output that would promote considerable interest would be historical T-rate charts. Such charts would depict graphically the T-rate history of each rating class for the past year.

Associated with each T-rate would be the output, sample, sample realization, expected demerits, actual demerits, variance factor and appropriate rating notes. Such charts would be distributed each period. The BTL/QAC Engineer would receive charts for each rating class he was responsible for and each location would also receive a chart for each of its classes. A second new output that would stir the interest of HQ/QA would be the development of a program that would create most of the text required for the classic 667.1 TWX. A third new output attractive to both BTL/QAC Product Specialists and WECO Rating Engineers would be a facility to retrieve audit data from the data base by product code. Each of these new output proposals should be developed by the QAIS group at Holmdel.

Input Considerations

The third area of design consideration for the TSO version of QAIS should be inputs. To be efficient an information system should not ask for any input unless that data is scrutinized for validity and eventually processed for output. The extent to which input data is scrutinized in the present system is disappointing. Specifically, all product codes, results classes and defect item numbers should be checked more closely for validity.

Conclusion

The TSO version of QAIS has completed its initial goal of QA 667.2 T-rate computation. It's time now to use the system more effectively. Erold Hinds, the designer of the system, should establish a design consultation group consisting of several WECO engineers and more importantly, several BTL/QAC product specialists to outline future design goals.

John A. Conte

JAC:ER

J. A. CONTE - 01KC2163620

Copy to:
E. W. Hinds - 1737, BTL-Holmdel
W. L. Roach - 1737, BTL-Holmdel
J. L. Swaim - 6360, Oklahoma City
E. R. Dancy - 01KC2163620
W. H. Baldwin - 01OH212310, Omaha-QA
D. R. Castor - 6361, Oklahoma City-QA
J. D. Bolen - 636, Dallas-QA