



N00014-94-C-2063

# System Quality Consultants, I

# **TECHNICAL STATUS REPORT**

# FOR THE PERIOD ENDING 31 August 94

# **Executive Summary**

During this month's reporting period, SQC continued to provide project management to the Backgrounds Data Center (BDC). In addition to the Project Manager, SQC provided management of the Software Development, Project Support, and Specification and Test efforts. The most significant events that occurred are the completion of coding and unit test of the Final Operational Capability (FOC) Software, the continuation of MSX Data System Test (DST) 4.2, and the start of DST 5.1.

# Task 1-Project Management Support

### Abstract

This task requires SQC to provide risk management analysis, software cost estimates, procurement strategies, program office organization and staff planning, schedule and resource allocation planning, program planning and documentation, project control system accounting and training.

### Work Performed During AUG 94

Provided Specification & Test (S&T), Software Development, and Project Support Office input to MSX project GANTT and PERT charts for scheduling and resource allocation planning.

Provided S&T, Software Development, and Project Support Office input to the monthly MSX and Core status reports.

Generated a draft MSX PERT chart for management review.

Updated the Canonical GANTT charts.

# **Anticipated Activities During SEP 94**

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Continue the production of GANTT schedules and PERT charts.

Continue to provide input for FY95 budget, project planning, and monthly status reports.

## Task 2--Management Plan Development

### Abstract

This task requires SQC to develop and present program management plans, software development plans, configuration management plans, quality assurance plans, test plans, and independent verification and validation plans for use on Naval Research Laboratory's (NRL) programs.

### Work Performed During AUG 94

Chaired eleven Configuration Control Boards (CCB) which processed fifty-nine (59) Problem Report/Change Request (PR/CR) actions. This included: sixteen new PR/CRs, fifteen analyzes, four implementations, thirteen validations, three QE's, and eight closures.

Continued to manage the ongoing effort of producing a BDC User's Guide.

Implemented software modifications required by the PR/CR process resulting from DST 4.2. Sixteen (16) PR/CRs were analyzed during July. Five (5) PR/CR implementations were completed.

Continued integration testing of FOC software.

Continued to manage VISTA software development.

Continued to manage RAIDS software development

#### **Anticipated Activities During SEP 94**

Chair CCBs as required.

Produce the first draft of the BDC User's Guide.

Review final draft of proposed update to the BDC CMP.

Complete integration testing of FOC Software and deliver it for formal testing.

Continue to manage VISTA software development.

Continue to manage RAIDS software development.

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# Task 3-Detailed Process Development

### Abstract

This task requires SQC to develop and present processes (process flow diagrams, step-by-step procedures, quality assurance procedures, and quality checklists) to be used on NRL programs.

# Work Performed During AUG 94

Six new BDC procedures were issued during this reporting period.

Revising the PR/CR Procedure.

Managing the creation of a generic Quality Evaluation processive for manual operations.

Reviewed an updated draft PFD for the Configuration Item Receipts and returned comments to the author.

# Anticipated Activities During SEP 94

Develop detailed step-by-step procedures for the Configuration Item Receipt procedure.

Revise all MSX Pipeline procedures to reflect changes in the man-machine interface for the FOC software build.

#### **Task 4--Requirements Development**

#### Abstract

This task requires SQC to meet with NRL scientists, users, customers, and others identified by the Contracting Officer's Technical Representative to document project requirements. SQC is required to document requirements in Type A and Type B specifications. The requirements are o provide program managers with capability for product assessment through analysis and testing of performance parameters. SQC is to determine performance requirements and demonstrate satisfaction through testing

# Work Performed During AUG 94

Updated the BDC to SDAC ICD and distributed it for review.

Updated the BDC to EMDAC ICD.

Distributed the BDC to SEU DAT and UVISI DPC to BDC ICDs for internal BDC review.

Compiled and transmitted BDC review comments to the PLDAF for the PLDAF to BDC ICD.

#### **Anticipated Activities During SEP 94**

Release the BDC to SDAC and BDC to EMDAC ICDs as requirements documents.

Complete updates of the BDC to PLDAF and BDC to OSDP ICDs and distribute them for review.

# Task 5--Documentation Review

#### Abstract

This task requires SQC to review documents prepared by NRL contractors in a variety of activities for compliance with relevant established standards, development plans, and management plans and to provide comments and recommendations to NRL. The task also requires SQC to perform technical reviews and audits (formal design reviews, informal reviews, and administrative reviews) on NRL's contractor developed hardware, software, facilities, and management documents.

### Work Performed During AUG 94

Reviewed the test cases and test procedures developed for FOC testing of the MSX system.

Performed a review of a revised draft of a Generic Evaluation Procedure and provided comments to the author.

Update of the BDC Lexicon was placed into BDC review.

#### Anticipated Activities During SEP 94

Release the System Test Description to OCM.

# Task 6--Technical Information Preparation and Presentation

### Abstract

This task requires SQC to prepare and provide formal and informal statu-of-the-art techniques presentations in Project and Process Management disciplines.

## Work Performed During AUG 94

Presented briefing at BMDO Test Data Centers Program Review.

Hosted quarterly DCSC meeting.

Prepared and distributed CCB Minutes.

Prepared and distributed DM PR Status Report,

Participated in the DM DST 4.3 and 4.4 planning teleconference.

# **Anticipated Activities During SEP 94**

Prepare for and participate in the System Acceptance Review (SAR).

# Task 7--Formal Test Case and Test Procedure development and Execution

# Abstract

This task requires SQC to develop and execute detailed test cases and procedures designed to validate designated developed products prior to their being declared operational. The testing must demonstrate that all system elements satisfy NRL requirements. SQC must also verify that testing spans the overall acquisition cycle.

# Work Performed During AUG 94

Managed and provided guidance for the preparation of formal test cases, test case descriptions, and test procedures. During this reporting period, test procedures were developed to test the software and operations allocated functions of the MSX Pipeline System.

Managed the effort of preparing the required volume of test data input needed to conduct FOC volume testing.

Commenced FOC testing.

Continued the management of and coordinated the activities necessary to successfully complete Data System Test (DST) 5.1.which was successfully completed during this reporting period.

# **Anticipated Activities During SEP 94**

Manage and coordinate the activities required to conclude DST 4.3 and start DST 4.4.

Submit FOC test data input to OCM for control and continue managing FOC test activities.