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OAK RIDGE NATIONAL LABORATORY

LOCKHEED MARTIN

ORNL/TM-13375



# Project Management Plan for the Objective Supply Capability Adaptive Redesign (OSCAR) Project

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MANAGED AND OPERATED BY
LOCKHEED MARTIN ENERGY RESEARCH CORPORATION
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

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ORNL/TM-13375

Computational Physics and Engineering Division

# PROJECT MANAGEMENT PLAN FOR THE OBJECTIVE SUPPLY CAPABILITY ADAPTIVE REDESIGN (OSCAR) PROJECT

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Prepared by the
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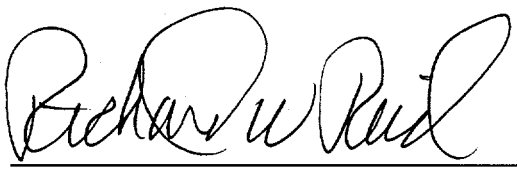
## APPROVALS

The following signatures indicate acceptance of, concurrence with, and support of this Project Management Plan for the Objective Supply Capability Adaptive Redesign (OSCAR) Project.



Date: 1/27/97

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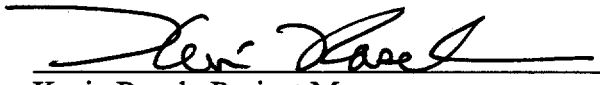

Date: 1/27/97

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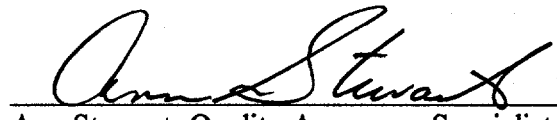

Date: 1-29-97

Ann Stewart, Quality Assurance Specialist
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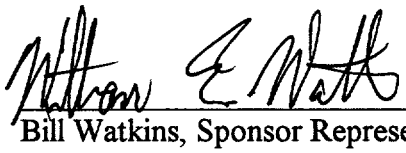

Date: 2-7-97

Bill Watkins, Sponsor Representative
National Guard Bureau

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## ABSTRACT

This document establishes the project management plan for design and development of the Object Supply Capability Adaptive Redesign (OSCAR) Project. The purpose of the project management plan is to document the plans, goals, directions, commitments, approaches, and decisions that relate to guiding a project throughout its life cycle. Special attention is given to project goals, deliverables, sponsor and project standards, project resources, schedule, and cost estimates.

## ACRONYMS

| | |
|---|---|
| DOE | U.S. Department of Energy |
| LMER | Lockheed Martin Energy Research Corporation |
| NGB | National Guard Bureau |
| ORNL | Oak Ridge National Laboratory |
| OSC | Objective Supply Capability |
| OSCAR | Objective Supply Capability Adaptive Redesign |
| PMP | project management plan |

# 1. PROJECT OVERVIEW

## 1.1 PROJECT STATEMENT

The Object Supply Capability Adaptive Redesign (OSCAR) system consists of three subsystems: the State Objective Supply Capability (OSC) Gateway, the Excess Management Gateway, and the National Guard Bureau (NGB) OSC Gateway.

### 1.1.1 State OSC Gateway

Each state will run the State OSC Gateway subsystem on a workstation at its site. This subsystem will control communications between each state and the other two systems (which will both be running on a workstation at the NGB site in Arlington, Virginia). It will also be responsible for converting input data from multiple National Guard systems into a common format.

NGB will develop this subsystem internally. The Oak Ridge National Laboratory will be responsible for ensuring that communication and interfaces between the gateways and the other subsystems are established and perform effectively.

### 1.1.2 Excess Management Gateway

The Excess Management Gateway subsystem will streamline management of excess equipment that affects a unit's readiness to go to war. This streamlining will be achieved by automating some of the tasks that asset managers currently perform manually.

### 1.1.3 NGB OSC Gateway

The NGB OSC Gateway subsystem will store information about excess supplies at National Guard units across the country. When a unit orders new supplies, this subsystem will determine whether the supplies are available as excess from another National Guard site. If so, it will effect a transfer of the supplies.

## 1.2 PROJECT GOALS

The overall goal of this project is to deliver software to NGB that will enable it to more effectively manage its excess supplies. Specific functional goals will be grouped into project phases. At the conclusion of each phase, a prototype software module will be installed and feedback will be solicited from NGB. This feedback will be used to refine the project requirements further.

## 1.3 DELIVERABLES

Deliverables fall into two categories—documentation and software. Documentation deliverables are as follows:

- Quality Assurance Plan
- Project Management Plan
- Configuration Management Plan
- User Manual

Note that the User Manual will be written primarily by NGB personnel.

Software deliverables are grouped by phase in the following table. Note that deliverables in later phases may be changed by NGB to reflect knowledge gained from prototypes installed during the early phases.

| Phase | Software Deliverables |
|---|---|
| I | OSCAR Excess Management Client version 1.0. |
| | OSCAR Server version 1.0 (includes Excess Management Gateway). |
| | |
| II | OSCAR Excess Management Client version 2.0. |
| | OSCAR Server version 2.0 (adds support for new Excess Management Client). |
| | |
| III | OSCAR Server version 3.0 (adds NGB OSC Gateway). |
| | |
| IV | OSCAR Server version 4.0 (adds ARMIS support). |

Note that all software deliverables after the second phase of the project must interface with the State OSC Gateway that NGB will develop internally.

### 1.4 SPONSOR AND PROJECT STANDARDS

Documentation and software development will follow requirements as defined by the U.S. Department of Energy (DOE) and Lockheed Martin Energy Research Corporation (LMER). Satisfying DOE and LMER standards will also satisfy NGB standards.

# 2. PROJECT INITIATION

## 2.1 PROJECT RESOURCES

### 2.1.1 Staffing

The success of the project will depend on coordinating the efforts of Lockheed Martin personnel as well as personnel provided by NGB. For this reason, the following table includes the names of personnel from both organizations.

| Name | Organization | Primary Role |
|---|---|---|
| Kevin Rasch | Lockheed Martin | Project manager, software developer |
| Dick Reid | Lockheed Martin | Program manager |
| Ann Stewart | Lockheed Martin | Quality assurance specialist |
| Sgt. Tammy Snyder | Army National Guard | System administrator |
| TBN | Army National Guard | State OSC Gateway developer |
| CW3 Bobby Pelath | Army National Guard | Technical contact |

### 2.1.2 Hardware and Software

The following platforms will be used for the development of OSCAR:

- Sun SPARCstation 20 running Solaris 2.4 and Informix Online 7.1
- Intel Pentium-based personal computer running Windows NT 4.0

The following software tools are anticipated for use in developing OSCAR:

- Informix Connect
- Informix ESQL/C
- Intersolv DataDirect ODBC driver for Informix
- SunSoft Visual Workshop C++
- Rogue Wave Tools++.h
- Rogue Wave DBTools++.h
- Erwin/ERX
- Visual FoxPro
- Crystal Reports Professional

## 2.2 SCHEDULE

A schedule for the project is shown in Appendix A. This schedule will be updated periodically during the life of the project.

As previously stated, OSCAR will be developed in phases. At the end of each phase, a prototype system will be installed and feedback will be solicited from NGB. This feedback will be used to refine the specifications and design of later phases. For this reason, the schedule does not yet include tasks after the second phase of the project.

## 2.3 COST ESTIMATES

Cost estimates for the project are summarized in the following table. These estimates include company overhead.

| Description | FY 1997 | FY 1998 | FY 1999 |
|---|---|---|---|
| Labor | $200,000 | $200,000 | $100,000 |
| Travel | 20,000 | 20,000 | 10,000 |
| Hardware/software | 30,000 | 10,000 | 10,000 |
| DOE added factor (4.3%) | 10,750 | 9,890 | 5,160 |
| Total | $260,750 | $239,890 | $125,160 |

# APPENDIX: SCHEDULE

| Task | Complete | Control | Projected | Remarks |
|---|---|---|---|---|
| **PHASE 1** | **22%** | **No** | **Tue 4/29/97** | |
| Documentation-Quality Assurance Plan | 100% | Yes | Mon 12/30/96 | |
| Documentation-Database Model | 100% | Yes | Mon 12/30/96 | |
| Windows Program-Database Login | 95% | Yes | Thu 1/2/97 | |
| Windows Program-Menus | 80% | Yes | Mon 1/6/97 | |
| Windows Program-Catalog Data Import | 0% | No | Wed 1/8/97 | |
| Windows Program-Dodaac Data Import | 0% | No | Fri 1/10/97 | |
| Documentation-Project Management Plan | 90% | Yes | Fri 1/10/97 | |
| Documentation-Configuration Control Plan | 90% | Yes | Fri 1/10/97 | |
| Windows Program-Auto Disposition Table Maintenance | 0% | Yes | Fri 1/24/97 | |
| Windows Program-Setup Table Maintenance | 0% | Yes | Mon 1/27/97 | |
| Windows Program-Priority Table Maintenance | 0% | Yes | Wed 1/29/97 | |
| Windows Program-Ricc Table Maintenance | 0% | Yes | Tue 2/4/97 | |
| Windows Program-Condition Table Maintenance | 0% | Yes | Thu 2/6/97 | |
| Windows Program-SOS Table Maintenance | 0% | Yes | Mon 2/10/97 | |
| Windows Program-User Table Maintenance | 0% | Yes | Wed 2/12/97 | |
| Windows Program-User/SOS Table Maintenance | 0% | Yes | Mon 2/17/97 | |
| Windows Program-State Table Maintenance | 0% | Yes | Wed 2/19/97 | |
| Populate Database-Development Platform | 10% | Yes | Thu 2/20/97 | |
| Windows Program-Manual Excess Management | 0% | Yes | Thu 2/27/97 | |
| Testing-Test Interactive Processes-Validation | 0% | Yes | Fri 2/28/97 | Bobby in Oak Ridge for this |
| Communications-Data Flow Input | 10% | No | Tue 3/4/97 | |
| Communications-Data Flow Output | 10% | No | Thu 3/6/97 | |
| Testing-Test Communications from Customer | 0% | No | Fri 3/7/97 | Bobby in Oak Ridge for this |
| Testing-Test Communications to Customer | 0% | No | Mon 3/10/97 | Bobby in Oak Ridge for this |
| Timer Program-Framework | 0% | Yes | Mon 3/17/97 | |
| Timer Program-Import Transactions from Customers | 0% | No | Wed 3/19/97 | |
| Timer Program-Process Transactions from Customers | 0% | Yes | Wed 3/26/97 | |
| Timer Program-Send Transactions to Daas/Customers | 0% | No | Mon 3/31/97 | |
| Timer Program-Scan Master-Handle days_archive | 0% | Yes | Tue 4/1/97 | |
| Timer Program-Scan Master-Handle days_mgt_notify | 0% | Yes | Wed 4/2/97 | |
| Excess Conference | 0% | No | Tue 4/8/97 | |
| Timer Program-Scan Master-Handle days_auto_status | 0% | Yes | Wed 4/9/97 | |

# APPENDIX: SCHEDULE

| Task | Complete | Control | Projected | Remarks |
|---|---|---|---|---|
| Timer Program-Scan Master-Handle days_ftr_status | 0% | Yes | Thu 4/10/97 | |
| Timer Program-Scan Master-Handle days_ftm_create | 0% | Yes | Fri 4/11/97 | |
| Timer Program-Scan Master-Handle days_ftm | 0% | Yes | Mon 4/14/97 | |
| Testing-Test Interactive Processes-User | 0% | Yes | Tue 4/15/97 | Harry in Oak Ridge for this |
| Testing-Test Automated Processes | 0% | Yes | Wed 4/16/97 | |
| Quality Assurance Surveillance-Phase 1 | 0% | No | Thu 4/17/97 | |
| Installation-Sun Hardware | 0% | Yes | Fri 4/18/97 | Kevin in Arlington for this |
| Installation-Sun Database | 0% | Yes | Tue 4/22/97 | Kevin in Arlington for this |
| Installation-Sun Software/Setup Accounts | 0% | Yes | Wed 4/23/97 | Kevin in Arlington for this |
| Installation-PC Software | 0% | Yes | Thu 4/24/97 | Kevin in Arlington for this |
| Training-Phase 1 | 0% | Yes | Mon 4/28/97 | Kevin in Arlington for this |
| Populate Database-Production Platform | 0% | Yes | Tue 4/29/97 | System Admin/Supervisor task |
| Testing-Pilot States | 0% | No | Tue 4/29/97 | Projected start date |
| | | | | |
| **PHASE 2** | **0%** | **Yes** | **Thu 6/12/97** | |
| Windows Program-Automated Excess Management | 0% | Yes | Tue 5/20/97 | |
| Windows Program-Reports | 0% | Yes | Wed 6/4/97 | |
| Quality Assurance Surveillance-Phase 2 | 0% | No | Thu 6/5/97 | |
| Testing-Phase 2 Enhancements | 0% | Yes | Mon 6/9/97 | |
| Installation-Phase 2 Enhancements | 0% | Yes | Wed 6/11/97 | Kevin in Arlington for this |
| Training-Phase 2 | 0% | Yes | Thu 6/12/97 | Kevin in Arlington for this |