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

K. A. Rasch
R. W. Reid

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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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Date Published: February 1997

Prepared by the
Oak Ridge National Laboratory
Oak Ridge, Tennessee 37831-6397
Managed by
LOCKHEED MARTIN ENERGY RESEARCH CORP.
for the
U.S. DEPARTMENT OF ENERGY
under contract DE-AC05-96OR22464

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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Oak Ridge National Laboratory

Date: 1/27/97

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Oak Ridge National Laboratory

Date: 1-29-97

Ann Stewart, Quality Assurance Specialist
Data Systems Research and Development

Date: 2-2-97

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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 ESQ/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_fr_status	0%	Yes	Thu 4/10/97	
Timer Program-Scan Master-Handle days_fm_create	0%	Yes	Fri 4/11/97	
Timer Program-Scan Master-Handle days_fm	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