# GCCS System Integration Support

## RFA Maintenance Manual
## Update

May 24, 1996

Prepared for:

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Contract Number: DCA 100-94-D-0014
Delivery Order Number: 204, Task 5
CDRL Number: A072

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**RFA MAINTENANCE MANUAL**
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# GCCS System Integration Support

## JOPES Software Configuration Management Report

May 21, 1996

Prepared for:

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Contract Number: DCA 100-94-D-0014
Delivery Order Number: 204, Task 5
CDRL Number: A005

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The Global Command and Control System (GCCS) Joint Operation Planning and Execution System (JOPES) Configuration Management (CM) Report contains the CM logs that are maintained to record the delivered releases for each application, as well as the Global System Problem Reports (GSPRs) closed in each release. These logs have been maintained since the first application delivered on February 23, 1995.

Table A shows, in ascending chronological order:

a. the application,
b. the version,
c. the version date (date tape was produced),
d. the delivery date (date version was provided to the Government at the Operational Support Facility (OSF)),
e. the platform/operating system (OS) (Sun Sparc or Hewlett Packard TAC / Sun Solaris or Hewlett Packard HP-UX), and
f. comments.

Table B shows, in ascending GSPR Number order, the GSPRs corrected by version number from October 6, 1995 through the present. After early versions of the application systems were installed at Government sites, changes to the source code were initiated by the Government provided GSPRs. Table B contains the following:

a. the corrected GSPR number,
b. the application,
c. the platform/operating system (OS) (Sun Sparc or Hewlett Packard TAC / Sun Solaris or Hewlett Packard HP-UX),
d. the version, and
e. the version date (date tape was produced).

The applications listed in tables A and B use the common abbreviations as follows:

| | |
|---|---|
| JEPES | Joint Engineer Planning and Execution System |
| JNAV | JOPES High-Level Navigation & On-line Help |
| RFA | Reference File Administration |
| RDA | Requirements Development and Analysis |
| PDR | Predefined Reports |
| TCCESI | Transportation Component Command External Systems Interface |
| LOGSAFE | Logistics Sustainment Analysis and Feasibility Estimator. |

Table A. GCCS JOPES Release Delivery Log, Page 1 of 2

| Application | Version | Version Date | Delivery Date | Platform/OS | Comments |
|---|---|---|---|---|---|
| JEPES | 4.00 | 23-Feb-95 | 23-Feb-95 | Sparc/Solaris | |
| JEPES | 4.00.01 | 6-Mar-95 | 3-Jun-95 | Sparc/Solaris | |
| JNAV | 0.8 | 28-Apr-95 | 28-Apr-95 | Sparc/Solaris | |
| RDA | 0.5 | 1-May-95 | 1-May-95 | Sparc/Solaris | |
| RFA | 1.1 | 12-May-95 | 12-May-95 | Sparc/Solaris | |
| JNAV | 1.0 | 30-May-95 | 30-May-95 | Sparc/Solaris | |
| LOGSAFE | 2.0 | 30-May-95 | 30-May-95 | Sparc/Solaris | |
| PDR | 1.0 | 30-May-95 | 30-May-95 | Sparc/Solaris | |
| RDA | 1.0 | 30-May-95 | 30-May-95 | Sparc/Solaris | |
| TCCESI | 1.0 | 30-May-95 | 30-May-95 | Sparc/Solaris | |
| LOGSAFE | 2.1 | 31-May-95 | 31-May-95 | Sparc/Solaris | |
| JNAV | 1.0.1 | 12-Jun-95 | 12-Jun-95 | Sparc/Solaris | |
| RDA | 1.1 | 16-Jun-95 | 16-Jun-95 | Sparc/Solaris | |
| RDA | 1.2 | 27-Jun-95 | 27-Jun-95 | Sparc/Solaris | |
| JNAV | 2.0 | 30-Jun-95 | 30-Jun-95 | Sparc/Solaris | |
| PDR | 1.1 | 30-Jun-95 | 30-Jun-95 | Sparc/Solaris | |
| RFA | 1.2 | 30-Jun-95 | 30-Jun-95 | Sparc/Solaris | |
| JNAV | src | 14-Jul-95 | 14-Jul-95 | Sparc/Solaris | Source code only |
| JEPES | 4.01 | 28-Jul-95 | 28-Jul-95 | Sparc/Solaris | |
| JNAV | 2.2 | 28-Jul-95 | 28-Jul-95 | Sparc/Solaris | |
| LOGSAFE | 2.2 | 28-Jul-95 | 28-Jul-95 | Sparc/Solaris | |
| PDR | 1.2 | 31-Jul-95 | 31-Jul-95 | Sparc/Solaris | |
| RDA | 1.3 | 31-Jul-95 | 31-Jul-95 | Sparc/Solaris | |
| RFA | 1.2.1 | 31-Jul-95 | 31-Jul-95 | Sparc/Solaris | |
| TCCESI | 1.1 | 31-Jul-95 | 31-Jul-95 | Sparc/Solaris | |
| LOGSAFE | 2.2.01 | 3-Aug-95 | 3-Aug-95 | Sparc/Solaris | *To JTO only |
| JEPES | src | 14-Aug-95 | 14-Aug-95 | Sparc/Solaris | Source code only |
| RDA | 1.7 | 30-Aug-95 | 30-Aug-95 | Sparc/Solaris | |
| RDA | 1.7.1 | 31-Aug-95 | 31-Aug-95 | Sparc/Solaris | |
| RFA | 1.3 | 1-Sep-95 | 1-Sep-95 | Sparc/Solaris | |
| JNAV | 2.3 | 15-Sep-95 | 15-Sep-95 | Sparc/Solaris | |
| LOGSAFE | 2.4 | 15-Sep-95 | 15-Sep-95 | Sparc/Solaris | |
| RDA | 1.7.3 | 15-Sep-95 | 15-Sep-95 | Sparc/Solaris | |
| LOGSAFE | 2.5 | 6-Oct-95 | 9-Oct-95 | Sparc/Solaris | |
| PDR | 1.3 | 12-Oct-95 | 12-Oct-95 | Sparc/Solaris | |
| JNAV | 2.4 | 12-Oct-95 | 13-Oct-95 | Sparc/Solaris | |
| RDA | 1.7.4 | 30-Oct-95 | 30-Oct-95 | Sparc/Solaris | |
| PDR | 1.4 | 31-Oct-95 | 31-Oct-95 | Sparc/Solaris | |
| RDA | 1.7.4 | 1-Nov-95 | 1-Nov-95 | TAC/HP-UX | |
| PDR | 1.4.1 | 3-Nov-95 | 3-Nov-95 | Sparc/Solaris | |

Table A. GCCS JOPES Release Delivery Log, Page 2 of 2

| Application | Version | Version Date | Delivery Date | Platform/OS | Comments |
|---|---|---|---|---|---|
| RDA | 1.7.5.01 | 3-Nov-95 | 6-Nov-95 | TAC/HP-UX | |
| RDA | 1.7.5.02 | 30-Nov-95 | 1-Dec-95 | TAC/HP-UX | Client patch only |
| PDR | 1.4.2 | 5-Dec-95 | 5-Dec-95 | TAC/HP-UX | |
| JNAV | 2.5.0 | 15-Dec-95 | 15-Dec-95 | Sparc/Solaris | |
| RDA | 1.7.6 | 15-Dec-95 | 15-Dec-95 | Sparc/Solaris | |
| JNAV | 2.5.0 | 19-Dec-95 | 19-Dec-95 | TAC/HP-UX | |
| RDA | 1.7.7 | 19-Dec-95 | 19-Dec-95 | Sparc/Solaris | |
| RDA | 1.7.7 | 21-Dec-95 | 21-Dec-95 | TAC/HP-UX | |
| JNAV | 2.5.1 | 11-Jan-96 | 15-Jan-96 | Sparc/Solaris | Client patch only |
| JNAV | 2.5.1 | 11-Jan-96 | 16-Jan-96 | TAC/HP-UX | Client patch only |
| RDA | 1.7.8 | 19-Jan-96 | 19-Jan-96 | TAC/HP-UX | |
| LOGSAFE | 2.5.1 | 19-Jan-96 | 22-Jan-96 | Sparc/Solaris | OLSAFE.P2 only |
| LOGSAFE | 2.6.0 | 24-Jan-96 | 24-Jan-96 | Sparc/Solaris | |
| LOGSAFE | 2.6.0 | 24-Jan-96 | 26-Jan-96 | TAC/HP-UX | |
| JNAV | 2.5.2 | 25-Jan-96 | 25-Jan-96 | TAC/HP-UX | |
| JNAV | 2.5.2 | 31-Jan-96 | 9-Feb-96 | Sparc/Solaris | |
| RDA | 1.7.7.1 | 1-Mar-96 | 7-Mar-96 | Sparc/Solaris | Client patch only |
| PDR | 1.5.0 | 5-Mar-96 | 5-Mar-96 | Sparc/Solaris | |
| RDA | 1.7.8.1 | 8-Mar-96 | 11-Mar-96 | TAC/HP-UX | Client patch only |
| RDA | 1.7.9 | 19-Mar-96 | 19-Mar-96 | Sparc/Solaris | |
| JNAV | 2.6.0 | 22-Mar-96 | 22-Mar-96 | Sparc/Solaris | |
| RDA | 1.7.9 | 22-Mar-96 | 22-Mar-96 | TAC/HP-UX | |
| JNAV | 2.6.0 | 1-Apr-96 | 3-Apr-96 | TAC/HP-UX | |
| PDR | 1.5.0 | 1-Apr-96 | 3-Apr-96 | TAC/HP-UX | |
| RDA | 1.7.9.1 | 1-Apr-96 | 3-Apr-96 | TAC/HP-UX | |
| JEPES | 4.03.0 | 12-Apr-96 | 15-Apr-96 | Sparc/Solaris | |
| PDR | 1.5.1 | 1-May-96 | 1-May-96 | Sparc/Solaris | |
| PDR | 1.5.1 | 1-May-96 | 2-May-96 | TAC/HP-UX | |
| RDA | 1.7.10 | 7-May-96 | 7-May-96 | Sparc/Solaris | |
| RDA | 1.7.10 | 7-May-96 | 8-May-96 | TAC/HP-UX | |
| RFA | 1.4.0 | 15-May-96 | 15-May-96 | Sparc/Solaris | |

* JOPES Training Organization (JTO)

Table B. GCCS JOPES Delivered GSPR Correction Log, Page 1 of 4

| GSPR | Application | Platform/OS | Version | Version Date |
|---|---|---|---|---|
| LRO281410 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| LRO281415 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| RSM281313 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| LRO291245 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G50991 | LOGSAFE | Sparc/Solaris | 2.5 | 6-Oct-95 |
| G51100 | RDA | Sparc/Solaris | 1.7.3 | 15-Sep-95 |
| G51115 | RDA | Sparc/Solaris | 1.7.3 | 15-Sep-95 |
| G51116 | RDA | Sparc/Solaris | 1.7.4 | 30-Oct-95 |
| G51116 | RDA | Sparc/Solaris | 1.7.3 | 15-Sep-95 |
| G51118 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51119 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51125 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G51179 | RDA | Sparc/Solaris | 1.7.3 | 15-Sep-95 |
| G51187 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G51189 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G51199 | RDA | Sparc/Solaris | 1.7.3 | 15-Sep-95 |
| G51200 | RDA | Sparc/Solaris | 1.7.3 | 15-Sep-95 |
| G51203 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51203 | RDA | Sparc/Solaris | 1.7.4 | 30-Oct-95 |
| G51206 | RDA | Sparc/Solaris | 1.7.4 | 30-Oct-95 |
| G51206 | RDA | Sparc/Solaris | 1.7.3 | 15-Sep-95 |
| G51208 | RDA | Sparc/Solaris | 1.7.4 | 30-Oct-95 |
| G51210 | RDA | Sparc/Solaris | 1.7.3 | 15-Sep-95 |
| G51211 | RDA | Sparc/Solaris | 1.7.3 | 15-Sep-95 |
| G51213 | RDA | Sparc/Solaris | 1.7.3 | 15-Sep-95 |
| G51237 | RDA | Sparc/Solaris | 1.7.4 | 30-Oct-95 |
| G51253 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51258 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51267 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51269 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51275 | RDA | TAC/HP-UX | 1.7.9 | 19-Mar-96 |
| G51275 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G51352 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51353 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51354 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51355 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51356 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51357 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51358 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51359 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |

Table B. GCCS JOPES Delivered GSPR Correction Log, Page 2 of 4

| GSPR | Application | Platform/OS | Version | Version Date |
|---|---|---|---|---|
| G51361 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51362 | PDR | Sparc/Solaris | 1.3 | 12-Oct-95 |
| G51364 | PDR | Sparc/Solaris | 1.4.1 | 3-Nov-95 |
| G51365 | RDA | Sparc/Solaris | 1.7.4 | 30-Oct-95 |
| G51367 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G51368 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G51378 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51383 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G51399 | RDA | Sparc/Solaris | 1.7.4 | 30-Oct-95 |
| G51400 | JNAV | Sparc/Solaris | 2.5.0 | 15-Dec-95 |
| G51407 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G51445 | JNAV | Sparc/Solaris | 2.6.0 | 22-Mar-96 |
| G51448 | JNAV | Sparc/Solaris | 2.6.0 | 22-Mar-96 |
| G51463 | JNAV | Sparc/Solaris | 2.5.0 | 15-Dec-95 |
| G51464 | JNAV | Sparc/Solaris | 2.5.0 | 15-Dec-95 |
| G51465 | JNAV | Sparc/Solaris | 2.5.0 | 15-Dec-95 |
| G51466 | JNAV | Sparc/Solaris | 2.5.0 | 15-Dec-95 |
| G51467 | JNAV | Sparc/Solaris | 2.5.0 | 15-Dec-95 |
| G51468 | JNAV | Sparc/Solaris | 2.5.0 | 15-Dec-95 |
| G51471 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G51475 | RDA | Sparc/Solaris | 1.7.4 | 30-Oct-95 |
| G51480 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G51482 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51483 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51536 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51538 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G51539 | LOGSAFE | Sparc/Solaris | 2.6.0 | 24-Jan-96 |
| G51541 | LOGSAFE | Sparc/Solaris | 2.6.0 | 24-Jan-96 |
| G51542 | LOGSAFE | Sparc/Solaris | 2.6.0 | 24-Jan-96 |
| G51543 | LOGSAFE | Sparc/Solaris | 2.6.0 | 24-Jan-96 |
| G51544 | LOGSAFE | Sparc/Solaris | 2.6.0 | 24-Jan-96 |
| G51545 | LOGSAFE | Sparc/Solaris | 2.6.0 | 24-Jan-96 |
| G51546 | LOGSAFE | Sparc/Solaris | 2.6.0 | 24-Jan-96 |
| G51557 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51567 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51574 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G51590 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51616 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G51629 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51633 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |

Table B. GCCS JOPES Delivered GSPR Correction Log, Page 3 of 4

| GSPR | Application | Platform/OS | Version | Version Date |
|---|---|---|---|---|
| G51650 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51655 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51656 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51736 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51738 | RDA | Sparc/Solaris | 1.7.10 | 7-May-96 |
| G51738 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51739 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51740 | RDA | Sparc/Solaris | 1.7.6 | 14-Dec-95 |
| G51815 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G51830 | PDR | Sparc/Solaris | 1.5.0 | 5-Mar-96 |
| G51835 | RDA | Sparc/Solaris | 1.7.10 | 7-May-96 |
| G51840 | RDA | Sparc/Solaris | 1.7.10 | 7-May-96 |
| G51843 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60011 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G60017 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G60018 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G60027 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60028 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60029 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60030 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60032 | JNAV | Sparc/Solaris | 2.6.0 | 22-Mar-96 |
| G60057 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60059 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60060 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60061 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60067 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60070 | PDR | Sparc/Solaris | 1.5.0 | 5-Mar-96 |
| G60075 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G60076 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G60080 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60084 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60109 | JNAV | Sparc/Solaris | 2.6.0 | 22-Mar-96 |
| G60111 | JNAV | Sparc/Solaris | 2.6.0 | 22-Mar-96 |
| G60115 | PDR | Sparc/Solaris | 1.5.0 | 5-Mar-96 |
| G60116 | PDR | Sparc/Solaris | 1.5.0 | 5-Mar-96 |
| G60125 | PDR | Sparc/Solaris | 1.5.0 | 5-Mar-96 |
| G60126 | PDR | Sparc/Solaris | 1.5.0 | 5-Mar-96 |
| G60133 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60145 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60146 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |

Table B. GCCS JOPES Delivered GSPR Correction Log, Page 4 of 4

| GSPR | Application | Platform/OS | Version | Version Date |
|---|---|---|---|---|
| G60147 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60154 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G60155 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G60165 | RDA | Sparc/Solaris | 1.7.10 | 7-May-96 |
| G60165 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G60166 | RDA | Sparc/Solaris | 1.7.10 | 7-May-96 |
| G60178 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G60179 | RDA | Sparc/Solaris | 1.7.10 | 7-May-96 |
| G60179 | RDA | Sparc/Solaris | 1.7.9 | 19-Mar-96 |
| G60179 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G60203 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G60230 | JNAV | Sparc/Solaris | 2.6.0 | 22-Mar-96 |
| G60231 | JNAV | Sparc/Solaris | 2.6.0 | 22-Mar-96 |
| G60258 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G60259 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G60260 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G60261 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G60262 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G60295 | JEPES | Sparc/Solaris | 4.03.0 | 12-Apr-96 |
| G60338 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| G60340 | RDA | Sparc/Solaris | 1.7.10 | 7-May-96 |
| G60343 | RDA | Sparc/Solaris | 1.7.10 | 7-May-96 |
| G60348 | RDA | Sparc/Solaris | 1.7.10 | 7-May-96 |
| G60349 | RDA | Sparc/Solaris | 1.7.10 | 7-May-96 |
| G60350 | RDA | Sparc/Solaris | 1.7.10 | 7-May-96 |
| G60359 | RDA | Sparc/Solaris | 1.7.10 | 7-May-96 |
| G60360 | PDR | Sparc/Solaris | 1.5.1 | 1-May-96 |
| HRR#4684** | LOGSAFE | Sparc/Solaris | 2.5.1 | 19-Jan-96 |
| HRR#4706** | LOGSAFE | Sparc/Solaris | 2.5.1 | 19-Jan-96 |

** Hot Line Requests

## 1.0 SCOPE

### 1.1 Identification

The Reference File Administration (RFA) Maintenance Manual was developed in accordance with Department of Defense (DoD), Military Standard-498, Data Item Description (DID), Software Development and Documentation, Software Product Specification (SPS), as referenced in Section 2.0, item d. RFA is a subsystem of the Joint Operation Planning and Execution System (JOPES) component of the Global Command and Control System (GCCS), Version 2.1. RFA is used in a centralized location by database analysts to accept Joint Reporting Structure (JRS) input transactions and to update reference files that are distributed to JOPES database servers within GCCS.

RFA operates in a client/server environment. The RFA software resides on a UNIX application server or client, while its data resides in an ORACLE Relational Database Management System (RDBMS) on a database server. The RFA software utilizes ORACLE Forms 4.0 as the Graphical User Interface (GUI) and ORACLE Reports 2.0 as the report generator. UNIX shell scripts and ORACLE Structured Query Language (SQL) are used where required.

The following lists the commerical-off-the-shelf (COTS) products used by RFA and their version numbers.

a. ORACLE RDBMS Server 7 Release 7.1.4.1.0 w/ distributed option
b. ORACLE PL/SQL Release 2.1.4.0.0
c. ORACLE Forms Release 4.0.13.20.0
d. ORACLE Reports Release 2.0.14.6.2
e. ORACLE SQL*Loader Release 7.1.4.1.0
f. ORACLE SQL*Plus Release 3.1.3.5.1
g. SQL*NET ver 2.0.15.0.0
h. JOPES Core Database (Scheduling & Movement Database (SMDB) Segment)
i. Solaris 2.3/2.4

### 1.2 Application Overview

RFA is used by database analysts at the Defense Information Systems Agency (DISA)-Western Hemisphere (WESTHEM)/Joint Staff Support Center (JSSC)/WEY441 to process reference file updates which originate from Services and agencies within the Department of Defense (DoD). RFA verifies the accuracy of input transactions submitted in accordance with the JRS, prepares transactions which update the JOPES Core database and in some cases provides inputs for legacy software.

RFA is a menu-driven system that assists database analysts in the reference file maintenance process. RFA provides an on-line update to the Specified Geographic Location (GEO) file, and batch updates to the Type Unit Characteristics File (TUCHA), the Type Unit Equipment Detail File (TUDET), the Port Characteristics File (PORTS), the Aerial Ports and Air Operating Bases File (APORTS), and the Logistic Factors File (LFF). After updates have been processed for a particular reference file, the network process of RFA reduces the transactions to, at most, a single change for each database record. An ORACLE script to update reference file tables at the local JOPES database site is produced. The version of SMDB which includes the ORACLE snapshot feature provides for automatic replication of these changes to all the JOPES databases

throughout GCCS. A series of reports can be produced to show rejected transactions, processed transactions, and reference file status.

The major functions of RFA are:

**Make Working Copy**. This function allows the user to produce a starting position for a specified reference file by copying the contents of that reference file from an operational database server. Updates to reference files are made to this "working" copy. In order to execute this function, the user must be an RFA Database Administrator (DBA), or a DBA of the given reference file, or have UPDATE access to the specified reference file.

**On-line Update**. This function is available for GEO, TUCHA, and Access Control Files. GEO On-line Update allows the user to add, change or delete any GEO record. The GEO On-line Update function also allows the user to invoke the GEO Autodelete function to delete GEO records that have been canceled for some time. The TUCHA On-line Update allows the user to invoke the TUCHA Autodelete function to delete TUCHA records that have been canceled for some time. The Access Control File On-line Update function allows RFA Administrators to use discretionary access controls to restrict the users who can execute the various functions of RFA. A user identified as an RFA DBA can perform any RFA function. A DBA of an individual reference file can perform all RFA functions for that reference file. Users who do not qualify as a DBA, must have an individual access to a specific reference file. The access types are UPDATE, NETWORK, and REPORTS. When RFA is initially installed, the UserID "rfaadmin" is identified as a RFA DBA. In order to execute this function, the user must be a DBA or have UPDATE access to the specified reference file.

**Batch Update**. The Batch Update process is available for TUCHA, TUDET, PORTS, APORTS, and LFF. This process allows JRS transactions that are available in UNIX American Standard Code for Information Interchange (ASCII) files to be validated and update the working copy. Reports are available to show JRS format errors, reference file transaction data errors, transaction lists, and successful updates. Session reports show a before and after image of each database record updated. In order to execute this function, the user must be a DBA, or have UPDATE access to the specified reference file.

**Network**. The network function examines all updates to a given reference file over many sessions and reduces these updates to at most a single update per database record. Cycle reports show a before and after image for each updated database record. If the user concurs, a SQL script is generated that will update the contents of the specified reference file on the JOPES database server. For GEO, TUCHA, and TUDET, the Network function will also generate transactions in JRS format that can be exported from GCCS to a legacy Worldwide Military Command and Control System (WWMCCS) Top Secret Support System (TS3) mainframe to process reference file updates within the TS3 network.

**Reports**. This function allows the user to produce several reports. The Reference File Summary Report provides status information on all reference files. Session and Cycle reports are available for individual reference files. Reports for reference files with a batch update capability contain Input Transaction Listings, JRS Edit/Error Reports, and Input Transaction Error Listings. Reports for GEO, TUCHA, and TUDET also have specific file content listings.

**Quit**. The Quit function terminates the current session and, if changes are made to any reference file, provides a summary of records changed in the session and the opportunity to review a full Session Report.

### 1.2.1 History

RFA was originally developed as a series of COBOL programs for the Honeywell WWMCCS mainframe. These programs, collectively known as Reference File Maintenance (RFM), are executed on the National Military Command Center (NMCC) and NMCC2 WWMCCS hosts. In early 1994, Computer Sciences Corporation (CSC) under another contract began migrating the functionality of RFM to a client/server architecture. The resulting system is called RFA. The early migration was done using the ORACLE desktop tools on Microsoft Windows systems on site at the Pentagon. The ORACLE database was configured on a SCO UNIX platform at the Pentagon. In September 1994 under the DEIS contract, CSC moved the migration to CSC's, Virginia Technology Center in Falls Church, VA. The support platform consisted of SUN servers, PCs with AGE Xoftware X-Window server software, and SUN workstations. The first version of RFA was delivered to the Government as Version 1.1 in May 1995 as part of GCCS Version 2.1. Version 1.2 which added functionality for LFF and PORTS was delivered in June 1995. In September 1995 Version 1.3 was delivered with the addition of APORTS functionality.

### 1.2.2 RFA Sponsor

The RFA sponsor is the Defense Information Systems Agency (DISA). For problem reports and assistance, write to the following address:

Defense Information Systems Agency
ATTN: DISA-WESTHEM/JSSC/WEY441
RFA Project Officer
7010 Defense, Pentagon Room BF671A
Washington, DC 20301-7010

### 1.2.3 Users

Database analysts working for DISA-WESTHEM/JSSC/WEY441 are the users of RFA.

### 1.2.4 RFA Developer

RFA was developed by CSC's Systems Engineering Division at Falls Church, VA.

## 1.3 Document Overview

The Software Programmer's Manual details the information required by MIL-STD-498, Data Item Description, DI-IPSC-81447. The main document contains the Scope, References, Notes, and forward references to the remaining information in the appendices. The appendices contain the detailed technical information to support RFA maintenance. The majority of this information is accessible on-line. Appendix A contains requirements, software support information and qualification provisions. Appendix B contains the RFA GCCS Hardware Requirements Questionnaire, which was previously delivered to the Government GCCS Configuration Management Office with each RFA software delivery. Appendix C provides requirements traceability information.

## 2.0 REFERENCED DOCUMENTS

The following documents are referenced in, or are applicable to, this manual:


a. Computer Sciences Corporation, Systems Engineering Division, GCCS JOPES Migration Engineering and Implementation, Software Development Plan (SDP), Falls Church, Virginia, June 15, 1995.

b. Computer Sciences Corporation, Systems Engineering Division, Joint Operation Planning and Execution System (JOPES) Joint Operation Planning System (JOPS) Database Specification, Falls Church, Virginia, August 16, 1994.

c. Computer Sciences Corporation, Systems Engineering Division, JOPES Software Development Standards, Falls Church, Virginia, July 25, 1995.

d. Department of Defense (DoD), Military Standard-498, (MIL-STD-498) Software Development and Documentation, Software Product Specification (SPS), Data Item Description (DID) DI-IPSC-81441, December 5, 1995.

e. Defense Information Systems Agency, GCCS Implementation Procedures for the Global Command and Control System (GCCS) (Draft), Version 2.0, Washington, D.C., March 9, 1995.

f. Defense Information Systems Agency, GCCS Style Guide (Draft), Washington, D.C.

g. Defense Information Systems Agency, Global Command and Control System (GCCS) Integration Standard, Version 1.0, Washington, D.C., October 26, 1994

h. ORACLE Corporation, ORACLE Forms Reference Manual, Part Number A11988-2, Redwood Shores, CA, February 1994.

i. ORACLE Corporation, ORACLE Forms User's Guide, Part Number A11987-2, Redwood Shores, CA, February 1994.

j. ORACLE Corporation, ORACLE Reports Reference Manual, Part Number A14005-1, Redwood Shores, CA, 1993.

k. ORACLE Corporation, Building Reports with ORACLE Reports, Part Number A14004-2, Redwood Shores, CA, 1993.

l. ORACLE7, The Complete Reference, Koch and Muller, Osborne McGraw-Hill, Berkeley, California, 1993.

m. The Definitive Guides to the X Window System, X Window System User's Guide, Quercia and O'Reilly, O'Reilly & Associates, Inc, 1993.

n. The UNIX C Shell Field Guide, Anderson and Anderson, PTR Prentice Hall, Englewood Cliffs, New Jersey.

## 3.0 REQUIREMENTS

The RFA application software requirements are documented within this section. This application operates within the context of the GCCS Desktop as a standard application. The JOPES High Level System Navigation (JNAV) process also is capable of launching the RFA process.

### 3.1 Executable Software

Refer to Appendix A.1.2 for this section.

### 3.2 Source Files

Refer to Appendix A.1.1 for this section.

### 3.3 Segmentation Scripts

Refer to Appendix A.1.3 for this section.

## 4.0 QUALIFICATION PROVISIONS

Refer to Appendix A.5 for this section.

## 5.0 SOFTWARE SUPPORT INFORMATION

### 5.1 "As Built" Software Design

Refer to Appendix A.2 for this section.

### 5.2 Compilation/Build Procedures

Refer to Appendix A.3 for this section.

### 5.3 Modification Procedures

Refer to Appendix A.4 for this section.

## 6.0 REQUIREMENTS TRACEABILITY

Refer to Appendix B for this section.

## 7.0 NOTES

The following acronyms are used in this document:

| | |
|---|---|
| APORTS | Aerial Ports and Air Operating Bases |
| ASCII | American Standard Code for Information Interchange |
| COBOL | Common Business Oriented Language |
| COTS | Commercial-Off-The-Shelf |
| CSC | Computer Sciences Corporation |
| DBA | Database Administrator |
| DEIS | Defense Enterprise Integration Services |
| DISA | Defense Information Systems Agency |
| DoD | Department of Defense |
| GEO | Specified Geographic Location |
| GCCS | Global Command and Control System |
| GSPR | Global System Problem Report |
| GUI | Graphical User Interface |
| HTML | Hyper Text Markup Language |
| JCDB | JOPES Core Database |
| JIEO | Joint Interoperability and Engineering Organization |
| JNAV | JOPES High Level System Navigation |
| JOPES | Joint Operation Planning and Execution System |
| JOPS | Joint Operation Planning System |
| JRS | Joint Reporting Structure |
| LFF | Logistic Factors File |
| MB | Megabytes |
| MHZ | Megahertz |
| NMCC | National Military Command Center |
| PL/SQL | Procedural Language/Structured Query Language |
| PORTS | Port Characteristics |
| RDBMS | Relational Database Management System |
| RFA | Reference File Administration |
| RFM | Reference File Maintenance |
| S&M | Scheduling and Movement |
| SMDB | Scheduling and Movement Database |
| SPM | Software Programmer’s Manual |
| SQL | Structured Query Language |
| TS3 | Top Secret Support System |
| TUCHA | Type Unit Characteristics |
| TUDET | Type Unit Equipment Detail |
| UM | Users Manual |
| VTC | Virginia Technology Center |
| WP | Work Package |
| WWMCCS | Worldwide Military Command and Control System |