Analysis and Discussion Related to the Use of the Multi-Agency Incident Resource Processing System (MIRPS) on a Nationwide Basis

Prepared for
National Wildfire Coordinating Group
By The ROSS Project Team

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Executive Summary

This paper presents the results of an in-depth analysis of differences between the Multi-agency Incident Resource Processing System (MIRPS) and the planned National Interagency Resource Order and Status System (ROSS). In summary, the following findings are documented in this paper.

- The MIRPS effort provides a good foundation upon which ROSS will build.
- The MIRPS system was put together based on a Rapid Application Development (RAD) approach.
- The MIRPS database received little if any design or analysis which is a weak point in the system.
- Many MIRPS tables do not have foreign keys established which put responsibility for data integrity on the MIRPS application itself.
- The majority of work in MIRPS has been to address the application functionality and user interface, which is its greatest contribution to the success of ROSS.
- Many potential issues that were identified during the ROSS Business Requirements Analysis were dealt with during MIRPS development and those resolutions will be used during the ROSS system design.
- The MIRPS system will serve as a foundation for ROSS design and a stepping stone to the next level, as the ROSS Application.
- The MIRPS infrastructure is designed to be for a LAN/WAN, which is primarily focused on platform dependent technology.
- MIRPS uses a configuration of client systems that run custom software.
- MIRPS uses SQL*NET and data replication processes for communications between systems.
- MIRPS has limited dial-in capability through a Remote Access Server.
- MIRPS access focuses on a known number of offices within the California Dispatch System.
- The planned ROSS infrastructure (as outlined in the ROSS Infrastructure Requirements Plan) focuses on the use of an Internet based network, which is platform independent in nature.
- Access to the ROSS servers will be through Internet protocol (TCP/IP), which is connected to via agency LAN/WAN, ISP or dial-in. The objective is to provide maximum access capability in a system independent manner.
- Approvals and Waivers have become a major issue with system procurement and development projects. The MIRPS project lacks these important documents. In order for MIRPS to continue, extensive analysis and planning would be required. This work would focus on building a business case, benefit cost analysis, agency and department finance planning, charter development and approval etc… The ROSS Project has completed all of the necessary work and has obtained approvals and waivers.
- The ROSS Project has obtained USDA Advisory and Assistance Authority permitting necessary contracting options to be exercised. The current design contract, which began work on April 1, 1999, was issued under GSA Schedule 70 authority. Region 2 was delegated the authority to administer this contract by the Forest Service Washington Office.
- Detailed data and functional comparative analysis of MIRPS verses ROSS was conducted and shows that few exceptions, the ROSS application includes all of the data and functionality of MIRPS. The ROSS application will include many more data items and system functionality then MIRPS. The items missing from ROSS are being studied for future addition to the ROSS application.
- Additional analysis of MIRPS is on going. Any additional data items or functionality not documented in this paper will be amended when available.

It continues to be our assessment that the ROSS investment is a credible one which will provide nationwide efficiency that MIRPS began in the state of California, only on a Interagency Basis for the Nation. One key to the success of ROSS is to build from the MIRPS foundation and to utilize to every extent the lessons learned from this grass-roots effort.

Introduction

In 1997, the National Wildfire Coordination Group (NWCG) chartered the National Resource Order and Status (ROSS) Project. Early in 1998 the NWCG proposed that work from the Multi-Agency Incident Resource Processing System (MIRPS is a system under development in a cooperative venture between the California Department of Forest Protection and the US Forest Service Region 5) be reviewed for transition into the ROSS Project Application. This review was completed in late 1998. During 1998 representatives from the ROSS and MIRPS Management Groups reviewed the ROSS Charter to assure that the needs of MIRPS were addressed. The resulting changes were minor. At that time, the MIRPS Leadership agreed to support the ROSS Project and implement the ROSS Application within California once it is available.

As the ROSS team progressed with the ROSS Business Requirements Analysis and Application Design, many dispatchers have been asking why MIRPS is not being implemented nationwide. Many view ROSS as the next version of MIRPS. From a functionality and data content perspective, this suggestion is true.

In general, it is understood that the intent of the ROSS Project is to build a Resource Order and Status application that could be implemented on an interagency basis nationwide. The business scope was defined to meet the needs of all National Wildfire Coordinating Group agencies (BIA, BLM, FS, FWS, NPS, USFA, and 50 States). The intent of MIRPS was to serve the needs of the Forest Service in California and the California Department of Forestry (CDF).

Recognizing the significant investment and risk of undertaking a project of this magnitude, the ROSS team has considered which factors lead to the best chance of project and product success. The ROSS team has constantly sought to proactively address these various factors while refining it's understanding, efficiency and effectiveness in that effort. In fact, since August 1998, Jerry Clements, one of the important leaders of the MIRPS effort has served as a key advisory member of the ROSS team.

The analysis supporting the answer to the question: Why not MIRPS nationwide? is given in light of the success factors which the ROSS team has identified and is pursuing.

The methods used for this analysis are comparative in nature. The areas of focus are Information Systems Planning, Information Systems Infrastructure, Information System Approvals, Waivers and Contracting, functionality and data contained in ROSS which is not found in MIRPS, and functionality and data contained in MIRPS which is not found in ROSS. Two appendices are attached to this paper that give detailed information on the differences between the data and functional aspects of ROSS and MIRPS.

This paper presents the results of analysis work completed in April 1999 by the ROSS Project Team.

Information System Planning

Important to the success of any project is completion of a plan that concisely describes the scope, objectives, risks, success factors, tasks, deliverables, timelines, responsible parties and funding. These plans are signed by project stakeholders who then serve as approving officials for project actions through project completion. The ROSS Team has put much effort into project planning. This effort has contributed to the project success and acceptance by interdisciplinary management from all agencies involved. The table below identifies the various plans that were completed by each project.

Plan Type	ROSS	MIRPS
Project Charter	Yes – Approved 1998	Not Formal
Benefit / Cost Analysis	Yes – update is expected in June 1999	None
Project Statement of Work	Yes – Living Document	None
Contract Statement of Work	Yes – Statement of Work for Design is complete, Build Phase is currently under development	None – Contracting work was completed on a task order basis as funding was available
Infrastructure Requirements	Yes – Living Document	Some work completed for network design. No other formal work known
Client Implementation Plan	Yes – Living Document	Some documentation known
Communication Plan	Yes – Living Document	None
Project Operating Principles	Yes – Living Document	None

Information System Approvals, Waivers and Contracting

During the past three years, there has been an increased focus on investments in technology and system development. Increased emphasis on Information Systems Project Management, investment tracking, and adherence to agency policies has been key to project success. This change has caused much concern by project managers as many feel that this increase in oversight is causing undo cost and unneeded project effort.

When the MIRPS project began many of the current policies and regulations were not in place. The MIRPS project began with verbal technical approvals, which soon caused concerns at the USDA Forest Service Washington Office. The project operated on a task order contract basis, which allowed tasks to be authorized but had little contract performance requirement. In early 1998, the MIRPS Contractor (Boeing) made the decision to discontinue some of its information systems related work. This decision directly affected the MIRPS effort. The Boeing contract was completed in April 1999.

The ROSS Project has completed all Departmental and Agency Waivers and Approvals. The project utilizes the USDA Information Technology Investments Portfolio (Reporting) System (I-TIPS) to report project plans and accomplishments directly to the USDA and to the Forest Service Washington Office. Additional reporting to all participating agencies occurs at the highest level possible. The ROSS Design Contract was awarded in March 1999 and work will be completed at the end of September 1999.

The following table compares the ROSS and MIRPS project Approvals, Waivers and Contracting efforts.

Document	ROSS	MIRPS
USDA Moratorium Y2K Waiver	Yes	No waiver known to exist – Waivers were not required when MIRPS initially started. For any further MIRPS development and/or maintenance/support, a waiver is required.
USDA Forest Service Washington Office IRM Technical Approval	Verbal Approval Received September 1998 Written Approval Received January 1999	No approval known to exist, verbal Regional Technical Approval was granted at project initiation. No written technical approval is known to exist.
USDA - A11 Budget Summary	Completed – Next Update Fall 1999	None exists
USDA Forest Service Washington Office IRM Benefit / Cost Analysis	Completed – Living Document	None exists
Agreement that Project is in compliance with the Clinger Coehen Act.	Yes – Project was reviewed by BLM Deputy Chief Information Officer	None exists
USDA Advisory and Assistance Approval	Granted February 1999	None is known to currently exist. A&A may have been granted on the former Boeing Contract.
Contracting Authority	National in Scope	Regional in Scope

Information System Infrastructure

The infrastructure of an information system is foundational. Industry literature points out that poor infrastructure planning contributes to 6 out of 10 system failures. The MIRPS and ROSS projects have different approaches to this focus area. The MIRPS infrastructure is currently operational and has undergone some re-design since its implementation. When first implemented, MIRPS was hosted on two primary servers one located in Northern California and one in Southern California) which utilized Oracle's data mirroring scheme to synchronize databases. This approach was later changed to having one primary server which was mirrored to a secondary server. The system currently operates in this fashion.

System access design for MIRPS focuses on LAN access using TCP/IP protocols. Secondary access is available through a dial-up connection to a Remote Access Server (RAS) using a terminal emulator to access the system. MIRPS is not designed to be accessible via the Internet.

System access design for ROSS focuses on the internet for connectivity to a central database and application server. Internet access will occur through Agency LAN/WAN, Internet Service Provider, or Remote Dial-in. This method provides for maximum flexibility and allows any agency or local dispatch office to access the system.

The following table outlines the areas that were analyzed.

Infrastructure Item	ROSS	MIRPS	
Platform Independent Environment	Browser (Java Compliant)	No – Client Application or Remote Accessed – via Windows 95 or Windows NT based Platform	
Client-Type	PC or Mac based	PC	
System Access	Internet through LAN/WAN or Internet Service Provider (ISP) or Direct Dial-in via modem to PPP connection	Login through machine (software is client based(fat client) or login direct to system server through system emulation software (Citrix MetaFrame Independent Computing Architecture)	
Server Architecture	Central Server with N-tier architecture (scalable). Multi-processing (2 IBM J50 servers with 6 processors each, and mainframe IBM G4 technology with 10 processors). System is mirrored and will have remote hot-site (replicated).	Central Server N-tier architecture (scalable) with multiple processors. System is mirrored and replication occurs between servers based in Northern and Southern California.	
		LAN Access • Tier 1 = ORACLE dB • Tier 2 = Client Application	Remote Access • Tier 1 = ORACLE dB • Tier 2 = Application Server • Tier 3 = Terminal Server
Scalable System	Yes	Yes	
System Security	Internal – Table, Column and Row level access using Role based access (Data Authentication) External – Minimum C2 standard, Web Server user entry authentication, certificated access, Encryption, ORACLE dB Authentication	Internal – None External – Windows NT Authentication, Encryption, and ORACLE dB Authentication	

Database Design

Data is the foundation upon which applications are built. Data design is the most important thing to do well because, as the foundation, it is the most expensive thing to change. One may adjust the presentation of existing data fairly easily. One may revise the logic used to process data with just a bit more effort. But to revise the structure of data as represented in a database involves not only redesigning and reworking the database itself, but also revising all the code for logic and presentation which is built upon that data design. After that, one must unravel any historical data and reinterpret it into the new format. The fact of this impact is one of the underlying forces supporting the evolution of database management systems, component based architectures and technologies, and design practices aimed at segmentation and allocation of business rules to the appropriate processing layer.

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         PRESENTATION
            LOGIC
            DATA
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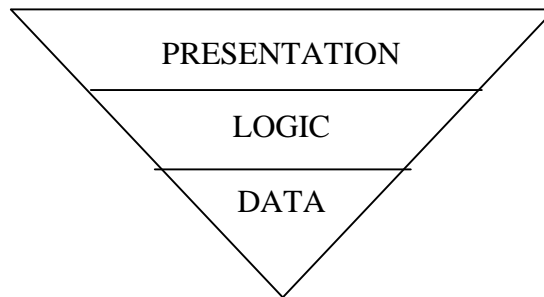
MIRPS

Aside from the missing business functionality that a national system requires, the structure of the current MIRPS database has some faults that do not recommend it for national use. These faults have been recognized by the MIRPS team and stem from the following facts:

- *Origin of the database:* The MIRPS team started with a database format from another effort which itself was not the result of a comprehensive design effort but was produced via the informal gathering of requirements and related information pertinent to the subject of resource ordering.
- *Constraints of the effort:* The team worked under strict time constraints to produce the MIRPS application within 6 months. At first, the vision was a "quick fix (tent with stakes)" which then evolved over time to include other business objectives and functions ("a house to live in").
- *Development approach:* Using a prototyping approach, the database was adjusted, added to and corrected. This is not necessarily a faulty process for discovering or refining business rules and requirements. Prototyping does, however, assume that, once requirements are settled, engineering discipline is applied to formulate the production product. In the process of MIRPS' "successive evolution," there has not yet been that comprehensive design effort to consider efficiency and performance from an architectural perspective given the larger target environment of operation.

The result is instant "legacy", a condition generally seen in long-standing applications where, over time, the programs and data structures are fixed and patched and modified so much that the underlying framework becomes indiscernible. The evidence of this condition of the database is as follows:

- Lack of effective links and relationships between data in the data base,
- Length of time required to complete search functions (e.g. proximity checks, especially for aircraft) which must traverse many convoluted pathways to gather and present the requested information,

- Structural limitations on the number of logical relations which do not effectively mirror the business environment (e.g. Organization may have only one Address; Orders allow only three Office Reference Numbers).
- The MIRPS database has several data fields that are not currently being used (e.g. engine ID and classification information) because this is seen as a duplication of information held in other systems to which MIRPS has no links. Perhaps when the MIRPS application is used at the protection unit level, this information may begin to be populated. Perhaps the users may find it is merely "nice to have" and not worth the effort to maintain.
- The MIRPS Site ID data field is a partial key to nearly every major table. Should the database architecture recommended to support a national application and the security plan differ from that embodied in MIRPS up to now, nearly every primary structure would require significant overhaul.

While any application is bound to evolve, there comes a point where, due to all this patching, the performance of the application and its maintainability both suffer, with each successive change demanding more and more complex "surgery" to institute new business requirements. This point comes sooner to systems that did not start out with either 1) a thorough and comprehensive design effort prior to build or 2) a component- or object-based approach.

For these reasons, to revise the MIRPS database to incorporate the ROSS requirements, to architect the database to support performance requirements of a nationwide system would seem to be beyond reason. Many firms facing this type of challenge with their legacy applications prefer to take what was learned about the data and the business rules (which such a system embodies) as a starting point for requirements for system replacement.

The MIRPS database is hosted on Oracle's Relational Database Management System.

ROSS

The ROSS Project took a more traditional database design approach as described at the beginning of this section. A detailed Business Requirements Analysis was conducted which involved members of the business community, Analysts and a Modeling Consultant. The business community validated the result of that analysis. In-depth modeling activities, which resulted in a Business Process Model and Conceptual Data Model, were documented during the business requirements for ROSS.

During the Design Phase of the project, a Relational Data Model and physical database design will be developed. This will lay the foundation for a concise and complete database built on a through understanding of the business requirements and designed for flexibility and evolution and will serve the needs of the dispatch community. Once built, changes to this database and supporting models will occur using a documented change management process.

The ROSS database will be hosted on Oracle's Relational Database Management System.

Functionality Contained in ROSS which is not found in MIRPS

The application functionality specified in ROSS that is not fully addressed in MIRPS is detailed in Appendix A and summarized below. In addition to the MIRPS functionality, ROSS includes support for:

LOCATION/VOR/AIRPORT
- Location Conversions (MIRPS provides only TRS to Lat/Long – ROSS Provides conversions between TRS, Lat/Long, UTM, VOR Bearing and Distance)
- Location Hazard Information and Affected Operations
- Country, County

ORGANIZATION PERSON
- Several pertinent Organization Relationships and Responsibilities including hierarchy for Federal and State agencies, organization function (cache, dispatch office, etc.)
- E-mail and multiple street addresses as Contact Information for people and organizations
- Compact Agreement

EVENT/INITIAL REPORT
- Initial Report
- Ability to Merge Events
- Multiple relationships between Events (follow-on, complex)
- Event sizing and estimated end date/time

RESOURCE CATALOG
- Ability to filter Catalog entry view by organization relationships
- Custom Catalog for local use only items
- Ability to add non-NFES supply items
- Group which may include unlimited list of members which may be any type of resource

RESOURCE INVENTORY
- Inventory by Quantity in addition to Inventory for items known by an ID (MIRPS only provides catalog and issue quantity)
- Unavailability Periods for a Resource (MIRPS provides for Overhead only)
- Some detail data items for Resources, e.g. Person Travel Authorization Number, etc,

RESOURCE REQUEST
- Detail Request
- Support for Provider Inclusion/Exclusion rules
- Relationships between Requests, e.g. group, support, detail
- Some detail data items for Request, e.g. Pre-Position Replacement, Maximum Assignment Days, etc.

ASSIGNMENT
- Assignment of Substitute Catalog item
- Organization vs. Resource Assignment
- Assignment Charge-back, Shipping Charge-back
- Some data items for Assignment, e.g. Assignment NTE Date, Assignment Actual Quantity Filled

TRAVEL ITINERARY
- Non-assigned Transporting Resource
- Travelling Administrative Passenger

DOCUMENTATION
- Documentation Type

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OPERATIONAL FEATURES
- Editable Lists of Values (In most cases MIRPS supports the data requirement with a free-text field but does not allow reuse of recurring values.)
- Standard Reporting (MIRPS has many of the same reports which ROSS requires but in several cases does not provide a few data items nor the ability to sort/select by data items of interest to ROSS.)
- Customized Reference Data Import
- Data Archival Functions

Functionality Contained in MIRPS which is not found in ROSS

The application functionality specified in MIRPS that is not fully addressed in ROSS is detailed in Appendix B and summarized below. In general, all functionality contained in MIRPS has been documented in ROSS Business Requirements documents and models. Items listed below are still under consideration for inclusion in ROSS. These items may not be included in version 1.0 of the ROSS Application.

Items included in MIRPS which were deemed as out of scope for ROSS version 1.0 are:

- Organization – alternate base meridian
- Resource
    - Aircraft – cargo capacity, cargo volume, PAX capacity, max/min elevation, serial number, single or multi-engine.
    - Equipment – gross weight, make, model, year
    - Overhead – baggage weight, last day off, radio number
    - Strike Team Number

Items, which were added to ROSS (as a result of the analysis) version 1.0, are:

- Pending Release Management Approval
    Handled as Tentative Release Flag and Tentative Release Date
- Change Request Anytime
    This is handled differently in ROSS. Anytime a request is changed after the time of departure; that request is cancelled or released and a new request must be filed.

Items, which were found to already be in ROSS but needing further clarification, were:

- Incident types – the domain values for this (or these) field is being reviewed.
- Request Status – the domain items for this (or these) field is being reviewed.
- Airport Function Type - the domain items for this (or these) field is being reviewed.
- Resource Type, Kind, Qualifier - the domain items for this (or these) field is being reviewed.

Appendix A - ROSS to MIRPS Analysis Summary

Application Functionality

This section answers the question: Would the current MIRPS application meet the ROSS requirements? It outlines the key differences in application functionality, these being the value that the ROSS application will have in addition to that provided by the MIRPS application. The success of an application with respect to its functionality is based on the extent to which the application supports the business function as evidenced in its processes, data items and data relationships. Details of the differences are given in the following sections.

The original analysis of the MIRPS/ROSS overlap concentrated on the functionality that MIRPS had which ROSS did not address. The results of that analysis are available in the MIRPS/ROSS Business Requirements Overlap Analysis report dated 2/22/99 (see Appendix B of this document). The following analysis outlines what requirements ROSS specifies which MIRPS does not meet. This analysis is based on MIRPS version 3.3 documentation and the ROSS 1.0a requirements authorized as of 4/1/99.

ROSS Requirements Not Fully Met By MIRPS

Location, Airport, VOR

Object Type	Object Title	ROSS Reference	MIRPS Reference
Process	Calculate Coordinates based on VOR Bearing and Distance; Perform Legal Land Description Conversion	See ROSS Process Model Process # 5.1.4.2-3	OUT OF SCOPE
Process	Maintain Location Hazard	See ROSS Process Model Process #5.1.5	MIRPS allows one to document hazards for an Incident but these are not associated with a location and are not reusable.
Data Item	Airport Record Source	Included in the ROSS Data Model An indicator to identify the originator of the airport/heliport record data (e.g. "FAA" or "ROSS")	Not in MIRPS
Data item	Hazard Affected Operations Type	Included in the ROSS Data Model An indicator of the type of event operations that will be affected by a hazard.	Not in MIRPS
Data item	VOR Name	Included in the ROSS Data Model The descriptive name given to a VOR beacon (e.g. Crazy Woman, Wildhorse).	Not in MIRPS
Relation	county state	Included in the ROSS Data Model	MIRPS does not have county.
Relation	state/province country	Included in the ROSS Data Model	MIRPS does not have country.

Object Type	Object Title	ROSS Reference	MIRPS Reference
Relation	airport capability	Included in the ROSS Data Model	Almost same
Relation	airport function	Included in the ROSS Data Model	Almost same
Relation	hazard type creating office	Included in the ROSS Data Model	Not in MIRPS
Relation	hazard typing	Included in the ROSS Data Model	Not in MIRPS
Relation	Location country	Included in the ROSS Data Model	Not in MIRPS; only state
Relation	location hazard	Included in the ROSS Data Model	Not in MIRPS
Report	Prepare CAHIS Report	See ROSS Process Model Process # Process 3.6 ROSS requires access to Location Hazard for locations in all states.	MIRPS uses WINCAN for location coordinates conversion and hazard data on locations within California, Oregon and Washington.

Organization

Object Type		ROSS Approach	MIRPS Approach
Process	Maintain Compact	See ROSS Process Model Process # 5.5	Not a California requirement
Data Item	Compact Active Flag	Included in the ROSS Data Model An indicator as to whether or not states are authorized to fill resource requirements directly via the associated Compact, therefore bypassing interagency dispatch channels.	MIRPS does not support Compacts
Data Item	Compact Name	Included in the ROSS Data Model The name of a cooperative agreement between state natural resource organizations to share resources that allows them to bypass established interagency dispatch channels.	Not in MIRPS does not support Compacts
Data item	Electronic Address Name	Included in the ROSS Data Model The characters and symbols of the Electronic mail address.	Not in MIRPS
Data Item	Federal Agency Code	Included in the ROSS Data Model A standard group of characters used to identify a federal government agency that conforms with a published standard and uses fewer characters than would be required to record the full name of the agency. (e.g.USFS, BLM, NPS, BIA, etc.)	Not in MIRPS

Object Type	Object Title	ROSS Reference	MIRPS Reference
Data Item	Federal Agency Department Code	Included in the ROSS Data Model An abbreviation for the one of the 14 executive branches of the United States Government (e.g. USDI, USDA, DOD, etc.)	Not in MIRPS
Data item	Organization Category	Included in the ROSS Data Model A description of the kind of organization. (e.g. non-wildland fire organization; private organization; wildland fire organization.)	Not in MIRPS
Data item	Organization Function Name	Included in the ROSS Data Model A description of the functional role of the office (e.g. dispatch, cache,) (This is to provide information formerly contained in the third digit of the Unit ID Code).	Not in MIRPS
Data item	Phone Contact Type	Included in the ROSS Data Model Identifies the place and usage of the phone line.	MIRPS allows 3 contacts, ROSS allows unlimited and supports typing each instance
Data item	State Agency Code	Included in the ROSS Data Model An abbreviation for a State agency, e.g. DNR for Department of Natural Resources.	Not in MIRPS
Data item	State Department Code	Included in the ROSS Data Model The code of the state government's department. (e.g. CDF, DNR, etc.)	Not in MIRPS
Relation	system override	Included in the ROSS Data Model Depicts the hierarchical relationship "reports to/oversees" among organizations	In MIRPS, is not organization hierarchy only agency affiliation
Relation	request placement responsibility	Included in the ROSS Data Model	
Relation	organization GACC	Included in the ROSS Data Model	
Relation	organization dispatch office	Included in the ROSS Data Model	
Relation	organization address	Included in the ROSS Data Model	MIRPS allows only 1 address for an organization and does not store full street address.

Object Type	Object Title	ROSS Reference	MIRPS Reference
Relation	state financial code	Included in the ROSS Data Model	MIRPS has financial code but it is not reusable (lookup list of values).
Relation	compact participant	Included in the ROSS Data Model	MIRPS does not have compacts
Relation	organization contract/agreement	Included in the ROSS Data Model	MIRPS does not have compacts
Relation	organization electronic address	Included in the ROSS Data Model	Not in MIRPS
Relation	organization service area	Included in the ROSS Data Model

A relationship between organization and country | MIRPS does not have country |
| Relation | ROSS function | Included in the ROSS Data Model

Describes functional role of an organization with respect to the ROSS system | Not in MIRPS |

Person

Object Type		ROSS Approach	MIRPS Approach
Data item	Person Middle Name	Included in the ROSS Data Model

The middle name or initial of a person. | Not in MIRPS |
| Data item | Role Name | Included in the ROSS Data Model

Job title or functional area of expertise of a person/office designated as a contact. (e.g.Incident Command Unit, Dispatch Unit, Air Attack Unit). | Not in MIRPS |
| Relation | person electronic address | Included in the ROSS Data Model | Not in MIRPS |

Event

Object Type		ROSS Approach	MIRPS Approach
Process	Merge Events	See ROSS Process Model ROSS specifies that two events may be merged and the resources and documentation and all related data are automatically linked to the target event. Process # 1.5	MIRPS supports this process allowing one to Create a new Order, Create new request for resources, Reassign resources to new Incident, Close incident.
Data Item	Event Estimated End Date+Time	Included in the ROSS Data Model The date and time an event is expected to end.	Not in MIRPS
Data Item	Event Request Status Total	Included in the ROSS Data Model The total of all requests for a particular resource description with the same request status for an event. In the case of supplies, this count is based on the REQUEST QUANTITY, rather than the number of requests.	Not in MIRPS
Data Item	Event Size Date	Included in the ROSS Data Model The date of the corresponding Event Size Approximate Acres.	Not in MIRPS
Relation	event complex	links a parent and several child Events to document the relationship of related events in a complex.	Not in MIRPS
Relation	event non-cooperator's cross reference	Included in the ROSS Data Model	Not in MIRPS
Relation	event estimated ending	Included in the ROSS Data Model	Not in MIRPS
Relation	event follow-on	Included in the ROSS Data Model	Not in MIRPS
Relation	event non-host billing	Included in the ROSS Data Model	This information maybe kept in MIRPS by using an intelligent code for the finance code.
Relation	event sizing	Included in the ROSS Data Model	Not in MIRPS

Initial Report

Object Type		ROSS Approach	MIRPS Approach
Process	Maintain Event Information	Create Event from Initial Report See ROSS Process Model Process # 1	MIRPS does not support initial reports
Process	Maintain Initial Report	See ROSS Process Model Process # 8	Not in MIRPS
Data item	Initial Report Identifier	Included in the ROSS Data Model A unique identifier for an initial report.	Not in MIRPS
Data item	Initial Report Initial Date/Time	Included in the ROSS Data Model The date an Initial report was originally entered.	Not in MIRPS
Data item	Initial Report Status	Included in the ROSS Data Model An indicator of the current status of an Intitial Report. Values: "Open" - indicates the event has not been referred to another organization. The reported event has not yet met the definition of a ROSS Event (for example, Initial Attack Fire that never requires a resource order) "Closed" - indicates the event is either: a) concluded, b) referred to another organization, or c) has been entered into ROSS as an EVENT Record.	Not in MIRPS
Data item	Initial Reporting Information	Included in the ROSS Data Model Information received from the reporting party.	Not in MIRPS
Relation	emergency report duplicate	Included in the ROSS Data Model	Not in MIRPS
Relation	initial report category	Included in the ROSS Data Model	Not in MIRPS
Relation	initial report fire category	Included in the ROSS Data Model	Not in MIRPS
Relation	initial report note	Included in the ROSS Data Model	Not in MIRPS

Resource Catalog

Object Type		ROSS Approach	MIRPS Approach
Process	Create/Modify Resource Catalog Record	ROSS provides for an organization-specific (custom) catalog entry See ROSS Process Model Process # 2.3.1, 2.3..2	MIRPS does not provide for a catalog entry that is only viewable within a particular organization hierarchy. Once a catalog entry is in, everyone sees it.
Data item	Overhead Position Specialty Description	Included in the ROSS Data Model Supplemental description added to the Technical Specialist (THSP) code to identify a specific specialty qualification not defined in any other Overhead Position Code. (e.g. THSP - Biologist, Forester, Resource Advisor).	Not in MIRPS
Data item	Resource Reminder Text	Included in the ROSS Data Model Considerations pertaining to a particular kind of resource. Serves as a tickler for the dispatcher to make sure all related items are identified. Examples: Requestor must provide potable water. Does the health department need to be notified? Has argon gas been ordered fo rhe Probeye?	Not in MIRPS
Data item	Service Category	Included in the ROSS Data Model A narrative description of the service being provided.	Not in MIRPS
Data item	Supply Identifier	Included in the ROSS Data Model A unique identifier for a particular supply item. Example: Property Number of a chainsaw	Not in MIRPS
Data item	Supply Non-NFES Category	Included in the ROSS Data Model Can add non-NFES items to the catalog A standard descriptor of wildland fire non-NFES supply resources.	Not in MIRPS

Object Type		ROSS Approach	MIRPS Approach
Relation	catalog entry org	Included in the ROSS Data Model	ROSS allows a "custom catalog" for local use only items. MIRPS partially addresses this functionality with the Alternate Place/Fill dialog, which allows for entry of one-time only but does not keep them on file for reuse.
Relation	catalog reminder	Included in the ROSS Data Model	Not in MIRPS
Relation	group catalog sub-type	Included in the ROSS Data Model	MIRPS will handle a Task Force, ROSS will handle a Task Force and other groups types within all Resource Categories

Resource Inventory

Object Type		ROSS Approach	MIRPS Approach
Process	Activate/Deactivate Inventory Record	ROSS keeps actual activation/deactivation dates for an inventory item allowing this information to be pre-set for each resource as needed. See ROSS Process Model Process # 2.1.5 and 2.1.7)	MIRPS does not allow pre-set activation/deactivation dates for other than Overhead resources. MIRPS tracks availability of other resource types, but not by specific dates.
Process	Maintain Provider Resource-Quantity Records	ROSS supports keeping track of Provider resources by quantity. See ROSS Process Model Process # 2.2	NOT A CALIFORNIA REQUIREMENT
Report	Prepare ICBS Inventory Report	See ROSS Process Model Process # 3.1.4	ICBS is not yet online. Would likely be included if the ICBS system was available.
Report	Prepare Resource Request Status Summary by Resource Category, Area and Agency	See ROSS Process Model Process # 3.3.6	Does not show benefiting area.
Report	Prepare Resource Status Summary by Agency and Resource Category	See ROSS Process Model Process # 3.3.7	Does not allow reporting by Area
Data item	Aircraft Call Sign/Alternate Name	Included in the ROSS Data Model An alternate call sign for a aircraft Example: Tanker 66	Not in MIRPS

Object Type		ROSS Approach	MIRPS Approach
Data item	Cache Item Principal Name	Included in the ROSS Data Model Explanation of a specific NFES catalog item. Examples: Shovel Pulaski Mark III Pump	Not in MIRPS
Data item	Provider Available Quantity	Included in the ROSS Data Model The provider's count of a particular resource whose readiness status is "available".	Not in MIRPS
Data item	Provider Default Name	Included in the ROSS Data Model A pre-defined prefix describing a resource identifier.	Not in MIRPS
Data item	Resource Assignment Maximum Day Quantity	Included in the ROSS Data Model A guideline used to identify the maximum quantity of days a resource should be away from the home unit (e.g. 21 days; 14 days. The resource maximum assignment days is a guideline, not a restriction.	Not in MIRPS
Data item	Resource Inventory Record Source	Included in the ROSS Data Model An indicator to identify the source of the inventory data such as "ROSS", "OAS Source List", "Quals System", etc.	Not in MIRPS
Data item	Resource Unavailability Reason	Included in the ROSS Data Model The explanation for a resource being unavailable for assignment.	Not in MIRPS
Data item	Resource Unavailablility Begin Date	Included in the ROSS Data Model The first day during an "unavailable period" that a resource is not available for assignment.	Not in MIRPS
Data item	Resource Unavailablility End Date	Included in the ROSS Data Model The last day during an "unavailable period" that a resource is not available for assignment.	Not in MIRPS

Object Type		ROSS Approach	MIRPS Approach
Data item	Roster Current Flag	Included in the ROSS Data Model A designator to indicate whether a roster is current. Only one roster at a time may be flagged as current (Y = Current or N= Not Current) for a particular Group, Equipment or Aircraft Inventory Item.	Not in MIRPS
Data item	Roster ID	Included in the ROSS Data Model A unique identifier for a roster record.	Not in MIRPS
Data item	Roster Master/Alternate Flag	Included in the ROSS Data Model An indicator describing whether an inventory roster is the "master" (permanent membership list) or "alternate" (modified roster with substitute members) roster.	Not in MIRPS
Data item	Roster Member Reserved Flag	Included in the ROSS Data Model Indicates whether or not the members on the roster should be flagged as "Reserved". (To be considered before selecting a person for an individual overhead assignment). ("Y" = Reserved; "N" = Not Reserved) This will reduce the chance that a team member on a national crew or team will be assigned as an individual overhead resource.	Not in MIRPS
Data item	Travel Authorization Number	Included in the ROSS Data Model A tracking number of a document that authorizes travel for an overhead resource.	NOT IN MIRPS

Object Type	Object Title	ROSS Reference	MIRPS Reference
Relation	aircraft alternate name	Included in the ROSS Data Model	Not in MIRPS
Relation	aircraft support	Included in the ROSS Data Model	
Relation	group closest jetport	Included in the ROSS Data Model	MIRPS will handle a Task Force, ROSS will handle a Task Force and other groups types within all Resource Categories
Relation	provider default	Included in the ROSS Data Model	Not in MIRPS
Relation	provider resource availability	Included in the ROSS Data Model	Not in MIRPS
Relation	quantity inventory sub-type	Included in the ROSS Data Model	Not in MIRPS
Relation	Resource assignment time limit	Included in the ROSS Data Model	Not in MIRPS
Relation	roster note	Included in the ROSS Data Model	Not in MIRPS

Resource Request

General Request Information

Object Type		ROSS Approach	MIRPS Approach
Data item	Infrared Interpreter Lodging Name	Included in the ROSS Data Model The name of the hotel/place where the Infrared-Interpreter can be contacted.	Not in MIRPS
Data item	Meal Packaged Quantity	Included in the ROSS Data Model The estimated number of "sack lunch" type meals needed to be provided by a caterer on the initial order.	Not in MIRPS
Data item	Request Pre-position Replacement Flag	Included in the ROSS Data Model An indicator as to whether the request is initiated to replace a pre-positioned item that was moved from the pre-positioned location as a result of an assignment	Not in MIRPS
Data item	Request Provider Restriction	Included in the ROSS Data Model This is a criteria determined by the requestor to limit the type of providers that will be contacted to fill a request.	Not in MIRPS

Analysis and Discussion Related to the Use of MIRPS on a Nation-Wide Basis

Object Type		ROSS Approach	MIRPS Approach
Data item	Request Quantity	Included in the ROSS Data Model The number of items requested. The following attributes are related to the common item: Meal Total Quantity Spike Camp Quantity Daily Meal Quantity Meal Packaged Quantity	Not in MIRPS
Data item	Request Reporting Instruction Identifier	Included in the ROSS Data Model A set of characters or numbers assigned to a particular reporting instruction description as a unique identifier. (A Reporting instruction can be shared amongst more than one request.)	Not in MIRPS
Data item	Request Shipping Instruction Text	Included in the ROSS Data Model Information regarding the location and/or method of sending supplies to a designated point. Examples: Will pick up Deliver to 1342 Main Street Deliver to Deer Flat Meadow via para cargo.	Not in MIRPS
Data item	Request Update Date+Time	Included in the ROSS Data Model The date and time a request record is added to or altered.	Not in MIRPS

Object Type	Object Title	ROSS Reference	MIRPS Reference
Data item	Shipping Instructions Identifier	Included in the ROSS Data Model	Not in MIRPS
Relation	Infrared film delivery point	Included in the ROSS Data Model	MIRPS provides a text field only for this data; not a reusable list of values.
Relation	infrared scan	Included in the ROSS Data Model	MIRPS provides a text field only for this data; not reusable list of values.
Relation	Primary/Alternate Flag	Included in the ROSS Data Model Supports prioritizing multiple drop points for IR film delivery	Not in MIRPS
Relation	provider type exclusion	Included in the ROSS Data Model	Not in MIRPS
Relation	quantity request sub-type	Included in the ROSS Data Model	Not in MIRPS
Relation	request compact	Included in the ROSS Data Model	Not in MIRPS
Relation	request ending date	Included in the ROSS Data Model	Not in MIRPS
Relation	Request reminder	Included in the ROSS Data Model	Not in MIRPS
Relation	supply shipping	Included in the ROSS Data Model	MIRPS provides a text field only for this data; not a reusable list of values.
Relation	Support request	Included in the ROSS Data Model	While it is possible to prepare a support request within MIRPS, there is no link to supported request.

Detail Request

Object Type		ROSS Approach	MIRPS Approach
Data Item	Detail Agency Uniform Requirement Flag	Included in the ROSS Data Model Identifies if an Agency Uniform is needed for a detail. (yes/no)	Not in MIRPS
Data Item	Detail Commercial Lodging Approved Amount	Included in the ROSS Data Model The daily allowance for commercial lodging.	Not in MIRPS
Data Item	Detail Commercial Lodging Rate	Included in the ROSS Data Model Identifies the daily cost of Commercial Lodging at a location.	Not in MIRPS
Data Item	Detail Cost Type	Included in the ROSS Data Model A description of the item to which costs are attributed (e.g. per diem, salary, equipment, etc.)Kind of cost.	Not in MIRPS
Data Item	Detail Driver's License Endorsement	Included in the ROSS Data Model The additional authority added to a drivers license class, identifying specific qualifications.	Not in MIRPS
Data Item	Detail Drivers License Requirement Flag	Included in the ROSS Data Model The additional authority added to a drivers license class, identifying specific qualifications.	Not in MIRPS
Data Item	Detail Duty Hours Text	Included in the ROSS Data Model Identifies the hours of a workday an employee will be required to work during a detail.	Not in MIRPS
Data Item	Detail End Date	Included in the ROSS Data Model The date designated as the last day of a detail.	Not in MIRPS
Data Item	Detail Established Workweek	Included in the ROSS Data Model Identifies the days of the week an employee will be required to work during a detail.	Not in MIRPS
Data Item	Detail Fire Resistant Clothing Requirement Flag	Included in the ROSS Data Model Identifies if fire resistant clothing is required for a detail. (yes/no)	Not in MIRPS
Data Item	Detail Government Provided Lodging Availability Flag	Included in the ROSS Data Model Identifies if Government provided lodging is available to personnel assigned to a detail.	Not in MIRPS

Object Type	Object Title	ROSS Reference	MIRPS Reference
Data Item	Detail Meal and Expense Authorization Amount	Included in the ROSS Data Model The daily allowance for meals and incidental expenses.	Not in MIRPS
Data Item	Detail Meal Facility Availability Category	Included in the ROSS Data Model A description of a type of meal facility that is available (e.g. government cooking facilities, government mess hall).	Not in MIRPS
Data Item	Detail Radios Needed Quantity	Included in the ROSS Data Model Identifies the quantity of radios needed for a detail.	Not in MIRPS
Data Item	Detail Request Identifier	Included in the ROSS Data Model A unique identifier assigned to a detail request.	Not in MIRPS
Data Item	Detail Requested Quantity	Included in the ROSS Data Model The number of non-overhead resources requested for a detail.	Not in MIRPS
Data Item	Detail Requesting Unit Estimated Total Cost	Included in the ROSS Data Model The estimated amount that the detail will cost the requesting unit.	Not in MIRPS
Data Item	Detail Rotation Day Quantity	Included in the ROSS Data Model Identifies the interval of days personnel may be rotated during a detail. (e.g. personnel can be replaced every 21 days.)	Not in MIRPS
Data Item	Detail Start Date	Included in the ROSS Data Model The first day designated as the beginning of a detail.	Not in MIRPS
Data Item	Detail Travel Outside Duty Hours Authorization Flag	Included in the ROSS Data Model Identifies whether a resource is allowed to travel outside regularly scheduled duty hours.	Not in MIRPS
Data Item	Detail Vehicle Authorized Quantity	Included in the ROSS Data Model The amount of vehicles a detail host will allow a detail participant to bring to a detail.	Not in MIRPS
Data Item	Detail Vehicle Ownership Category	Included in the ROSS Data Model Identifies ownership of a vehicle, values are agency owned, private, and rental,	Not in MIRPS

Object Type	Object Title	ROSS Reference	MIRPS Reference
Data item	Request Detail Flag	Included in the ROSS Data Model	Not in MIRPS
Relation	detail accommodation	Included in the ROSS Data Model	Not in MIRPS
Relation	detail available meal facility	Included in the ROSS Data Model	Not in MIRPS
Relation	detail cost responsibility	Included in the ROSS Data Model	Not in MIRPS
Relation	detail drivers license endorsement requirement	Included in the ROSS Data Model	Not in MIRPS
Relation	detail federal employer restriction	Included in the ROSS Data Model	Not in MIRPS
Relation	detail government vehicle requirement	Included in the ROSS Data Model	Not in MIRPS
Relation	detail minimum qualification	Included in the ROSS Data Model	Not in MIRPS
Relation	detail personnel detail	Included in the ROSS Data Model	Not in MIRPS
Relation	detail radio requirement	Included in the ROSS Data Model	Not in MIRPS
Relation	detail request	Included in the ROSS Data Model	Not in MIRPS
Relation	detail request contact	Included in the ROSS Data Model	Not in MIRPS
Relation	detail request note	Included in the ROSS Data Model	Not in MIRPS
Relation	detail resource requirement	Included in the ROSS Data Model	Not in MIRPS
Relation	detail rotation schedule	Included in the ROSS Data Model	Not in MIRPS
Relation	detail state employer restriction	Included in the ROSS Data Model	Not in MIRPS
Relation	detail temporary duty station	Included in the ROSS Data Model	Not in MIRPS
Relation	detail vehicle requirement	Included in the ROSS Data Model	Not in MIRPS
Relation	event detail	Included in the ROSS Data Model	Not in MIRPS

Assignment

General Assignment Information

Object Type		ROSS Approach	MIRPS Approach
Process	Prepare Assigned Resources by Event Report	See ROSS Process Model Process # 3.3.4	Does not show Assignment NTE date
Report	Prepare Demobilization Report	See ROSS Process Model Process # 3.3.5	Does not show Assignment NTE date
Process	Document Resource Request Decision	ROSS provides for an audit trail of all changes made with time/date, person making the change and explanation of the change. See ROSS Process Model Process # 4.3	The Notifier function within MIRPS partially addresses this requirement. It does not log
Process	Enter Shipping Financial Code	See ROSS Process Model Process # 4.3.2.5.6	OUT OF SCOPE
Process	Commit Supply Items from Provider Resource Quantities Inventory	See ROSS Process Model Process # 4.3.2.5.7.2.1	In MIRPS you can accomplish this by entering the resource information, does not carry inventory data for reuse.
Process	Designate Selected Resource Finance Code	See ROSS Process Model Process # 4.3.2.9	Does not support Compacts
Process	Compute Assignment NTE Date	See ROSS Process Model Process # 4.3.8	MIRPS Days on Incident Report addresses this requirement somewhat.
Process	Select Resource Based on Provider Input	ROSS supports bringing prior used Provider Inventory items into the "active" state for reuse See ROSS Process Model Process # 4.3.14	MIRPS allows one to enter resource information on an assignment if an item is not in inventory; this is not reusable.
Data item	Assignment Filled Quantity	Included in the ROSS Data Model The quantity of items furnished to satisfy a request.	Not in MIRPS
Data item	Assignment Not To Exceed Date	Included in the ROSS Data Model The date a resources is recommended to be released from a particular assignment.	Not in MIRPS
Data item	NFES Kit ID	Included in the ROSS Data Model A number which, when combined with the NFES Cache Item Number identifies a specific NFES kit. (4381-001 = Kit #1)	Not in MIRPS
Data item	Release Date Tentative/Actual Flag	Included in the ROSS Data Model Identifies whether the Release Date is tentative or actual.	Not in MIRPS

Object Type	Object Title	ROSS Reference	MIRPS Reference
Relation	assigned NFES substitution	Included in the ROSS Data Model	Not in MIRPS
Relation	assigned organization	Included in the ROSS Data Model Allows assigning an organization to provide a service without necessarily documenting a particular inventory item which represents the service.	
Relation	assignment chargeback	Included in the ROSS Data Model	Not in MIRPS
Relation	assignment compact	Included in the ROSS Data Model	Not in MIRPS
Relation	assignment NTE	Included in the ROSS Data Model	Not in MIRPS
Relation	assignment roster line NTE	Included in the ROSS Data Model	Not in MIRPS
Relation	assignment shipping charge back	Included in the ROSS Data Model	Not in MIRPS

Travel Itinerary

Object Type		ROSS Approach	MIRPS Approach
Process	Prepare Overdue Travel Itineraries Report	See ROSS Process Model Process # 3.3.8	Information is available, no display created. Could use MIRPS report writer.
Process	Create Travel Itinerary Report, Prepare Travel Requirements Report	See ROSS Process Model Process # 3.3.10-11	It is possible to produce similar reports from Order; the travel information for assigned resources is appended to the Order report. Travel Authorization number is not included in MIRPS.
Process	Assign/Release Resources Upon Travel ETD	See ROSS Process Model Process # 4.7.4	Resource is "committed" once assigned to the request, even if the travel has not commenced.
Process	Update records upon Travel ETA	A resource used only for transport may not be actually assigned to any event. The "release" (changing status to available) for the transporting resource may be handled automatically according to ETA for the travel itinerary for which the transporting resource served. See ROSS Process Model Process # 4.7.5	In MIRPS, one may create a support order to order/assign a transporting resource.
Data item	Transporting Resource Release After Flag	Included in the ROSS Data Model Identifies whether a resource being used as the transport vehicle will be released at the completion of a transportation assignment.	Transporting resource is assigned to a Support Order

Object Type	Object Title	ROSS Reference	MIRPS Reference
Data item	Travel Itinerary Identifier	Included in the ROSS Data Model A unique identifier to identify a travel itinerary performed by a single resource or provider.	Not in MIRPS
Data item	Travel Leg Total Cargo Volume	Included in the ROSS Data Model The total cubes, in feet, of the cargo being shipped.	Added base data fields in MIRPS 3.3, can now derive
Data item	Travel Leg Total Weight	Included in the ROSS Data Model Total weight for passengers and cargo, not including flight crew.	Added base data fields in MIRPS 3.3, can now derive
Relation	transporting assigned resource	Included in the ROSS Data Model	In MIRPS, one may assign a transporting resource via a support order but it is not be related to Travel Itinerary as required in ROSS.
Relation	travelling administrative passenger	Included in the ROSS Data Model	Not in MIRPS

Documentation

Object Type		ROSS Approach	MIRPS Approach
Process	Prepare Document Report	ROSS allows reporting Documentation entries by a variety of parameters. See ROSS Process Model Process # 3.5	(partial) MIRPS outputs documentation related to an object (Incident, Request).
Relation	documentation type	Included in the ROSS Data Model	MIRPS does this partially, allows remarks by object but the remarks are not coded so not-selectable by type of decision to which they relate.

Data Management

Import Function

Object Type		ROSS Approach	MIRPS Approach
Process	Import Data from External Sources	See ROSS Process Model Process # 6.1 See also *System Interfaces* section below	MIRPS API allows data exchange from/to MIRPS' database. This capability is planned to be used to share two-way data with INCINET application.
Data item	Location Record Source	Included in the ROSS Data Model An indicator to identify the originator of the location record. Values: 1) "USGS" (data was downloaded from the U.S. Geological Survey database) 2) UNIT ID (Creating Dispatch Office)	Not in MIRPS
Relation	item record source	Included in the ROSS Data Model	Not in MIRPS
Relation	Location source	Included in the ROSS Data Model	Not in MIRPS

System Interfaces

Although MIRPS provides an API whereby an external system could address the MIRPS database, in addition to this capability, ROSS specifies a number of specific custom system interfaces that MIRPS does not include. These are detailed in the ROSS Design Task Order Statement of Work, Appendix E: System Interfaces and also listed below. Of particular note is the planned two-way interface to the Cache system (ICBS) for processing supply orders.

1. Data import processes and utilities for importing of available required Office of Aircraft Services (OAS) aircraft data into the ROSS **AIRCRAFT INVENTORY** store (Process 6.1.7 Import OAS Aircraft Inventory Data).

2. Data import processes and utilities for the importing of available required US Geographic Survey Geographic Names Information System data into the ROSS **LOCATION** store. (Process 6.1.4 Import USGS Location Data.)

3. Processes, mechanisms, and/or utilities that consolidate required inventory data from the 11 National Interagency Fire Caches that are running the National Interagency Cache Business System (ICBS), to be implemented by spring of 1999, into a single repository which is accessed by the ROSS application via the reporting process and for utilization by the application. (Process 3.1.4 Prepare ICBS Inventory Report.)

4. Process, mechanism, and/or utility which retrieves and stores catalog data from the Interagency Cache Business System (ICBS) into ROSS **NFES CATALOG** store. (Process 6.1.1 Import NFES Catalog Data.)

5. Processes, mechanisms, and/or utilities that consolidate and rationalize available required inventory data from the three Qualifications Systems (IQS, REDCARD, DOI-SACS/IQCS) into the ROSS **OVERHEAD INVENTORY** store. (Process 6.1.5 Import Overhead Personnel Qualifications Data)

6. Data import processes and utilities for the importing of position description data into the ROSS **OVERHEAD CATALOG** store from external systems (i.e. DOI-SACS/IQCS, State-IQS, FS-REDCARD) for those positions which do not meet the NWCG 310-1 standard. (Process 6.1.2 Import Overhead Position Catalog Data)

7. Data import processes and utilities for the importing of aviation related data (i.e.: airport location, VOR data) into the ROSS **AIRPORT** and **VOR** stores from external systems (i.e. National Imagery Mapping Agency - Digital Aeronautical Flight Information File or FAA). (Processes 5.2.1 Create Airport Record, 6.1.3 Import FAA Airport Data and 6.1.6 Import FAA VOR Data)

8. Data import processes and utilities for the importing aircraft make and model data into the ROSS **AIRCRAFT CATALOG** store from the Federal Aviation Administration (FAA) and/or the Forest Service Aviation Management Information Systems (AMIS).

9. Data import processes and utilities for the importing location data from external systems (e.g. Geographic Information Systems) into the ROSS **LOCATION** store.

10. Generic data import processes and utilities for importing data into any ROSS reference table. Processes and utilities must appropriately accommodate subsequent updates to existing records.

Archival Function

Object Type		ROSS Approach	MIRPS Approach
Process	Perform Historic Copy of ROSS Records	See ROSS Process Model Process # 6.2	NOT YET ADDRESSED; All MIRPS data from the first installation forward still resides in the MIRPS database.
Data item	Durability Flag	Included in the ROSS Data Model An indicator of whether the item is a permanent fixture or created on a temporary basis.	MIRPS does not address archiving
Data item	Radio Frequency Archive Flag	Included in the ROSS Data Model An indicator of whether the radio frequency's status is archived Y=(yes) or active N=(no).	Not in MIRPS
Data item	Travel Itinerary Status	Included in the ROSS Data Model An indicator of the current status of a travel itinerary.	Not in MIRPS
Relation	Record Status	Included in the ROSS Data Model	Not in MIRPS

Appendix B - MIRPS to ROSS Analysis Summary

Background

The ROSS and MIRPS projects have been proceeding in parallel for some time. Each project took a different approach to defining requirements. The MIRPS team used a prototyping approach, and the ROSS team used a structured analysis approach. As such, MIRPS business requirements are engendered in a working prototype, and the ROSS team deliverables include documents and models. The following comparison is based on the business requirements expressed in each of these representations.

Since the MIRPS requirements are represented in a working prototype, necessarily there are constructs within the MIRPS database and application, which are purely to serve technical, or implementation requirements and not actually required by the business function. These are noted as such in the analysis. Some may find parallels within the ROSS implementation; some will not be needed in ROSS due to architectural differences. Generally, these MIRPS physical implementation characteristics (noted as DESIGN ITEMs) are considered to be adequately addressed in the ROSS requirements although they may not map specifically to a ROSS business process, entity or attribute, the conceptual/business view of the application.. We assume the specific workings of ROSS constructs, which parallel the MIRPS design items, if needed, will be detailed during the design stage of the ROSS application.

Process Overlap

Approach

Using ROSS Business Process Model (BPM) version 1.0 as of 10/20/98 and MIRPS 3.2 User Guide (dated 9/18/98) and the MIRPS Software Users Manual (dated 8/6/98), we documented each user interface (screen, report, system interface) which MIRPS provides and mapped it to the system requirements as expressed in the ROSS BPM. For each correspondence, we documented the level of coverage that ROSS would provide for the MIRPS functionality. On each activity which is not either fully met or exceeded by ROSS requirements, notes are provided to detail the difference. Also wherever a business assumption or approach was different between what ROSS specifies and what MIRPS implements, notes are also given to delineate the difference.

Analysis Table

MIRPS Ref	MIRPS	MIRPS Comment	Business Requirement	ROSS Process #	ROSS	Match	Discussion
Fig 1	MIRPS Login		Identify system users and their current location		Included in ROSS Technical Requirements	DESIGN ITEM	
Fig 2	Change Password	Gives a user the ability to change their password	Authenticate system users		Included in ROSS Technical Requirements	DESIGN ITEM	
Fig 3	MIRPS Main Menu		Entry point for system access			DESIGN ITEM	
Fig 4	Date/Time		Data entry help for dates and times			DESIGN ITEM	
Fig 5	MIRPS Settings	Allows the user to customize what they see	Allows personalized settings and filters based on event type, request type, etc.			DESIGN ITEM	
Fig 6	Old Order/New Request (for Move-up and Cover)	When move-up and cover is identified in the New Order Information screen, cover agency and Cover Base are added to the Old Order/New Request screen.		4.1, 4.1.10	Process Resource Request, Record Request Initiation Common Items	Meets	
Fig 7	New Order Information		Document information from the header portion (Blocks 1-11) of the Resource Order Form	4.1, 4.1.10, 4.1.10.2, 4.1.10.3	Process Resource Request, Record Request Initiation Common Items, Enter Request Common Items, Record Detail Request Supplement	Meets	

MIRPS Ref	MIRPS	MIRPS Comment	Business Requirement	ROSS Process #	ROSS	Match	Discussion
Fig 8, 11	Old Order/New Request		Document information from Resource Order Form block 12	4.1, 4.1.10	Process Resource Request, Record Request Initiation Common Items	Meets	
Fig 9	Old Order Information		Change information in Resource Order form blocks 1-11	3.2	Prepare Event Report	Meets	
Fig 10	Execute Not Done		Save prompt			DESIGN ITEM	May not be needed due to ROSS architecture
Fig 12	Aircraft Resource Order	Identifies the appropriate resource that can be ordered within the Aircraft Resource Category.		4.1.1	Record Aircraft Request	meets	
Fig 13	Crew Resource Order	Identifies the appropriate resource that can be ordered within the Crew Resource Category.		4.1.10.1	Identify Kind of Resource Needed	Meets	
Fig 14	Equipment Resource Order	Identifies the appropriate resource that can be ordered within the Equipment Resource Category.		4.1.10.1	Identify Kind of Resource Needed	Meets	
Fig 15	Communications Equipment Resource Order	Identifies the appropriate communications resource that can be ordered within the Equipment Resource Category.		4.1.10.1	Identify Kind of Resource Needed	Meets	

MIRPS Ref	MIRPS	MIRPS Comment	Business Requirement	ROSS Process #	ROSS	Match	Discussion
Fig 16	Transport Equipment Resource Order	Identifies the appropriate transport resource that can be ordered within the Equipment Resource Category.		4.1.10.1	Identify Kind of Resource Needed	Meets	
Fig 17	Other Equipment Resource Order	Identifies any other type of appropriate resource that can be ordered within the Equipment Resource Category.		4.1.10.1	Identify Kind of Resource Needed	Meets	
Fig 18	Overhead Resource Order	Identifies the appropriate resource that can be ordered within the Overhead Resource Category.		4.1.7	Record Overhead Request	Meets	
Fig 19-25	Overhead Catalog Query (by Function)	Identifies the appropriate resource that can be ordered within the Overhead Resource Category, listed by Function.		3.1.3	Prepare Resource Category & Status Summary	Meets	ROSS does not have a specific classification field for Function (e.g. Logistics, Command, etc.) within the Catalog. This could be addressed potentially using data codes which facilitate sorting by function. **Add Qualifications Sub-category.**

MIRPS Ref	MIRPS	MIRPS Comment	Business Requirement	ROSS Process #	ROSS	Match	Discussion
Fig 26	Supplies Resource Order	Identifies the appropriate resource that can be ordered within the Supplies Resource Category.		4.1, 4.1.8, 4.1.10	Record Resource Request, Record Supply Request, Record Request Initiation Common Items	Meets	
Fig 27	Delete Request Confirmation	Allows the user to rescind a request prior to it being filled or after the resource has been released.	Delete Confirmation	4.6	Delete Resource Request	Meets	
Fig 28	Place/Fill	Enables dispatcher to selece the most appropriate resource.		4.3.4	Perform Assignment Common Activities	Meets	
Fig 29	View-Only Resources			3.1.2	Prepare Individual Resource Assignment Summary	Meets	
Fig 30	Alternate Place	Allows notation of a request sent to a non-MIRPS user.	Ability to send a request to a particular unit and bypass the status checking process			DESIGN ITEM	ROSS allows assignment of resource that is not documented in the resource inventory, to fill an request, by indicating the assigned organization for the resource and qty assigned.
Fig 31	Multi-place		To place multiple requests in a batch/ at one time to a unit			DESIGN ITEM	

MIRPS Ref	MIRPS	MIRPS Comment	Business Requirement	ROSS Process #	ROSS	Match	Discussion
Fig 32	UTF Information			3.2.2	Prepare Events List	Meets	
Fig 33	Place/Fill						
Fig 34	Resource Information	Identifies assignment location of a resource		3.1.2	Prepare Individual Resource Assignment Summary	Meets	
Fig 35	Alternate Fill	MIRPS allows assignment of new inventory items which are only defined within the context of a particular request, (non-MIRPS inventory) not reusable; may be reassigned, not referenceable beyond release; doesn't appear in the Inventory.	Alternate Fill	2.1.1	Maintain Inventory Record	Meets	ROSS allows on the fly creation of new inventory items and may be flagged as temporary to be removed at yearend.
Fig 36	Reassign			4.3.3	Re-Assign Resources From Event to Event	Meets	
Fig 37	Pending Release	GACCs requires management approval before a resource is released, so that the MIRPS User only sets a pending release.		3.3.5, 4.4.4	Prepare De-Mobilization Report, Enter Release Date + Time	May meet	ROSS assumes that when a resource is marked as "released" that is an approved release. **NEEDS DISCUSSION**
Fig 38	Release			4.4	Release Resource	Meets	
Fig 39	Cancel			4.5	Cancel Resource Request	Meets	

MIRPS Ref	MIRPS	MIRPS Comment	Business Requirement	ROSS Process #	ROSS	Match	Discussion
Fig 40	Quick Fill		Allow automatic order/assignment between neighboring, cooperating units in a single transaction	4.3.4	Perform Assignment Common Activities	DESIGN ITEM	
Fig 41	Aircraft Dispatch	Allows the user to do all functions to request, fill and release Aircraft resources.		4.1.1	Record Aircraft Request	Meets	
Fig 42	Change	MIRPS allows a change to a request at any time;	Update Resource Request	4.3.1.1	Modify Initial Resource Request	Partially meets	ROSS allows a change to a request only up until ETD. **NEEDS DISCUSSION**
Fig 43-54	Request Status (by Category Status)			3.1	Prepare Resource Status Report	Meets	
Fig 55	Remarks		Incident and Report	7	Enter Documentation	Meets	

MIRPS Ref	MIRPS	MIRPS Comment	Business Requirement	ROSS Process #	ROSS	Match	Discussion
Fig 56	Supplemental Information			4.1.2.2; 4.1.4.2; 4.3.1.1.2 4.3.1.1.3 4.2	Record Infrared Supplemental Information; Record Food Service Request Supplemental Information; Modify Infrared Supplement; Modify Caterer Supplement; Provide Resource Request Scheduling Information	Meets	
Fig 57	Food Service Form			4.3.10.3	Prepare Food Service Order	Meets	
Fig 58	Infrared Scanner Form			4.1.2	Record Infrared Request	Meets	
Fig 59	TFR		Temporary Flight Restriction Form			Misses	**NOW IN SCOPE: Add one bubble process to "Enter TFR data". Add required data to models.**
Fig 60	Travel Information			4.7	Maintain Travel Records	Meets	
Fig 61	Task Force Resource Order	Allows mixing of different types of resources on a single request for Task forces		4.1, 4.1.6	Record Resource Request, Record Group Request	Meets	

MIRPS Ref	MIRPS	MIRPS Comment	Business Requirement	ROSS Process #	ROSS	Match	Discussion
Fig 62	Place/Fill – Strike Teams and Task Forces	Allows designation of agency to which a Strike Team/Task Force request is to be placed	Select available resources by agency	4.3.1.3	Modify Request Selection/Assignment Information	Meets	
Fig 63	Strike Team/Task Force Place	(Page two of Fig 62) Allows placement of request for a strike team/task force element to other than the agency designated in Fig 62	Select available resources by agency	4.3.1.3	Modify Request Selection/Assignment Information	Meets	
Fig 64	Strike Team/Task Force Reassign			4.3.3	Re-Assign Resources From Event to Event	Meets	
Fig 65	Strike Team/Task Force Change			2.4.2	Modify Inventory Roster	Meets	
Fig 66	Strike Team/Task Force Status			3.1.3	Prepare Resource Category & Status Summary	Meets	
Fig 67	Strike Team/Task Force Supplemental Information			4.2	Provide Resource Request Scheduling Information	Meets	
Fig 68	Strike Team/Task Force Travel Information			4.7	Maintain Travel Records	Meets	
Fig 69	Move up and Cover			1.1	Create Event Record	Meets	

MIRPS Ref	MIRPS	MIRPS Comment	Business Requirement	ROSS Process #	ROSS	Match	Discussion
Fig 70	Open/Close Incident	MIRPS allows a closed incident to be reopened and to accumulate additional requests or to support reporting.		1.4, 8.4	Close Event Record, Close Emergency Record	Meets	ROSS does not allow this functionality because it is assumed that since there is only one physical data record for each Event, and the Home Unit is responsible for closing it, once an event is closed there would not be a reason to reopen it. Also ROSS allows reporting on closed incidents. **NEEDS DISCUSSION**
Fig 71	Close Incident Information			1.4, 3.2.3	Close Event Record, Prepare Event Record Report	Meets	
Fig 72	Overhead Search	List of overhead resources showing status		3.1	Prepare Resource Status Report	Meets	
Fig 73	Overhead Resource Information	Detailed information about a particular resource		3.1.3	Prepare Resource Category & Status Summary	Meets	

MIRPS Ref	MIRPS	MIRPS Comment	Business Requirement	ROSS Process #	ROSS	Match	Discussion
Fig 74	Incident Priority	Information is visible to any dispatcher for reference.	Show incident priority as set by supervisor within the GACC			Misses	MIRPS allows setting of priority within GACC **RE: Jon NOW IN SCOPE**
Fig 75	Morning Report		Allow each unit to update status of its own resources	2 3.3.1	Maintain/Update Resource Status; Prepare Resource Status Report		
Fig 76	Resource Order Form		Produce a hardcopy of the Resource Order Form	3.3.9.4	Send Resource Order		
Fig 77	Print Dialog					DESIGN ITEM	
Fig 78	Status Summary			3.1.3	Prepare Resource Category & Status Summary	Meets	
Fig 79	Type Qualifier		Allow different standards for types of resources as per NWCG or CA			Misses	**RE: Jon NOW IN SCOPE: also need to deal with Non-Standard …**
Fig 80	Setting Incident Priority		Allow managers to set incident priority			Misses	This was considered out of scope for ROSS. **RE: Jon NOW IN SCOPE**
Fig 81	User Login Maintenance		Allow administrator to set user rights for the application		Included in ROSS Technical Requirements	DESIGN ITEM	

Analysis and Discussion Related to the Use of MIRPS on a Nation-Wide Basis

MIRPS Ref	MIRPS	MIRPS Comment	Business Requirement	ROSS Process #	ROSS	Match	Discussion
Fig 82	Aircraft Maintenance	MIRPS designates whether an aircraft meets a particular organizational standard (e.g. CA or NWCG)	Aircraft inventory	2.1.1.1	Maintain Fixed/Rotor wing Inventory	Partially meets/meets	This can be handled using the ROSS Custom Catalog feature
Fig 83	Overhead Teams Maintenance			2.1, 2.1.1.2	Maintain Inventory-by-ID Records, Create Group Inventory Record	Meets	
Fig 84	FAA Location Maintenance	MIRPS maintains for each FAA location, the organization unit that is the dispatch center for that FAA location	Airport information			Partially meets	**NEED TO REVIEW DATA ITEMS**
Fig 85-86	Agency Maintenance	MIRPS captures draw-down level thresholds per agency, indicates whether an agency is a morning report agency and/or a resource agency	Organization Maintenance	5.3	Maintain Organization Records	Partially meets	**NEEDS DISCUSSION**

Data Overlap

Approach

Using the ROSS Conceptual Data Model (CDM) version 1.0 as of 10/19/98 and the MIRPS Entity-Relationship Model (which is actually a Relational Data Model of the physical Oracle database) and accompanying Data Dictionary as of 9/18/98, we mapped the data items to one another to determine which data items which are implemented in MIRPS are not addressed in ROSS, and also documented the differences in data characteristics. To accomplish the analysis, we reverse-engineered MIRPS 3.2 Oracle database into a relational data model, updated that model with the Common Items as defined within the current ROSS Conceptual Data Model and then linked the MIRPS columns with ROSS Common Items.

ROSS CDM Notes

As a result of the data analysis, we recommended the following corrections/clarifying changes to the ROSS Conceptual Data Model:
- Domain Group Category does not match size of domain and attribute, need code and description for Group Catalog
- Domain Airport Function Name: change description of valid value from "Tanker Base" to "Tanker Base/Air Attack Base"
- Increase Airport Code from 3 characters to 4 characters.
- Add a comment on the group request relationship.
- Domain Documentation Category code: set to Uniformly Used so that linked common item length is updated.
- Set length for common item: County Name to 30 as per linked Attribute
- Add comment on the Organization GACC relation: Currently ambiguous. Is this a two layer relation which associates all participating organizations to a GACC without regard to their interim reporting structure? If not, then a better name is Organization Hierarchy, which could also depict relations which are not through a GACC
- Revise Comment on Hazard, Hazard Identifier to remove reference to "aircraft" because Domain of Hazard Affected Operations Type includes "ground" so assume one can put in hazards which affect other than aircraft.

Entity and Attribute Definition Analysis Table

For each physical table in the MIRPS database, the corresponding ROSS entity and/or relation is noted. MIRPS columns are listed when there was a definitional difference between MIRPS and ROSS requirements or the MIRPS data item was considered out of scope for ROSS. Therefore, not all MIRPS columns and not all ROSS data entities, relations and attributes are listed here. Please also see the following sections of this report for a full understanding of the data overlap between ROSS and MIRPS.

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
ACFT_ROUTE_MOA	NOT CURRENTLY USED	Description of aircraft hazard	Location Hazard	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
ACTION	Definition of a dispatching function performed in MIRPS; Stores MIRPS action information; used for MIRPS notifier	PHYSICAL DESIGN RQMT: supports multi-site communications	Documentation Documentation Category	DESIGN ITEM: COMMUNICATIONS TRACEABILITY. Could be included in the documentation records
MIRPS Table	**MIRPS Comment**	**Business Requirement**	**ROSS Entity or Relation**	**ROSS Comment**
AGENCY	Store information about agencies	Identify organizations	Organization	
MIRPS Column			**ROSS Attribute**	
Agency level	Designates Unit, Parent, Combined	Request initiation author	Organization Hierarchy	Can be derived
Resource_agency Morning_agency	Used to select agencies for the Morning Report and whether or not resources are shown from those selected agencies		NOT CURRENTLY ADDRESSED	**CONSIDER QUICK-FILL. SEE MIRPS Fig 75; ?derived data for reports**
Alternate_base_meridian			NOT CURRENTLY ADDRESSED	Out of scope
Crw_draw_dn_1, crw_draw_dn_2, crw_draw_dn_3, eq_draw_dn_1, eq_draw_dn_2, eq_draw_dn_3	Used by managers for determining resource strengths	Tool for dispatchers that gives guidelines on user of available resources.	NOT CURRENTLY ADDRESSED	Out of scope

MIRPS Column			*ROSS Attribute*	
Resource_agency	Designates whether or not an agency should show in the proximity list in the Place/Fill screen.	Allows to see the agencies which might have resources close to an incident.	Resource Current Location	ROSS addresses this requirement via the Resource Location rather than the Organization Location.

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
AIRBASE	NOT CURRENTLY USED (See also FAA_LOCATION)	Physical location of air base	Airport Function Type	Covers all types of airport capabilities

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
AIRBASE_PROXIMITY	Used in generating airbase proximity lists	Air base capabilities and services and proximity to incident	Event Airport Airport Capability	ROSS only addresses the type of airport. This may be sufficient.
MIRPS Column			*ROSS Attribute*	
air_attack_type air_tanker_type			MAY BE SUFFICIENTLY ADDRESSED	ROSS does not address the specific tanker types and attack plane types which may be hosted at an airport. See changes to Airport Capability valid values for clarification.

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
AIRCRAFT		Store detailed information about aircraft resources	Aircraft Catalog, Resource Inventory (Aircraft)	
MIRPS Column			*ROSS Attribute*	
Cargo_capacity, cargo_volume Passenger_capacity	Maximum allowable cargo weight in pounds, Maximum allowable cargo volume in cubic feet; Maximum total passenger weight in pounds		NOT CURRENTLY ADDRESSED	Out of scope

MIRPS Column			*ROSS Attribute*	
Max_elevation, Min-elevation	Aircraft maximum elevation, Aircraft minimum elevation		NOT CURRENTLY ADDRESSED	Out of scope
Serial_number	Serial number given to aircraft resources		NOT CURRENTLY ADDRESSED	Out of scope
Single_multi_engine	Designates whether an aircraft is single-engine or multi-engine		NOT CURRENTLY ADDRESSED	No field for this specified in ROSS, however information may be indicated in Aircraft Category name.

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
AIRCRAFT_COUNT		Aircraft count and proximity	Aircraft Catalog Aircraft Inventory/Quantity	

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
AIRLINES	Airline information for travel	Store airline information for use re: travel information	Travel Itinerary	ROSS carries this information as text data

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
AIRCRAFT_HAZARDS	Store information about aircraft hazards.	Need to know hazard areas nearby an incident and whether these impact aircraft operations	Event Location Hazard	
MIRPS Column			*ROSS Attribute*	
Clearance_obtained, clearance_released	Military Training Route (MTR) /Temporary Flight Restriction (TFR) information		Hazard Documentation (Documentation Category)	
Clearance confirmed_by	MRT/TFR information		Hazard, Documentation (Recording Person name), Documentation Category Code	

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
BASE_MERIDIAN	Used by CAN.DLL for legal location to latitude/longitude conversion	Store base meridian information	Location	

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
BEARING_DISTANCE	Store bearing and distance calculations from a given base to an incident	for determining closest forces	Location	
MIRPS Column			*ROSS Attribute*	
All columns	This record is used for Event – Resource and Event-Event information.		Event Location Resource Current Location	Can be derived

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
CREW		Store information about crew camp	Non-Aircraft Inventory Home Location	

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
EQUIPMENT		Store detailed information about equipment resources	Equipment Catalog Non-Aircraft Inventory	
MIRPS Column			*ROSS Attribute*	
Contract_number	Contract number for hired equipment		NOT CURRENTLY ADDRESSED	**Check on this, may now be included in ROSS**
Eq_gross_weight	Gross weight in pounds of equipment resource		NOT CURRENTLY ADDRESSED	Out of scope
Eq_make, Eq_model, Eq_year	Make of equipment resource; model of equipment resource; Year equipment resource was manufactured		NOT CURRENTLY ADDRESSED	Out of scope
Eq_type_cargo, Eq_type_drive	Defines the type of cargo carried by an equipment resource; Defines drive capability of equipment resource (i.e., 4x4)		NOT CURRENTLY ADDRESSED	Could be included in RESOURCE CATALOG or RESOURCE NAME

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
FAA_BASE_RESTRICTIONS	NOT CURRENTLY USED		Airport Location Location Hazard	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
FAA_LOCATION	Store information about bases, including types of aircraft that are supported	Standard airport ID and location information	Airport Location Airport Function	
MIRPS Column			**ROSS Attribute**	
Declination	The angle formed between a magnetic needle and the geographical meridian; Saved because magnetic north changes and this is needed to calculate Bearing and Distance	This is an attribute of Location used to calculate Bearing and Distance	NOT CURRENTLY ADDRESSED	**RE: Jon NEED TO ADD THIS TO ROSS 1.0** **Put this in ROSS and have it updated via inbound Location Information Interface**
Phone	Contact Number for FAA Facility at an airport		NOT CURRENTLY ADDRESSED	**Add relationship from Organization to Location. Contact Phone is an attribute of Organization**
Recon_aircraft, paracargo_type, lead_plane_type, infrared_aircraft_type, helicopter_type, air_tanker_type, air_attack_type, smokejumper_aircraft_type, transport_type	Indicates Y/N if a particular type of resource is generally "supported" at that location. Supported means (according to the developer) "has the capability to allow such a resource to come and go from" the location		Airport Function Name	ROSS allows fewer Function Names than MIRPS does, however the team feels that enough options are available in the ROSS valid values of Airport Function Name to cover the need. May wish to add more Airport Function Types to choose from.

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
FAA_RESTRICTIONS	NOT CURRENTLY USED		Location Hazard	
MIRPS Column			**ROSS Attribute**	
Restriction_numbe, Restriction_type	Identification number associated with FAA restriction		NOT CURRENTLY ADDRESSED	May be kept in Hazard Documentation

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
FOOD_SERVICE		Store detailed catering request information from the Food Service Request form	Food Service Request Spike Camp Meal	
MIRPS Column			**ROSS Attribute**	
start_date_time	The time when the first meal is to be served		Request Need Date &Time	ROSS assumes that the Need date & time is time of first meal
first_meal_type	Breakfast, sack lunch, buffet lunch, dinner		Meal Type	MIRPS distinguishes between sack and buffet lunch. ROSS allows lunch and then define number of packaged meals. Buffet lunches are no longer available via contract providers
Spike_camp_flag	Distinguishes whether or not a spike camp exists		Can be derived	If there is a spike camp, meal quantities record will be there.

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
ICS_FUNCTIONAL_AREA		Defines ICS overhead functional areas	Resource Catalog (Overhead)	ROSS does not specifically categorize by ICS Functional Area
MIRPS Column			**ROSS Attribute**	
Functional_area_code, Functional_desc	3-letter identifier for overhead functional areas at an incident; description of the overhead functional areas in the Incident Command System (ICS)		*May be now included in ROSS – check current models.*	This need could be handled within the Overhead Position Titles. **RE: Jon NEED TO ADD THIS TO ROSS 1.0**

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
ICS_QUALIFICATION	Defines ICS qualifications by functional area		Overhead Position Catalog Overhead Specialty	ROSS does not specifically categorize by ICS Functional Area, although this could be done within the Overhead Position Titles.
MIRPS Column			**ROSS Attribute**	
Functional_area_code	3-letter identifier for overhead functional areas at an incident		*May be now included in ROSS – check current models.*	
Type_qual	Type of qualification (i.e., ICS, TECH, NEW)		*May be now included in ROSS – check current models.*	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
ICS_QUALIFICATION_LIST	FOUND IN DATABASE; NOT DOCUMENTED			Can be derived; report
MIRPS Column			**ROSS Attribute**	
Type	Type of qualification (i.e., 1 for qualified, 2 for trainee)		Overhead Position Code	Since the Overhead Position Codes are suffixed with (T) to indicate trainee, no need for separate field.

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
IMIRPS_LIST	FOUND IN DATABASE; NOT DOCUMENTED			

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
INCIDENT	Incident Header Information	Identify and document key reference information about an incident or initial report	Event Emergency Report	
MIRPS Column			**ROSS Attribute**	
Incident_jurisdiction	Agency which has protection jurisdiction over the location of the event		Either State Department Code or Federal Agency Code of ??Host Organization or ??Benefiting Organization	??Could be Host, Benefiting organization?? Not the Unit – rather the Agency that unit belongs to
Incident_priority	Prioritization level given to an incident		NOT CURRENTLY ADDRESSED	Out of scope
Incident_type	Type of incident (i.e., wildland, earthquake, hazardous chemical, mobilization center, move up and cover, structural fire, other)		Event Type, Fire Type	Two ROSS attributes are needed to accomplish what the MIRPS INCIDENT TYPE covers; may need to consider splitting "Natural Disaster" into flood, earthquake etc. for better local reporting
Incident_year	The year an incident is created in MIRPS. Supports reporting when we use same Order (Event) number in different years		Event Data & Time	ROSS carries the year as part of the Event Data & Time.
Latitude_degrees, latitude_minutes	A Sub-component of incident latitude (for display purposes in MIRPS)		Location Latitude	ROSS carries these fields as part of the Location Latitude field.
Longitude_degrees, longitude_minutes	A Sub-component of incident longitude (for display purposes in MIRPS)		Location Longitude	ROSS carries these fields as part of the Location Longitude field.

MIRPS Column			*ROSS Attribute*	
Response_area	Defined area where resources are to respond to an incident (grid coordinates)	A resource may be designated to zero or many response areas (geographic polygon pre-determined by the local or regional dispatchers)	NOT CURRENTLY ADDRESSED	Out of scope. May not be necessary. CAD system covers this. **RE: Jon KEEP ON LIST FOR ROSS 2.0**

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
INCIDENT_CONTACTS		incident contact information including radio frequencies	Event Radio Frequency Event Host Event Dispatch Office	
MIRPS Column			*ROSS Attribute*	
Contact_id	Identifies incident contact within new Order Information window or Old Order Information window		MAYBE SUFFICIENTLY ADDRESSED	ROSS has Event Contact Organization, rather than Contact Person as does MIRPS.

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
INCIDENT_COUNT	Used in proximity list calculations	Counts of available resources at an incident	Resource Inventory (Status)	Can be derived
MIRPS Column			*ROSS Attribute*	
asgn_count, type, itoa_distance, itoi_distance			Overhead Position Code, Equipment Category, Aircraft Category, Group Category, Supply Non-NFES Category, NFES-Cache Item Code, Service Category	Can be derived for all Resource Catalog entries

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
INCIDENT_INCIDENT	Stores distances between agencies and a given incident and other incidents and a given incident by kind of resources requested; used for reassigning resources	Determine closest forces	Organizational Location Event Location Resource Assignment	Can be derived
MIRPS Column			**ROSS Attribute**	
Order_description_needed	MIRPS allows a free-form text field with lookup to standard catalog entries. Can enter non-standard resource by entering description.		Overhead Position Code, Equipment Category, Aircraft Category, Group Category, Supply Non-NFES Category, NFES-Cache Item Code, Service Category Or Overhead Position Title, Overhead Position Specialty Description, NFES Supply Principal Name, NFES Supply Item Description	ROSS allows lookup from a catalog and create own custom entries.
Request_status	Outstanding, Placed, open, filled, UTF, released, cancelled, returned UTF MIRPS documentation also lists other Request Statuses (e.g. relay info, release info, all, all incidents and notification) which seem to be not really request status but rather selections for reporting or actions to be taken by the system to ensure information sharing during fulfillment of the request.		Request Status	**Need to do a detailed check on other MIRPS request statuses**

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
INCIDENT_PROXIMITY	CURRENTLY NOT USED		Event Location	Can be derived
MIRPS Column			**ROSS Attribute**	
type1, type2, type3, type4, type5, type6, type7	FOUND IN DATABASE, NOT DOCUMENTED; may be 7 national incident types	Unclear		

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
INCIDENT_REMARKS		Store remark information pertaining to incidents	Event Documentation	
MIRPS Column			**ROSS Attribute**	
Show_remark	Distinguishes wheter or not an incident remark was previously deleted by a user (remarks are not physically deleted from the database)		N/A	Not needed as ROSS does not allow deletion of Documentation (remarks) records.

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
INCIDENT_SUMMARY	Resource count information by Category (A, C, E, O, S) and by incident; Used in MIRPS Reports	Summary of resources assigned for an incident	Assignment	Can be derived

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
INFRARED_SCANNER		Detailed infrared scanner aircraft request information from the Infrared request form	Infrared Request Scan Area Weather Condition	
MIRPS Column			**ROSS Attribute**	
first_bearing, first_distance				Can be derived

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
KIND_SUPP_INFO	Default supplemental information		Request Special Need	
MIRPS Column			**ROSS Attribute**	
Table_name	Column not currently used	Unclear	NOT CURRENTLY ADDRESSED	Out of scope

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
MOA	MIRPS allows entry of MOA data associated with the combination of Incident, Site, and Request IDs.	Store detailed MOA request information.	Location Hazard	ROSS allows documentation of a Military Operating Area (MOA) as a Hazard associated with a Location. This may not be the same thing as in MIRPS.
MIRPS Column			**ROSS Attribute**	
All columns			MAY BE SUFFICIENTLY ADDRESSED	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
MOBILIZATION_COUNT		Counts of resources by kind and type assigned to mobilization center incidents	Assignment	Can be derived
MIRPS Column			**ROSS Attribute**	
MAY BE SUFFICIENTLY ADDRESSED	Organizational standard (i.e., NWCG or CA)			See comment on REQUEST_RESOURCE, organization_standard.

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
MTR	MIRPS allows entry of MOA data associated with the combination of Incident, Site, and Request IDs.	Store detailed Military Training Route (MTR) request information	Location Hazard	ROSS allows documentation of a Military Training Route (MTR) as a Hazard associated with a Location. This may not be the same thing as in MIRPS.
MIRPS Column			ROSS Attribute	
All columns			MAY BE SUFFICIENTLY ADDRESSED	Out of scope

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
NEIGHBORS	Defines neighboring agencies by agency and category of resources	Identify which agencies can go directly to another unit for resources without prior communication with a GACC	NOT CURRENTLY ADDRESSED	**RE: Jon NEED TO ADD THIS TO ROSS 1.0, RE: Rod: Request Authority**

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
NFES_CATALOG		Store NFES Catalog information	NFES Catalog	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
NULLTABLE	Placeholder for UNION queries	PHYSICAL DESIGN RQMT		DESIGN ITEM: PERFORMANCE

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
OPS		Operations Command Center information	Organization Organization Dispatch Office	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
ORDERED_RELAYS	tracks MIRPS transactions (i.e. Place, UTF, Return UTF)	PHYSICAL DESIGN RQMT	Documentation Documentation Category	DESIGN ITEM: COMMUNICATIONS TRACEABILITY. Could be included in the documentation records

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
OVERHEAD		Store detailed information about overhead personnel	Overhead Inventory Overhead Catalog	RE Rod: Assignment Report
MIRPS Column			*ROSS Attribute*	
Assigned_resource_id	Internal resource identification number "to which employee is assigned" Interpretation 1: the ID of a resource that an employee is assigned to as in the employee is driver of an engine, therefore this number is the resource ID of the engine. Interpretation 2: the resource ID used to identify an employee, as in SSN or employee ID.	Unclear		*Check with MIRPS on this.*
Baggage_weight	"The baggage weight of an employee in pounds"; assume this to mean: the weight in pounds of an employee's baggage		NOT CURRENTLY ADDRESSED	Out of scope
aval_count	Total number of available overhead at a given agency			Can be derived
Jetport Nearest_port	Nearest Major Airport Nearest Airport			ROSS keeps the Location Name for home and current locations. **Recommend this be included in ROSS**
last_day_off	The last day off for an employee		NOT CURRENTLY ADDRESSED	Out of scope
Radio_number	Radio call sign		NOT CURRENTLY ADDRESSED	Out of scope

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
OVERHEAD_COUNT	Counts of available overhead personnel by kind and type		Overhead Inventory	Can be derived

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
PROXIMITY	FOUND IN DATABASE; NOT DOCUMENTED			
MIRPS Column			ROSS Attribute	
dist_to_incident	Distance in nautical miles from given agency to incident			Can be derived

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
PROXIMITY_LIST	Distance information between incidents and agencies; used in proximity list		Organizational Location Event Location Event Host	Can be derived
MIRPS Column			ROSS Attribute	
Location_type	FOUND IN DATABASE; NOT DOCUMENTED			

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
RADIO_FREQUENCIES		Radio frequency information by agency	Organization Radio Frequency	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
RELOAD_BASE		Aircraft reload bases defined for an incident	Event Airport Airport Airport Function Type	ROSS links the type of airport to an incident for a particular function.
MIRPS Column			**ROSS Attribute**	
Reload_base_number	Distinguish between multiple reload bases		Airport Code which has an Airport Function Type of "Tanker Base/Air Attack Base"	Reload is not one of the Airport Function Types but perhaps function of "Tanker Base/Air Attack Base" is sufficient to meet the business requirement. Unclear whether MIRPS requires a sequencing of multiple bases for an incident. ROSS does not accommodate such a sequencing.
Reload_type	Type of reload base	Unclear	MAY BE SUFFICIENTLY ADDRESSED	*Check with MIRPS on valid values for this column – documentation not clear*

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
RELOAD_BASE_RESTRICTIONS	NOT CURRENTLY USED		Airport Location, Location Hazard	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
REPORT_KIND	Used by MIRPS Reports	Resource count by kind	Resource Catalog Resource Inventory	Can be derived

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
REPORT_RELAYS	Request transaction count information (Place, UTF, fill, relay information; used by MIRPS Reports	PHYSICAL DESIGN RQMT	Documentation Documentation Category	DESIGN CONSIDERATION: COMMUNICATIONS TRACEABILITY. Could be included in the documentation records

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
REQUEST		Request level information by incident	Resource Request	
MIRPS Column			ROSS Attribute	
Request_receiver	Initials of person receiving a request; In MIRPS 3.2, this field indicates the Unit ID of the receiving unit.	PHYSICAL DESIGN REQUIREMENT: ?Dispatch Messaging System		ROSS has not fully addressed the issue of how the notification process will work and therefore whether a field like this would be needed.
Request_priority	Not currently used	Unclear	NOT CURRENTLY ADDRESSED	Out of scope

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
REQUEST_INFO	Information about the path of request transactions	Provide traceability to all parties of the communication on the Resource Request	Resource Request Note (Dialog office, Dialog partner, Recording office, Recording partner) Documentation Category Code	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
REQUEST_REMARKS	Remarks pertaining to a request	Contents of the communications on the Resource Request to document all pertinent information about the request	Resource Request Note (Text); Documentation	
MIRPS Column			**ROSS Attribute**	
Show_remark	Distinguishes whether or not an incident remark was previously deleted by a user (remarks are not physically deleted from database)			ROSS does not allow delete of DOCUMENTATION

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
REQUEST_RESOURCE	Detailed resource requested and resource assigned information at the elemental level	Link between request, what was requested (catalog item type) and what was assigned.	Resource Request Requirement Resource Request Assignment	Link between request and what was requested (catalog item type) ROSS uses two relations to distinctly depict what was requested and what was assigned.
MIRPS Column			**ROSS Attribute**	
Agency_incident_flag	Distinguishes whether a request is placed with an agency or an incident		MAY BE SUFFICIENTLY ADDRESSED	ROSS keeps record of the assignment/reassignment. Since ROSS users may view availability and then assign there is not really a "place" an order function so this field is not needed. Also in ROSS, a request is always associated with an incident and never just with an agency.

MIRPS Column			*ROSS Attribute*	
co_pilot	Name of Co-pilot requested		MAY BE SUFFICIENTLY ADDRESSED	ROSS does not support requesting a particular person on a request. However, since the requestor can see availability of specific resources, the requestor may select a particular available person to assign for an aircraft request, although the role of "co-pilot" is not explicitly documented.
Order_description_needed	MIRPS allows a free-form text field with lookup to standard catalog entries. Can enter non-standard resource by entering description.		Overhead Position Code, Equipment Category, Aircraft Category, Group Category, Supply Non-NFES Category, NFES-Cache Item Code, Service Category Or Overhead Position Title, Overhead Position Specialty Description, NFES Supply Principal Name, NFES Supply Item Description	ROSS allows lookups from a catalog and create own custom entries.
Organization_standard	In MIRPS, a particular resource configuration (engine) might be referred to according to two standards (it is both a CA type 3 and an NWCG type 5), e.g. MIRPS cross-references the two standards.	This field allows MIRPS users to distinguish state standard resources (e.g. 4 types of engines) from NWCG standard resources (e.g. 7 types of engines). Type 3 CA is same as Type 6 NWCG.	NOT CURRENLY ADDRESSED	ROSS assumes each user of the NWCG system would use the NWCG standard resource definitions. If an agency had differing standards, they would need to translate their standard to the NWCG standard for ordering.

MIRPS Column			*ROSS Attribute*	
Originating_order_number Originating_request_number	When a resource is reassigned, maintains a link to the original order the person was mobed on so that one can: 1- communicate to the home unit visually the reassignments, and, 2- determine to what location to demob the resource. *RE Jerry: not necessary after MIRPS deployment to the Unit Level*		MAY BE SUFFICIENTLY ADDRESSED	ROSS will send a notification to the resource owner whenever a resource is reassigned. You can query the assignment history of a resource. Whenever a resource is reassigned, the Release-To location (the demob point) from the original assignment is the default for the release-to for the new assignment. This can be modified. If the original request was a detail (pre-position) request, then any sub-assignment within the detail, the demob point is the deliver to location from the original detail request. This can be modified as needed.
Overhead_vehicle_ID	Column currently not used		NOT CURRENTLY ADDRESSED	Out of scope
Quantity_people	Number of people on a resource		Roster Line Number	Can be derived based on the number of line on the roster for a Group Resource

MIRPS Column			*ROSS Attribute*	
Reassign_incident_id, Resource_reassigned_from _info	Incident_id corresponding to incident to which a resource is being reassigned		MAY BE SUFFICIENTLY ADDRESSED	ROSS allows one to query the resource assignment that shows all incidents and requests they have been assigned to. This is not maintained as a direct link between incidents.
Resource_name			Resource Inventory Identifier: Aircraft FAA Registration Number, Group Name, Equipment Identifier, Person Name, Supply Identifier	ROSS does not carry descriptions for Inventory all items so the Inventory ID may be used instead

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
REQUEST_SUPP_INFO	Supplemental information values for a request/element	Document additional needs	Request Special Needs	

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
RESOURCE_COUNT		Resource count information by agency, kind and type	Catalog Inventory	Can be derived
MIRPS Column			*ROSS Attribute*	
aval_count				Can be derived
Standard			NOT CURRENLY ADDRESSED	See discussion in REQUEST_RESOURCE (ORGANIZATION_STAND ARD)

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
RESOURCE_INFO	supports multi-site communications via Notifier	Information about the path of resource transactions		PHYSICAL DESIGN REQUIREMENT: Dispatch Messaging System?
MIRPS Column			**ROSS Attribute**	
Notify_home_unit				Until the entire NWCG dispatch community is working via ROSS, we will need to be able to document in ROSS that notification has been sent to dialog partners for various types of communications required to accomplish the business function of resource ordering and statusing.

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
RESOURCE_REQUEST	FOUND IN DATABASE, NOT DOCUMENTED	??See also REQUEST_RESOURCE; perhaps REQUEST_RESOURCE is the requirement and RESOURCE_REQUEST is the assignment.		
MIRPS Column			**ROSS Attribute**	
Description_fill			Resource Inventory Identifier: Aircraft FAA Registration Number, Group Name, Equipment Identifier, Person Name, Supply Identifier	ROSS does not carry descriptions for Inventory all items so the Inventory ID may be used instead

MIRPS Column			*ROSS Attribute*	
Element_status	Status of the fulfillment of the item on a group request, e.g. filled, placed, UTF		Resource Readiness Status	ROSS keeps a status on the request for the group, not for each line item. So either the request for a group is filled or not. If one item in the group cannot be filled due to unavailability, then ROSS needs to have the ability to look for the next closest available like resource to fill that group item.
Order_description_needed	Description of what is being ordered		Resource Catalog Identifier; Aircraft Category, Group Category, Equipment Category, Overhead Position Title, Service Category, NFES Cache Item Principal Name, Supply Non-NFES Category	ROSS does not carry descriptions for all Catalog items so the Catalog ID may be used instead

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
SF_USER	MIRPS user login information	PHYSICAL DESIGN RQMT	NOT CURRENTLY ADDRESSED	DESIGN ITEM: SECURITY

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
SINGLE_RESOURCE_KIND	Stores single resource information by kind	Major division of resource types	Catalog	
MIRPS Column			**ROSS Attribute**	
Resource_kind_description			Resource Catalog Identifier; Aircraft Category, Group Category, Equipment Category, Overhead Position Title, Service Category, NFES Cache Item Principal Name, Supply Non-NFES Category	ROSS does not carry descriptions for all Catalog items so the Catalog ID may be used instead
Sub_category	Column currently not used		NOT CURRENTLY ADDRESSED	Out of scope

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
SINGLE_RESOURCE_STANDARDS	CURRENTLY NOT USED	Segregate NWCG and Ca standard resource types	Custom Catalog	
MIRPS Column			**ROSS Attribute**	
Organization_standard				See discussion in REQUEST_RESOURCE (ORGANIZATION_STANDARD)

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
SINGLE_RESOURCE_TYPE	Single resource information by kind and type	Detailed definition of standard resource	Catalog	
MIRPS Column			*ROSS Attribute*	
kind_type_description			Resource Catalog Identifier; Aircraft Category, Group Category, Equipment Category, Overhead Position Title, Service Category, NFES Cache Item Principal Name, Supply Non-NFES Category	ROSS does not carry descriptions for all Catalog items so the Catalog ID may be used instead
Organization_standard				See discussion in REQUEST_RESOURCE (ORGANIZATION_STANDARD)
Resource_type_code				
type_description			Resource Catalog Identifier; Aircraft Category, Group Category, Equipment Category, Overhead Position Title, Service Category, NFES Cache Item Principal Name, Supply Non-NFES Category	ROSS does not carry descriptions for all Catalog items so the Catalog ID may be used instead

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
SITE_INFO	Stores MIRPS site information; supports multi-site data replication	PHYSICAL DESIGN RQMT	NOT CURRENTLY ADDRESSED	DESIGN ITEM: SYSTEM/DATA RELIABILITY. Maybe N/A according to ROSS target architecture

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
SRESOURCE	Stores detailed resource information		Assignment	
MIRPS Column			**ROSS Attribute**	
Declination				See discussion in FAA_LOCATION (declination)
Organization_standard				See discussion in REQUEST_RESOURCE (organization_standard)

MIRPS Column			ROSS Attribute	
Originating_incident_id ; originating_request_number	When a resource is reassigned, maintains a link to the original order the person was mobed on so that one can: 1. communicate to the home unit visually the reassignments and, 2. determine to what location to demob the resource. *RE Jerry: MIRPS 3.2 automatically sends a notification to the Resource Owner whenever a resource is assigned*		MAY BE SUFFICIENTLY ADDRESSED	In ROSS will send a notification to the resource owner whenever a resource is reassigned. You can query the assignment history of a resource. Whenever a resource is reassigned, the Release-To location (the demob point) from the original assignment is the default for the release-to for the new assignment. This can be modified. If the original request was a detail (pre-position) request, then any sub-assignment within the detail, the demob point is the deliver to location from the original detail request. This can be modified as needed.

MIRPS Column			*ROSS Attribute*	
Resource_status	Status of resource (AVAL for available, ASGN for assigned, OS/M for out of service, ASGA for released available, ASGU for released unavailable) In MIRPS, the released Resource is considered "assigned" to the incident until status is shown as "in quarters" by the home unit. This allows the GACC/Incident to reassign the resource anywhere along the way because they still have control of the resource.		Release Date & Time, Resource Readiness Status	In ROSS, this functionality is accomplished using two fields. A resource is considered released if it has a Release Data & Time in the past. At any time, the Resource Readiness Status may be either "available (AL, AG, AN)" or "not available" ROSS assumes the resource current location is "at home" once the Assignment Release Date & Time is in the past. Therefore that resource can be reassigned enroute by the GACC. ROSS does not require an explicit checkin of the resource once it arrives home.

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
STRIKE_ELEMENT_KIND	Defines strike team (crew or engine) compositions	Composition of a group	Inventory Group Roster	Allows multi-layering within roster members, e.g. groups may be members of other groups
MIRPS Column			*ROSS Attribute*	
Organization_standard				See discussion in REQUEST_RESOURCE (ORGANIZATION_STANDARD)

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
STRIKE_TEAM_ELEMENT	FOUND IN DATABASE; NOT DOCUMENTED RE: Jerry: 7 elements for Engine teams, 4 or 5 elements for Crews			
MIRPS Column			**ROSS Attribute**	
st_number st_number_description st_number_status	In MIRPS a group of strike team numbers are pre-assigned to a unit and used with the Request Category to automatically create the description of the Strike Team for an active request. When the Strike Team is released, the group relationship of the strike team members is undone and the Strike Team number is available for reuse to define another strike team within the unit, for another request.	According to the ICS business rule, a strike team is only released as a group. Each Strike Team or Task Force must have a number	Group Name	ROSS allows one to enter a free-form text name for a group. ROSS does not manage pre-assigned strike team numbers by unit. In ROSS if you order a strike team, the system creates subordinate related requests for each resource on that team, which can then be released as a group or independently.

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
STRIKE_TEAM_KIND	Describes strike teams by kind		Group Catalog	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
STRIKE_TEAM_NUMBER	Stores detailed information about strike team numbers including status	Assigned strike team numbers for each unit; each Strike Team or Task Force must have a number	Group	
MIRPS Column			**ROSS Attribute**	
st_number	Elements of each strike team		NOT CURRENTLY ADDRESSED	See discussion in STRIKE_TEAM_ELEMENT(st_number)

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
TEAM	Defines federal and state overhead teams; Standard team set for CDF, NLT and NST	Standard teams	Group Catalog	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
TEAM_ASSIGNMENT		Define resources assigned to individual teams	Group Inventory Roster	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
TEAM_COMPOSITION		Define positions within overhead teams	Group Catalog Configuration	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
TEAM_TYPE	Type I or Type II	Describe overhead teams by type	Group Catalog	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
TFR	Store detailed temporary flight restriction (TFR) request information	Order TFR from FAA	NOT CURRENTLY ADDRESSED	**Included in ROSS scope as of 12/98; need to assess details of overlap when revised ROSS models are available**
MIRPS Column			**ROSS Attribute**	
All columns	*Note: The columns listed below (for TFR) are only given because we did some investigation to understand the nature of the data stored in them. It is not a complete list of the columns MIRPS keeps for TFR data.*		NOT CURRENTLY ADDRESSED	**Included in ROSS scope as of 12/98; need to assess details of overlap when revised ROSS models are available**
Flight_service_station				Could support this in ROSS as a relation between a Location and Airport
Highest_ground_incident	Highest ground elevation of incident (MSL) or A/C operating base (MSL)		Infrared Scan Area Average Elevation	ROSS provides a field to keep the average elevation for IR scan area for IR Requests. This information is not the Event Elevation, per se.
msl_base msl_delta	Mean Sea Level of Reload Base MSL delta (2000 is standard, adjust according to need)			
Radial				If included, may be derived
tfr_received	Type of TFR received, e.g. 1, 2 or 3 designated by FAA based on activities going on in the area that restriction is requested to cover			
tfr_request	Media under which TFR was requested (e.g. FAX, phone, e-mail …)			

MIRPS Column			*ROSS Attribute*	
until_lifted	Allows Estimated duration time to be unspecified, rather "until lifted"			
vhf_am_frequency			Radio Frequency Number	Need a relationship between new TFR data and Radio Frequency Entity

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
TIMELIMIT	Used for idle request procedure	PHYSICAL DESIGN RQMT; Ensure timely response to messages		DESIGN CONSIDERATION: RESPONSE TIME

MIRPS Table	*MIRPS Comment*	*Business Requirement*	*ROSS Entity or Relation*	*ROSS Comment*
TIMEZONE	Stores the time zone derived from the server operating system	Support date/time transformation		All date/times (for Travel, Request, Documentation, Assignment, Release, etc.) are displayed at local time based on Organization Location. ROSS requirements do not explicitly address Location-Timezone link or required translations for presentation. DESIGN CONSIDERATION: Year 2000 COMPLIANCE

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
TRAVEL_LEGS	Detailed travel information pertaining to requests and elements of requests	Track travel details	Travel Leg	
MIRPS Column			**ROSS Attribute**	
Travel_mode	Indicates the mode of travel, e.g. commercial, ground, CWN, charter, etc.			Can be derived

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
TYPE_QUALIFIER	Descriptions of resources by kind and type		Catalog	
MIRPS Column			**ROSS Attribute**	
Organization_standard				See discussion in REQUEST_RESOURCE (ORGANIZATION_STANDARD)
Qualifier_id	Row number associated with qualifier_txt	Identify distinct resource types	?? Resource Catalog Item Identifier	**Need to check on MIRPS use of TYPE, KIND and QUALIFIER to identify Resource Catalog entries**

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
UNIT_OF_ISSUE	Descriptions of units of measure for supply requests	Order NFES items	Unit Of Issue	
MIRPS Column			**ROSS Attribute**	
Unit_description	Description of each unit of measure (i.e. box, case, each)		NOT CURRENTLY ADDRESSED	ROSS uses only Unit of Measure Code and does not store a corresponding description for the Unit of Measure.

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
UTF	UTF information by agency	Unable to Fill	Request (Status)	
MIRPS Column			**ROSS Attribute**	
utf_id	Internal identification number given to UTF actions		Documentation Identifier (date, time, recording office, recording person)	

MIRPS Table	MIRPS Comment	Business Requirement	ROSS Entity or Relation	ROSS Comment
ZONE_OF_INFLUENCE	Displays aircraft within 20 minute flight time of a air tanker or helicopter base	Identify air tanker and helicopter resources neat a base; determine closest forces	Event Resource Assignment Event Location Airport Location	Can be derived

Attribute Characteristics Analysis

The following table lists those MIRPS columns which, when addressed by the ROSS models, may not be fully accommodated re: data length. No analysis was done for data type (e.g. alpha or numeric). In the following table, column headers mean: LEN = Length, DEC = Number of Decimals.

Bold indicates attributes may not be a true match.

MIRPS Table	*MIRPS Column*	*Len*	*Dec*	*Comment*	*ROSS Common Item*	*Len*	*Dec*	*Comment*
ACFT_ROUTE_MOA	HAZARD_ID	20		description of aircraft hazard	Hazard Identifier	10	0	A description of known risks, threats, or hazards which may be encountered by an aircraft operating within a particular area.
ACTION	ACTION	20		Definition of a dispatching function performed in MIRPS (used internally for multi-site communication)	Documentation Category	10	0	A brief description to categorize the kind of documentation being created.
AGENCY	CMND_CNTR_PHONE	14		Phone number at command center *(re: Jerry: includes extension)*	Phone Number	10	0	The set of numbers used to connect two or more telecommunication devices.
AIRBASE_PROXIMITY	FAA_TYPE_LOCATION	15		Type of location for FAA identifier	Airport Function Name	4	0	A designator used by the wildland fire community to identify the various functions an airport can support (e.g. Jet Port, Heli-port, Tanker Base).
AIRCRAFT	CONTACT_NUMBER	24		Contact number for hired aircraft *(re: Jerry: allows for two numbers: Day and night number)*	Phone Number	10	0	The set of numbers used to connect two or more telecommunication devices.
AIRCRAFT	OWNER	31		Owner of aircraft resource	Organization Name	30	0	The title given to an administrative division of federal, state, or local government of interest to the dispatching community.
AIRCRAFT_HAZARDS	CLEARANCE_RELEASED	20		Person who released clearance for MOA or aircraft routes	Documentation Category	10	0	A brief description to categorize the kind of documentation being created.
BEARING_DISTANCE	BASE_OR_OMNI	4		Base reference for bearing calculation	VOR Identifier	3	0	An Federal Aviation Administration (FAA) assigned code used to identify individual aviation navigation beacons.
EQUIPMENT	**EQ_CAPACITY**	**10**		**Defines the maximum capacity allowed by the equipment resource** *(RE: Jerry: this isn't an exact match but the intent is probably sufficiently covered in ROSS)*	**Equipment Category**	**4**	**0**	**A standard descriptor of rolling stock used by the Wildland Fire Community.**
EQUIPMENT	EQ_LICENSE_NUMBER	10		License number of equipment resource	Equipment Identifier	6	0	A name, number, or combination of characters used to uniquely identify a specific equipment resource.

MIRPS Table	MIRPS Column	Len	Dec	Comment	ROSS Common Item	Len	Dec	Comment
EQUIPMENT	EQ_SERIAL_NUMBER	24		Serial number of equipment resource	Equipment Identifier	6	0	A name, number, or combination of characters used to uniquely identify a specific equipment resource.
FAA_LOCATION	PHONE	14		Phone number of FAA facility	Phone Number	10	0	The set of numbers used to connect two or more telecommunication devices.
FOOD_SERVICE	FIRST_MEAL_NUMBER	5		Number of meals for first meal	Meal Total Quantity	4	0	Estimated total number of people to be served by Meal Type for the initial food service request.
FOOD_SERVICE	INCIDENT_NUMBER	13		Number given to an incident (i.e., CA-ANF-123456)	Event Number	10	0	A set of digits established at the time an event is reported to uniquely identify an event. First 4-digits are assigned by the unit, last 6 digits are a system assigned alpha-numeric identifier.
FOOD_SERVICE	NEAREST_POTABLE_WATER	60		Location of closest potable water	Location Name	30	0	The official or common title given to a specific location.
FOOD_SERVICE	PEAK_NUMBER	5		Number of personnel at peak of incident	Food Service Peak Attendance Quantity	4	0	The estimated maximum number of individuals expected at the peak of an event.
FOOD_SERVICE	REPORT_LOCATION	60		Description of location of where food service is to report	Location Name	30	0	The official or common title given to a specific location.
FOOD_SERVICE	SECOND_MEAL_NUMBER	5		Number of meals for second meal	Meal Total Quantity	4	0	Estimated total number of people to be served by Meal Type for the initial food service request.
FOOD_SERVICE	SPIKE_CAMP_MEALS	5		Number of spike camp meals per day	Spike Camp Daily Meal Quantity	3	0	The estimated number of meals requested for delivery to a spike camp.
FOOD_SERVICE	SPIKE_CAMP_NUMBER	3		Number of spike camp meals	Spike Camp Quantity	2	0	The projected number of spike camps located at an event.
FOOD_SERVICE	THIRD_MEAL_NUMBER	5		Number of meals for third meal	Meal Total Quantity	4	0	Estimated total number of people to be served by Meal Type for the initial food service request.
ICS_QUALIFICATION	ICS_QUAL_DESC	50		Job title of an ICS position	Overhead Position Title	30	0	A description of a job within the Incident Command System (e.g.
IMIRPS_NEW_ORDER	INCIDENT_NUMBER	13			Event Number	10	0	A set of digits established at the time an event is reported to uniquely identify an event. First 4-digits are assigned by the unit, last 6 digits are a system assigned alpha-numeric identifier.
INCIDENT	INCIDENT_BASE_PHONE	40		Phone number at incident base *(Re: Jerry: 30 characters may be okay or offer multiple phone numbers)*	Phone Number	10	0	The set of numbers used to connect two or more telecommunication devices.

MIRPS Table	MIRPS Column	Len	Dec	Comment	ROSS Common Item	Len	Dec	Comment
INCIDENT	INCIDENT_NUMBER	13		Number given to an incident (i.e., CA-ANF-123456)	Event Number	10	0	A set of digits established at the time an event is reported to uniquely identify an event. First 4-digits are assigned by the unit, last 6 digits are a system assigned alpha-numeric identifier.
INCIDENT	INCIDENT_STATUS	8		Status of an incident (i.e., active or inactive)	Event Status	1	0	The current condition of an event.
INCIDENT	LOCATION_DESCRIPTION	160		Description of where incident is located	Location Name	30	0	The official or common title given to a specific location.
INCIDENT	NEAREST_VOR	4		Nearest VOR to an incident	VOR Identifier	3	0	An Federal Aviation Administration (FAA) assigned code used to identify individual aviation navigation beacons.
INCIDENT_CONTACTS	TYPE_CONTACT	12		Description of contact (i.e., ground, air-to-air or air-to-ground)	Radio Frequency Use	2	0	Identifies the kind of communications that should occur on the frequency (AA = air-to-air; AG = air-to-ground; GG = ground.)
INCIDENT_CONTACTS	TYPE_FREQUENCY	10		Frequency type (i.e., ATA, ATG) *(re: Jerry should be 6-8 characters, 10 characters not really needed)*	Radio Frequency Use	2	0	Identifies the kind of communications that should occur on the frequency (AA = air-to-air; AG = air-to-ground; GG = ground.)
INCIDENT_COUNT	INCIDENT_NUMBER	13		Number given to an incident (i.e., CA-ANF-123456)	Event Number	10	0	A set of digits established at the time an event is reported to uniquely identify an event. First 4-digits are assigned by the unit, last 6 digits are a system assigned alpha-numeric identifier.
INCIDENT_COUNT	KIND	4		Kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
INCIDENT_INCIDENT	INCIDENT_NUMBER	13		Number given to an incident (i.e., CA-ANF-123456)	Event Number	10	0	A set of digits established at the time an event is reported to uniquely identify an event. First 4-digits are assigned by the unit, last 6 digits are a system assigned alpha-numeric identifier.
INCIDENT_INCIDENT	KIND	4		Kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
INCIDENT_INCIDENT	ORDER_DESCRIPTION_NEEDED	50		Resource requested	Resource Catalog Item Identifier	20	0	A unique set of characters or number assigned to a resource catalog item.
INCIDENT_PROXIMITY	KIND	4			Resource Category	1	0	The grouping in which a wildland fire resource is designated.
INFRARED_SCANNER	APPROXIMATE_SIZE	10		Approximate size *(RE: Jerry: could be okay with 7 characters)*	Event Approximate Acres	6	0	The estimated size of an event, described in acres.

MIRPS Table	MIRPS Column	Len	Dec	Comment	ROSS Common Item	Len	Dec	Comment
INFRARED_SCANNER	FIRST_OMNI	4		Omni of incident from first VOR	VOR Identifier	3	0	An Federal Aviation Administration (FAA) assigned code used to identify individual aviation navigation beacons.
INFRARED_SCANNER	INCIDENT_ELEVATION	12		Elevation of incident	Infrared Scan Area Average Elevation	5	0	The measurement in feet from sea level for a given point.
INFRARED_SCANNER	INCIDENT_NUMBER	13		Number given to an incident (i.e., CA-ANF-123456)	Event Number	10	0	A set of digits established at the time an event is reported to uniquely identify an event. First 4-digits are assigned by the unit, last 6 digits are a system assigned alpha-numeric identifier.
INFRARED_SCANNER	LOCAL_DISPATCH	40		Local dispatch *(RE: Jerry: probably need 30 characters for Organization Title; if its really only the identifier, then 5 characters is okay)*	Organization Identifier	5	0	A unique identifier for an organizational unit.
INFRARED_SCANNER	NATIONAL_IR_COORD	40		National IR coordinator	Person Name	30	0	The name of a person which is made up of three sub-parts: first name, middle initial, and last name.
INFRARED_SCANNER	ORDERING_UNIT	25		Unit that ordered the infrared scanner *(RE: Jerry: probably need 30 characters for Organization Title; if its really only the identifier, then 5 characters is okay)*	Organization Identifier	5	0	A unique identifier for an organizational unit.
INFRARED_SCANNER	REGIONAL_COORD_CENTER	40		Regional coordination center *(RE: Jerry: probably need 30 characters for Organization Title; if its really only the identifier, then 5 characters is okay)*	Organization Identifier	5	0	A unique identifier for an organizational unit.
KIND_SUPP_INFO	RESOURCE_KIND_CODE	4		Resource kind identification	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
MOA	SCHEDULING_AGENCY	30		Scheduling agency or ATC *(RE: Jerry: probably need 30 characters for Organization Title; if its really only the identifier, then 5 characters is okay)*	Organization Identifier	5	0	A unique identifier for an organizational unit.
MOBILIZATION_COUNT	INCIDENT_NUMBER	13		Number given to an incident (i.e., CA-ANF-123456)	Event Number	10	0	A set of digits established at the time an event is reported to uniquely identify an event. First 4-digits are assigned by the unit, last 6 digits are a system assigned alpha-numeric identifier.
MOBILIZATION_COUNT	KIND	4		Kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.

MIRPS Table	MIRPS Column	Len	Dec	Comment	ROSS Common Item	Len	Dec	Comment
NFES_CATALOG	NFES_NUMBER	5		National Fire Equipment System catalog number *(RE: Jerry : 4 is what NFES number requires now, 5th character was for expansion)*	Cache Item Code	4	0	A unique four-digit number assigned to standard in the National Fire Equipment System.
ORDERED_RELAYS	NEED_ID	3		Element identifier for strike teams and task forces	Roster Line Number	2	0	The numeric identification of a specific line on a roster.
OVERHEAD	ASSIGNMENT_AVAILABILITY	4		Status of employee (AVAL for available, ASGN for assigned)	Resource Readiness Status	2	0	A description of the current readiness of a resource for potential assignments.
OVERHEAD	BODY_WEIGHT	4		The weight of an employee in pounds	Person Body Weight	3	0	The body weight (in pounds) of a person.
OVERHEAD	*EMPLOYMENT_STATUS*	*20*		Status of employment *(RE: Jerry: need to confirm this match; check for a better definition from MIRPS team)*	*Employment Status*	*3*	*0*	*Describes the method of personnel hiring. Examples: Regular Agency, Administratively Dispursed (AD), Emergency Firefighter (EFF).*
OVERHEAD	GENDER	2		The gender of an employee	Person Gender	1	0	Classification of sex of an individual (M=Male; F=Female)
OVERHEAD	PAGER	20		The pager number of an employee *(RE: Jerry: allows for pager PIN numbers)*	Phone Number	10	0	The set of numbers used to connect two or more telecommunication devices.
OVERHEAD	WORK_PHONE	20		The work phone number of an employee *(RE: Jerry: allows for extension)*	Phone Number	10	0	The set of numbers used to connect two or more telecommunication devices.
RADIO_FREQUENCIES	TONE	30		Frequency that opens and protects a repeater	Radio Frequency Number	15	0	The designated number that identifies a radio frequency. (122.9, 153.625) May include receive and transmit indicators.
RADIO_FREQUENCIES	TYPE_FRE	10		Type of frequency (ATA for air-to-air, ATG for air-to-ground) *(RE: Jerry: should be at least 4 characters)*	Radio Frequency Use	2	0	Identifies the kind of communications that should occur on the frequency (AA = air-to-air; AG = air-to-ground; GG = ground.)
RELOAD_BASE	RELOAD_PHONE	14		Phone number of reload base	Phone Number	10	0	The set of numbers used to connect two or more telecommunication devices.
REPORT_KIND	KIND	5		Kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
REPORT_RELAYS	KIND	5		Kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
REQUEST	ACTION	20		Definition of a dispatching function performed in MIRPS (used internally for multi-site communication)	Documentation Category	10	0	A brief description to categorize the kind of documentation being created.

MIRPS Table	MIRPS Column	Len	Dec	Comment	ROSS Common Item	Len	Dec	Comment
REQUEST	**SGROUP**	**2**		**Identifies whether a request is for a single resource (SR), strike team (ST) or task force (TF)** *(RE: Jerry: this isn't an exact match but the intent is probably sufficiently covered in ROSS)*	**Resource Category**	**1**	**0**	**The grouping in which a wildland fire resource is designated.**
REQUEST_RESOURCE	ACTION	20		Definition of a dispatching function performed in MIRPS (used internally for multi-site communication)	Documentation Category	10	0	A brief description to categorize the kind of documentation being created.
REQUEST_RESOURCE	CELL_PHONE_NUMBER	14		Column currently not used	Phone Number	10	0	The set of numbers used to connect two or more telecommunication devices.
REQUEST_RESOURCE	DESCRIPTION_FILL	60		Descriptive name of resource filled on a request	Resource Inventory Identifier	20	0	A set of characters or numbers assigned to a resource inventory item as a unique identifier.
REQUEST_RESOURCE	KIND_FILL	5		Kind of resource used to fill a request	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
REQUEST_RESOURCE	KIND_NEEDED	5		Kind of resource needed to fill a request	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
REQUEST_RESOURCE	ORDER_DESCRIPTION_NEEDED	50		Resource requested	Resource Catalog Item Identifier	20	0	A unique set of characters or number assigned to a resource catalog item.
REQUEST_RESOURCE	ORIGINATING_ORDER_NUMBER	13		Originating order number of resource	Event Number	10	0	A set of digits established at the time an event is reported to uniquely identify an event. First 4-digits are assigned by the unit, last 6 digits are a system assigned alpha-numeric identifier.
REQUEST_RESOURCE	QUANTITY_PEOPLE	3		Number of people on a resource	Roster Line Number	2	0	The numeric identification of a specific line on a roster.
REQUEST_RESOURCE	RESOURCE_NAME	30		Descriptive name of resource	Resource Inventory Identifier	20	0	A set of characters or numbers assigned to a resource inventory item as a unique identifier.
REQUEST_SUPP_INFO	ACTION	20		Definition of a dispatching function performed in MIRPS (used internally for multi-site communication) default_field_name	Documentation Category	10	0	A brief description to categorize the kind of documentation being created.
REQUEST_SUPP_INFO	REQUEST_KIND_CODE	4		Kind of request	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
RESOURCE_COUNT	KIND	4		Kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.

MIRPS Table	MIRPS Column	Len	Dec	Comment	ROSS Common Item	Len	Dec	Comment
RESOURCE_INFO	ACTION	20		Definition of a dispatching function performed in MIRPS (used internally for multi-site communication)	Documentation Category	10	0	A brief description to categorize the kind of documentation being created.
SF_USER	AGENCY	30		Description of the home agency of the user	Organization Identifier	5	0	A unique identifier for an organizational unit.
SINGLE_RESOURCE_KIND	RESOURCE_KIND_CODE	4		Kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
SINGLE_RESOURCE_KIND	RESOURCE_KIND_DESCRIPTION	50		Description of resource kind	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
SINGLE_RESOURCE_TYPE	KIND_TYPE_DESCRIPTION	50		Description of single resource kind and type	Resource Catalog Item Identifier	20	0	A unique set of characters or number assigned to a resource catalog item.
SINGLE_RESOURCE_TYPE	NUMBER_PEOPLE_ON_RESOURCE	5		Number of people assigned to a resource	Roster Line Number	2	0	The numeric identification of a specific line on a roster.
SINGLE_RESOURCE_TYPE	RESOURCE_KIND_CODE	4		Kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
SRESOURCE	CATEGORY	2		Category of request (A, C, E, O, S)	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
SRESOURCE	KIND	4		Kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
SRESOURCE	NWCG_KIND	4		Federal kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
SRESOURCE	QUANTITY_PERSONNEL	3		Number of personnel assigned to a resource	Roster Line Number	2	0	The numeric identification of a specific line on a roster.
SRESOURCE	RESOURCE_STATUS	4		Status of resource (AVAL for available, ASGN for assigned, OS/M for out of service, ASGA for released available, ASGU for released unavailable)	Resource Readiness Status	2	0	A description of the current readiness of a resource for potential assignments.
STRIKE_ELEMENT_KIND	ELEMENT_ID	3		Strike team element identifier	Roster Line Number	2	0	The numeric identification of a specific line on a roster.
STRIKE_ELEMENT_KIND	RESOURCE_KIND_CODE	4		Kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
STRIKE_ELEMENT_KIND	STRIKE_TEAM_KIND	4		Kind of strike team	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
STRIKE_TEAM_KIND	STRIKE_LONG_DESCRIPTION	40		Long description of strike team (i.e., Strike Team Type 1 Crew)	Group Category	4	0	A standard descriptor for a group of wildland fire resources.

MIRPS Table	MIRPS Column	Len	Dec	Comment	ROSS Common Item	Len	Dec	Comment
STRIKE_TEAM_KIND	STRIKE_TEAM_KIND	4		Kind of strike team (i.e., STC for strike team of type 3 engines)	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
TEAM	TEAM_KIND_CODE	4		Kind of team (CDF, NLT, NST)	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
TEAM_ASSIGNMENT	POSITION_NUMBER	3		Defined position number within a team	Roster Line Number	2	0	The numeric identification of a specific line on a roster.
TEAM_ASSIGNMENT	TEAM_KIND_CODE	4		Kind of team	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
TEAM_COMPOSITION	POSITION_NUMBER	3		Defined position number within a team	Roster Line Number	2	0	The numeric identification of a specific line on a roster.
TEAM_COMPOSITION	TEAM_KIND_CODE	4		Kind of team	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
TEAM_TYPE	TEAM_KIND_CODE	4		Kind of team	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
TEAM_TYPE	TEAM_KIND_DESCRIPTION	40		Description of team kind	Group Category	4	0	A standard descriptor for a group of wildland fire resources.
TEAM_TYPE	TEAM_TYPE_DESCRIPTION	40		Description of team type	Resource Catalog Item Identifier	20	0	A unique set of characters or number assigned to a resource catalog item.
TFR	INCIDENT_NUMBER	13		Number given to an incident (i.e., CA-ANF-123456)	Event Number	10	0	A set of digits established at the time an event is reported to uniquely identify an event. First 4-digits are assigned by the unit, last 6 digits are a system assigned alpha-numeric identifier.
TFR	LOCATION_RELIEF	35		Location of relief A/C operating base	Airport Code	4	0	A unique 3-4 character (e.g. BOI, RDM, U15, etc.) designator established for each airport/heliport, based on the place in which it is located.
TFR	REQUEST_FAA	10		Request made to which FAA ARTCC	Organization Identifier	5	0	A unique identifier for an organizational unit.
TFR	REQUEST_OFFICE	60		Request organization/office *(RE: Jerry: probably need 30 characters for Organization Title; if its really only the identifier, then 5 characters is okay)*	Organization Identifier	5	0	A unique identifier for an organizational unit.
TFR	VHF_AM_FREQUENCY	50		Radio frequency for handling news media or other requests to operate at altitudes used by relief aircraft	Radio Frequency Number	15	0	The designated number that identifies a radio frequency. (122.9, 153.625) May include receive and transmit indicators.

MIRPS Table	MIRPS Column	Len	Dec	Comment	ROSS Common Item	Len	Dec	Comment
TFR	VOR	4		VOR name	VOR Identifier	3	0	An Federal Aviation Administration (FAA) assigned code used to identify individual aviation navigation beacons.
TRAVEL_LEGS	ACTION	20		Definition of a dispatching function performed in MIRPS (used internally for multi-site communication), for travel, value is either BOTH for ETD/ETA, FIRST for ETD or LAST for ETA	Documentation Category	10	0	A brief description to categorize the kind of documentation being created.
TRAVEL_LEGS	DEPARTURE_POINT	36		Location from where resource is departing	Location Name	30	0	The official or common title given to a specific location.
TRAVEL_LEGS	DESTINATION_POINT	36		Description of destination of a resource	Location Name	30	0	The official or common title given to a specific location.
TRAVEL_LEGS	DOOR_NUMBER	10		Vehicle door number	Equipment Identifier	6	0	A name, number, or combination of characters used to uniquely identify a specific equipment resource.
TRAVEL_LEGS	LICENSE_NUMBER	10		The license number of the driver	Equipment Identifier	6	0	A name, number, or combination of characters used to uniquely identify a specific equipment resource.
TYPE_QUALIFIER	RESOURCE_KIND_CODE	4		Kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.
UTF	KIND	5		Kind of resource	Resource Category	1	0	The grouping in which a wildland fire resource is designated.

MIRPS Columns not Addressed in ROSS Models

Any MIRPS columns that did not have a corresponding Common Item link in the ROSS-MIRPS model (MIRPS32.RDM) are noted in the MIRPS Cols w-no Citem.xls spreadsheet. Many of these columns are only needed for physical design considerations (DSGN) and so are appropriately missing from the ROSS Conceptual Data Model (CDM). Others represent data that was considered out of scope (OOS) for ROSS or derivable from relationships set in the ROSS CDM. Those items have been documented in the Entity and Attribute Analysis section above.