



BIGHORN
INFORMATION SYSTEMS

**In Response to Request for Information for Computer Aided Dispatch (CAD) System
SN-2012-12**

June 29, 2012

Submitted to: U.S.D.A. Forest Service
National Interagency Fire Center (NIFC)
3833 South Development Avenue
Attn: Melinda G. Draper, Contracting Officer
Boise, ID 83705
mgdraper@fs.fed.us

Bighorn Information Systems understands that the Forest Service is issuing this Request for Information as part of market research with the goal of coordinating the acquisition of a new CAD system. As a trusted partner of the Forest Service and current provider of Computer Aided Dispatch (CAD) solutions, Bighorn is pleased to respond to this RFI and wishes to express its interest in responding to any future RFP that may result from this RFI. Bighorn would compete in the CAD procurement as a Prime Solution Provider. Bighorn has teamed with IBM to include a web/cloud version of WildCAD with mobile access as described in Sections B, C and D.

Please see our WildCAD customer list in Section A.3. Individual references with contact information can be found in Section D.4.

Let me know how Bighorn and IBM can help from here.

Sincerely,

Brian B Booher, President
Bighorn Information Systems
2973 Harbor Blvd, #572
Costa Mesa, CA 92626
714-557-5961

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A. General Procurement Interest

A.1 Bighorn Information Systems Corporate Overview

Company Name: Bighorn Information Systems
Company Address: 2973 Harbor Blvd, Suite 572
Costa Mesa, CA 92626
Company Point of Contact: Brian B Booher, President
Telephone: 714-557-5961
E-mail: bbooher@bighorn.info
Company URL: http://bighorn.info/
NAICS Code: 541511
DUNS Number: 949147722

Business Classification and Socio-Economic Status:

Large Small 8(a) Women Owned
 Hub-Zone SDB Service-Disabled Veteran Owned

Type of Business: Information Technology

A.2 Technical Capabilities Statement

Bighorn Information Systems has had a close relationship with the Forest Service fire community since 1991, developing and supporting dozens of fire applications used throughout the agency. As one example, Bighorn developed the Wildland Computer Aided Dispatch system (WildCAD), a fire dispatch tool used by approximately 100 Forest Service and BLM fire and all risk dispatch centers throughout the United States. WildCAD tracks local and cooperating fire and law enforcement resources, allows identification of a new fire or other incident, identifies the closest available resources, and provides a variety of reports. One of the keys to the success of WildCAD is the close cooperation between Bighorn and the dispatch community.

A.3 Bighorn References

Recent relevant examples of Bighorn's CAD system implementations are shown below:

N	Reference	Description
1	US Forest Service	90 Centers
2	US Bureau of Land Management	50 Centers
3	National Park Service	25 Centers
4	Fish and Wildlife Service	25 Centers
5	AZ State Lands	1 Center (covers entire state)

Please see individual reference list in Section D.4.

B. System Requirements

Place an “X” in the box following each system requirement description listed; if your company’s most recently deployed CAD system fully meets the requirement.

Bighorn Response: we also placed a “P” for “Pending” by those requirements which will be fully met in our summer 2012 release of WildCAD. Following the table, we have added comments to each of your requirements.

N	Requirement	X
1	The System should support web based technologies, such as mobile and cloud computing.	
2	The System must support the ability to merge an instance of the database with another instance, as in the case where data is created and stored in a standalone database that then must be combined with another database to consolidate the data. Note: For example, when two dispatch centers are becoming one.	X
3	The System must have disaster recovery processes that include data redundancy.	X
4	The System must have robust interoperability with established systems with the ability to share data easily and efficiently	X
5	The System must be available (24/7) at the local dispatch center without interruption for any reason so as to maintain operational continuance at the local level at all times.	X
6	The System must support a multi-user platform with real-time access	X
7	The System must meet all Federal and Agency requirements for security	X
8	The System must have on-going technical and user support	X
9	The System must be based on an interactive Graphical User Interface (GUI) environment.	X
10	The System must support real time, read-only access to data by local and remote fire managers and GACC personnel.	X
11	The System must meet the needs of an all-risk dispatch center	X
12	The System must be scalable and flexible to accommodate individual dispatch center data, policy and business practices while complying with national agency requirements for standardized data elements and reporting requirements.	X
13	The System must be able to create an Incident from any computer via the internet.	P (summer 2012)
14	The System must include a variety of robust mapping features that allow the dispatch center to determine the location of a potential incident quickly and easily.	X
15	The System must be able to produce standard and ad hoc reports.	X
16	The System must allow for local management to pre-determine the resource response by incident type, response area, and response level.	X
17	Daily log and entries may be retained as part of the official record of an incident.	X
18	When multiple incidents are created but should be tracked as one incident, the multiple incidents are merged, (i.e. A reported smoke incident and a reported	X

N	Requirement	X
	vehicle collision, are the same incident.) When incidents are merged, all documentation and resource data is tracked in one incident.	
19	The System must provide multiple ways to create an incident, such as using a function key or typing in an address or designating a map location through lat/long or GIS, etc.	X
20	The System maintains an incident log that records activity on an incident, such as radio communications, phone communications, dispatcher activity, notifications, etc.	X
21	The dispatcher must be able use a timer to track status, and position checks of resources. For example, if it is a law enforcement incident the timer will notify the dispatcher when a safety check is required. For aircraft, Automated Flight Following may want a verbal check back every 15 minutes to track the location in case of loss of contact.	X
22	Standard land-based geospatial data layers should be available within the System.	X
23	Response area data includes: response levels, associated Fire Danger Rating Area, response areas	X
24	Dispatch (run cards) data includes: response types, incident types with incident subtypes, response types, response levels, dispatch strategy, copying and reporting dispatch strategies, dispatch action required.	X
25	Interfaces with radio console over a serial data connection to select frequencies and tones (repeaters). Dispatcher can click the [SELECT] button on the CAD screen to select dispatch frequencies and tones on the radio console screen	
26	Provides an application administrator with the ability to add a common place name to the geographic data file with only a latitude/longitude location (location is off-road)	X
27	Provides an application administrator with the ability to configure response areas for fixed (run order) or dynamic (road network calculation) unit recommendation.	X
28	Provides a dispatcher with the ability to assign a weather-based dispatch level to response areas that have been organized into dispatch zones.	X
29	Recommends units based on the current weather conditions (dispatch level) in the response area associated with incident location. The dispatch level influences the selection of a response plan.	X
30	Calculates a bearing and distance for recommended units that travel through the air.	X
31	Provides an application administrator with the ability to assign air-to-air and air-to-ground frequencies to individual response areas.	X
32	Generates a fire number in addition to an incident number from a federal or local fire number counter as specified in the response area record associated with the incident location.	X
33	Provides an application administrator with the ability to create a hazard record at a latitude/longitude location.	X
34	Alerts the dispatcher when a call is entered at a latitude/longitude associated with a hazard record	X
35	Provides a dispatcher with the ability to set the dispatch priority of units in a fire station where there is more than one unit of the same type	X

N	Requirement	X
36	Displays an automatically-updated fire coverage window with the dispatch coverage status in green, yellow, or red.	X
37	Provides the dispatcher with the ability to assign the person responsible for completing the fire or investigation report by entering a command.	X
38	Replicates live CAD incident and unit information to a backup device	X
39	Provides a dispatcher with the ability to select an alternate tactical and/or air to air frequency when the primary tactical frequency is in use	X

Comments on Specific Requirements:

Requirement #1: The System should support web based technologies, such as mobile and cloud computing.

WildCAD supports web based technologies through WildWeb, the internet publishing component of WildCAD. (<http://www.WildCAD.net>). Example:

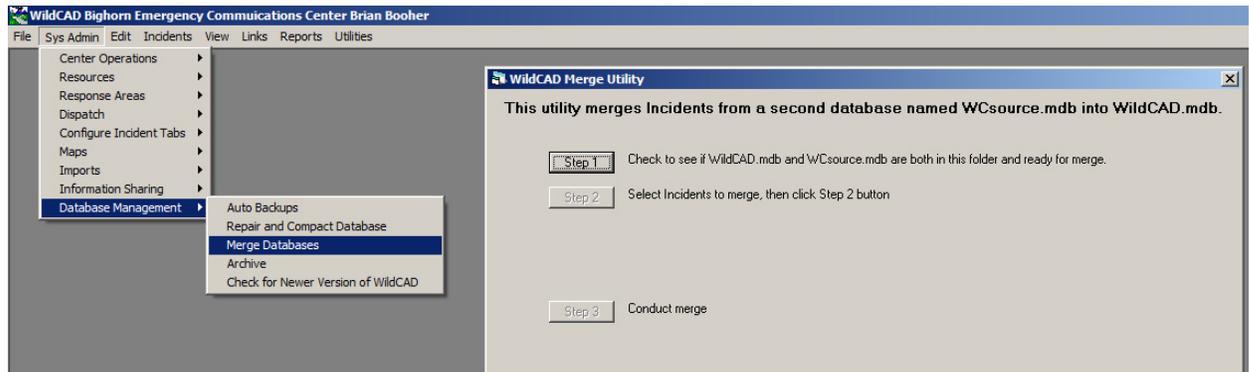
WildCAD - Federal Interagency Communications Center

Date	Acres	Resources	Inc #	Name	Type	Location	WebComment	IC	Lat/Lon	Fuels
06/21/2012 17:40	.	E3637	CDD - 9152	BRUSH FIRE DALE EVANS	Wildfire	STODDARD WELLS AND DALE EVANS S 15
06/21/2012 17:40	*****	*****	CDD - 9153	*****	Law Enforcement	*****	.	*****	.	*****
06/21/2012 16:54	*****	*****	CDF - 9151	*****	Law Enforcement	*****	.	*****	.	*****
06/21/2012 16:22	.	CREW 5	BDF - 9150	RO/R2-FY12 STAGING/PREPOSITION	Resource Order	ROCKY MOUNTAIN COORDINATION CENTER	(0231) P2EKR4	.	.	.
06/21/2012 16:03	.	4R10 MED1	DVP - 9149	MA/JM/4R16	Medical Aid	EDR BREAK AREA BEHIND THE STORE	.	.	36.335 x 116.587	.

Version 5 of WildCAD, to be delivered summer 2012, will implement more flexible web based capabilities including a manager portal for exchanging information with dispatch. The addition of IBM to the WildCAD team brings extensive experience with cloud computing and mobile access, as discussed in Sections C and D below.

Requirement #2: The System must support the ability to merge an instance of the database with another instance, as in the case where data is created and stored in a standalone database that then must be combined with another database to consolidate the data. Note: For example, when two dispatch centers are becoming one.

WildCAD fully support this requirement through the Merge Databases utility:

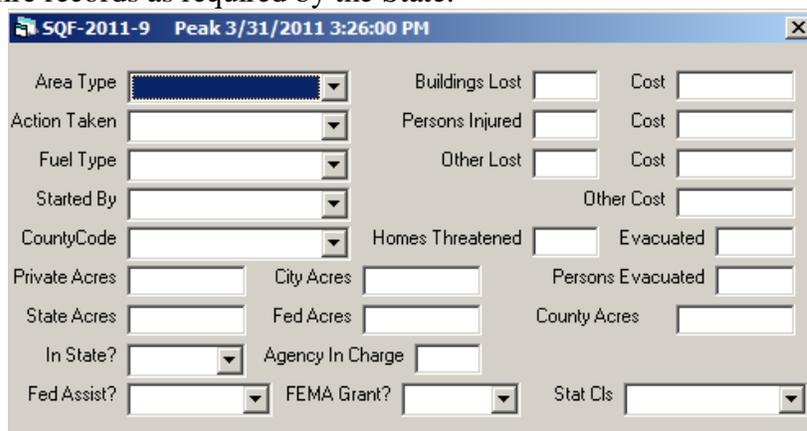


Requirement #3: The System must have disaster recovery processes that include data redundancy.

WildCAD presently meets this requirement through redundant instances of WildCAD and its data established by the users, including optionally on laptop computers for use in case of major disaster. Current data are backed up as discussed below in #38.

Requirement #4: The System must have robust interoperability with established systems with the ability to share data easily and efficiently.

WildCAD presently exchanges information with WFDSS, SWFRS, and the Arizona State Lands fire records system. To support AZ State Lands, additional fields of data were added to WildCAD fire records as required by the State:



WildCAD is presently being upgraded to support full integration with iRWIn, allowing exchange of data with numerous federal fire systems.

Requirement #5: The System must be available (24/7) at the local dispatch center without interruption for any reason so as to maintain operational continuance at the local level at all times.

WildCAD is available 24/7, and is implemented in numerous Centers operating 24/7/365. One example is the Federal Interagency Communications Center (FICC) in southern California which supports 3 NPS units, 1 BLM unit and 1 National Forest. They operate 24/7/365 and run approximately 25,000 Incidents per year through WildCAD.

Center personnel have repeatedly stressed to us the importance that the CAD not be subject to network failures or other down time. It is unacceptable to them to wait even a few seconds when they are faced with life and death decisions as dispatchers.

Requirement #6: The System must support a multi-user platform with real-time access.

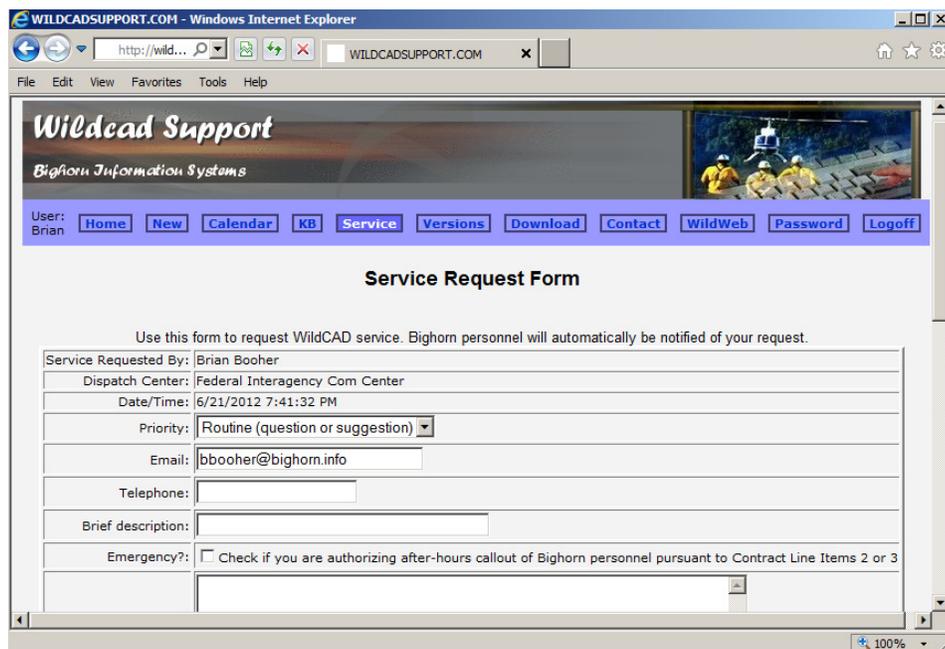
WildCAD is a multi-user Windows application with real-time access. The number of concurrent users per Center presently averages 5, with the largest number over 20.

Requirement #7: The System must meet all Federal and Agency requirements for security.

In addition to its own authentication, WildCAD implements standard federal LDAP for access to its applications and data. Version 5 moves from Access to SQL Server for the database in order to provide enhanced security.

Requirement #8: The System must have on-going technical and user support.

WildCAD support is provided primarily through our support site at www.WildCADsupport.net. Our support staff is informed immediately upon a service request being submitted. Our support personnel are all technically capable former federal dispatchers. The first part of the online service request form is shown below:



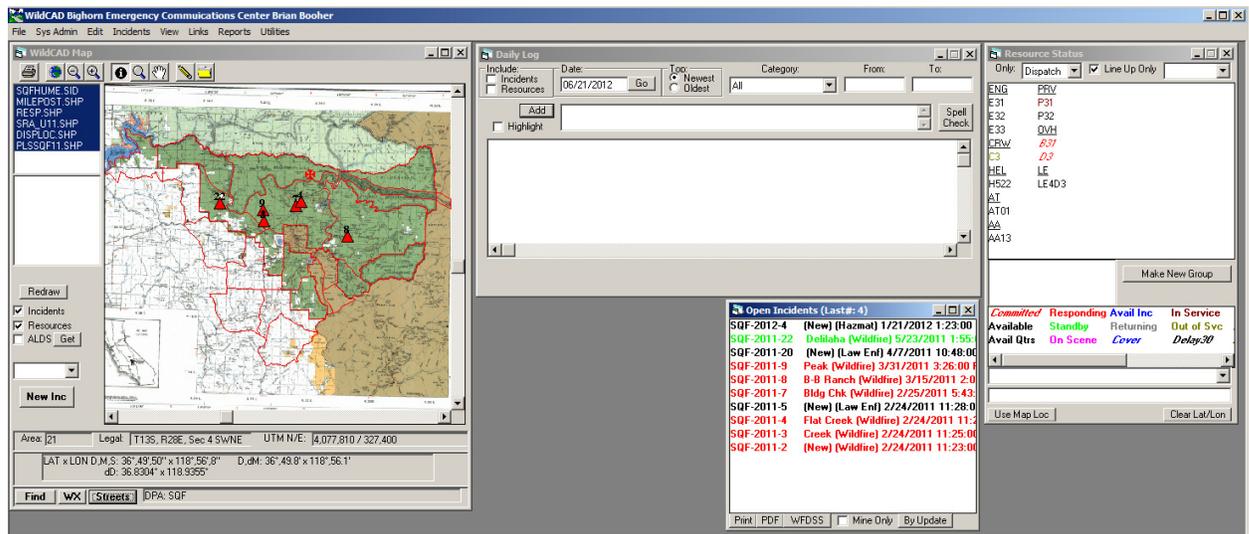
The screenshot shows a web browser window titled "WILDCADSUPPORT.COM - Windows Internet Explorer". The address bar shows "http://wild...". The page content includes a header for "Wildcad Support" by Bighorn Information Systems, a navigation menu with buttons for Home, New, Calendar, KB, Service, Versions, Download, Contact, WildWeb, Password, and Logoff. The main content is a "Service Request Form" with the following fields:

Service Requested By:	Brian Booher
Dispatch Center:	Federal Interagency Com Center
Date/Time:	6/21/2012 7:41:32 PM
Priority:	Routine (question or suggestion)
Email:	bbooher@bighorn.info
Telephone:	
Brief description:	
Emergency?:	<input type="checkbox"/> Check if you are authorizing after-hours callout of Bighorn personnel pursuant to Contract Line Items 2 or 3

The support site also includes FAQ and numerous downloads including user guides and technical papers.

Requirement #9: The System must be based on an interactive Graphical User Interface (GUI) environment.

WildCAD is an industry standard Windows forms GUI application:



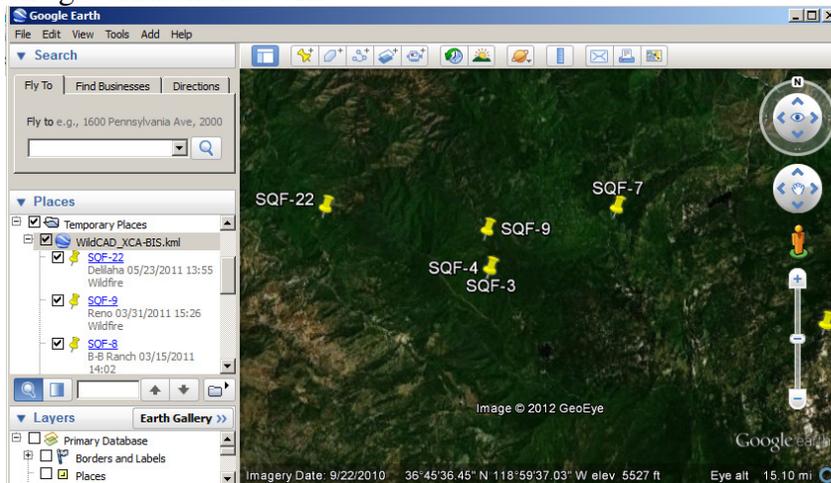
Requirement #10: The System must support real time, read-only access to data by local and remote fire managers and GACC personnel.

WildCAD supports real time read-only access to data through a number of means.

- 1 – WildWeb, discussed in #1 above.
- 2 – WildShare, which shares real-time resource status with other WildCAD Centers and GACCs:



- 3 – Google Maps kml files, providing real-time incident and resource information to computers on the government network:



Requirement #11: The System must meet the needs of an all-risk dispatch center.

WildCAD Incident Types are:

Wildfire
Structure Fire
Vehicle Fire
Smoke Check
Medical Aid
Emergency Standby
Public Assist
Law Enforcement
Miscellaneous
Traffic Collision
Prescribed Fire
Aircraft Down
Resource Order
Hazmat
Search & Rescue
Wildland Fire Use
Aircraft
Natural Disaster

Each Incident Type can have unlimited numbers of user-defined sub-types. Screens presented to the Dispatcher change according to Incident Type. Additionally, WildCAD includes an interface with a CLETS/NCIC system and a law enforcement Field Interrogation (FI) system:

The screenshot shows a software window titled "Field Interrogation (FI) File". The form contains the following fields and values:

- Officer: LE4D3 Investigator 4D3 (dropdown menu) with a checked "Show All" checkbox.
- Last: Booher
- First: Brian
- Middle: B
- DOB: Nov 20 1980 (dropdowns) Inc #: U012345 (text field) with an "Open" button.
- Contact Date: Jul 4 2010 (dropdowns) Contact Time: 1500 (text field) with a "Now" button.
- Plate State: CA (dropdown) Plate Number: 12345 (text field)
- Op Lic State: (empty dropdown) Op Lic Number: (empty text field)

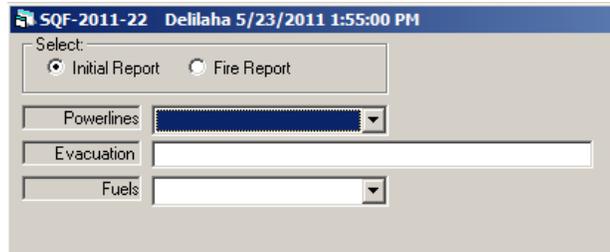
Below the form is a text area containing the text: "Subject observed driving a Jeep in the Kelso Closed Area. Warned and released".

At the bottom, there are buttons for "Clear", "Search", "Save Edits", and "Delete". Below these buttons is a list box containing one entry: "07/04/2010 1500 Booher, Brian B".

Requirement #12: The System must be scalable and flexible to accommodate individual dispatch center data, policy and business practices while complying with national agency requirements for standardized data elements and reporting requirements.

WildCAD was built for FS/DOI dispatch centers, and is kept up to date with changes in terminology, requirements, legislation, and application integration needs. As standardized data are required from WildCAD (e.g. for the exchange with WFDSS) crosswalks are established within WildCAD, for example – allowing users to continue to manage their local engine as E11, while exchanging its information with other systems as IDBOFENG11.

WildCAD is highly customizable by local Center management, including numerous categories (e.g. for Daily Log) and screen appearance (e.g. ordering of Resource Types). One extensive example is the ability to design entire screens for input of locally-required fire information which can include pull-down or text fields. Example:



Requirement #13: The System must be able to create an Incident from any computer via the internet.

This requirement is NOT presently implemented, but is being beta tested and will be available in version 5, available summer 2012. The WildCAD Integration Server, being established primarily for exchange of information with iRWIn, will also provide a web portal allowing authorized users to initiate Incidents – in addition to viewing information about ongoing activities.

Requirement #14: The System must include a variety of robust mapping features that allow the dispatch center to determine the location of a potential incident quickly and easily.

WildCAD users can determine locations by Place Name, Legal Description, Lat/Lon, UTM Coordinates, Response Area, Distance/Bearing, and Triangulation, or can simply click on the WildCAD map:

Find Map Location

Latitude/Longitude:
Lat: Lon:

UTM:
N: E:

Place Name:

Map Lat: 36.8304 Map Lon: 118.9355

Legal (enter 1/2 and 1/4 T/R as, e.g.: 15.25N):
Mer: Township: Range: Sec:

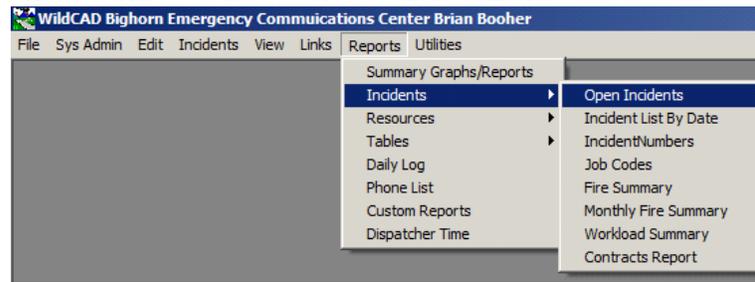
Response Area:

Triangulate

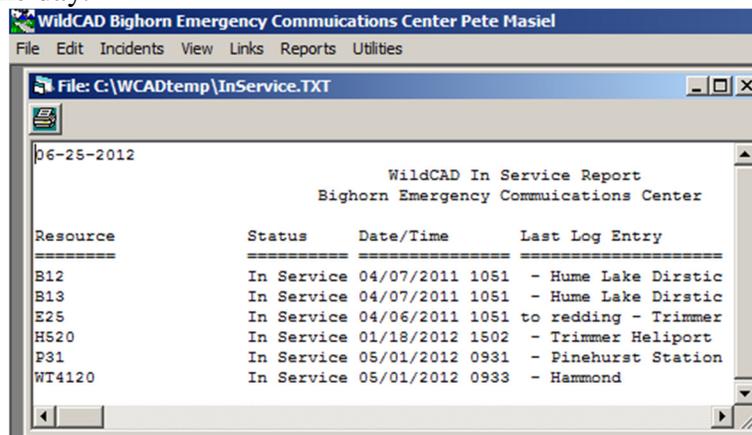
	Bearing	Distance
Buck Rock Lookout	95	<input type="text"/>
Delliah Lookout	125	<input type="text"/>

Requirement #15: The System must be able to produce standard and ad hoc reports.

WildCAD includes dozens of reports and graphs, and also allows users to design and store custom reports, whose formats can be sent to other Centers:



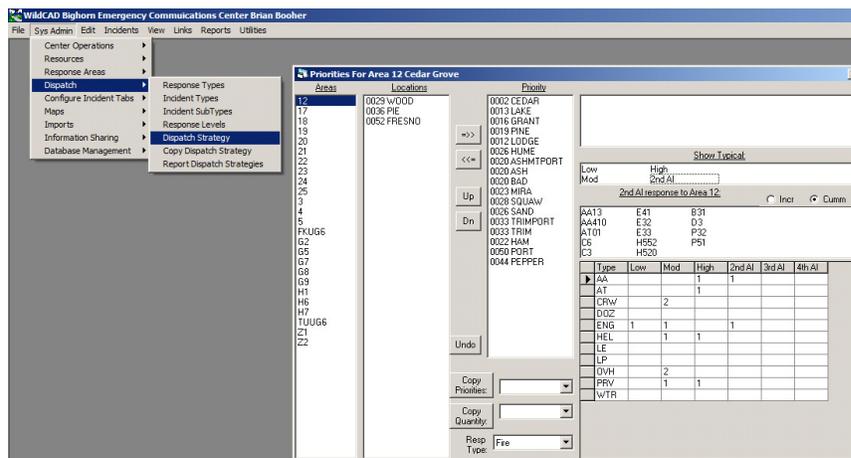
Many of the reports have resulted from user suggestions. One example is the In Service report, requested by the users to assist with determining which resources are still in the field at the end of the day:



Reports are sent to printers, PDF files, spreadsheets, html files, GIS shape files, and/or kml files as applicable.

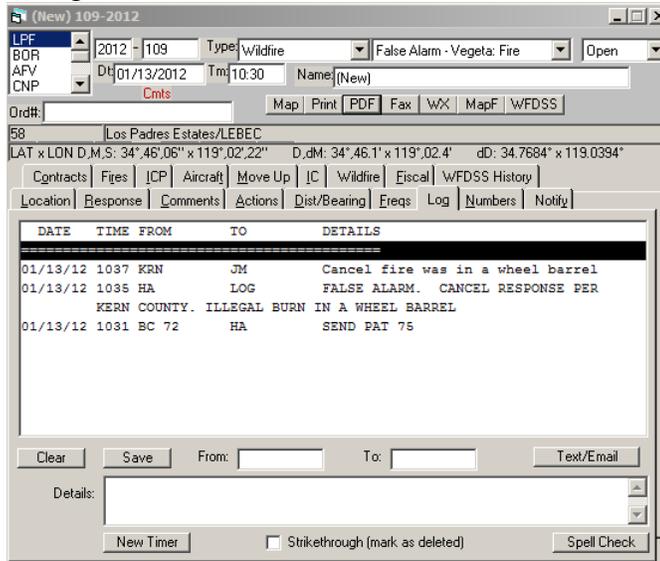
Requirement #16: The System must allow for local management to pre-determine the resource response by incident type, response area, and response level.

WildCAD includes robust algorithms, configured by local managers, for pre-planning the response to an Incident by Incident Type, Response Area, and Response Level. The primary tool is the System Administrator Dispatch Strategy screen:

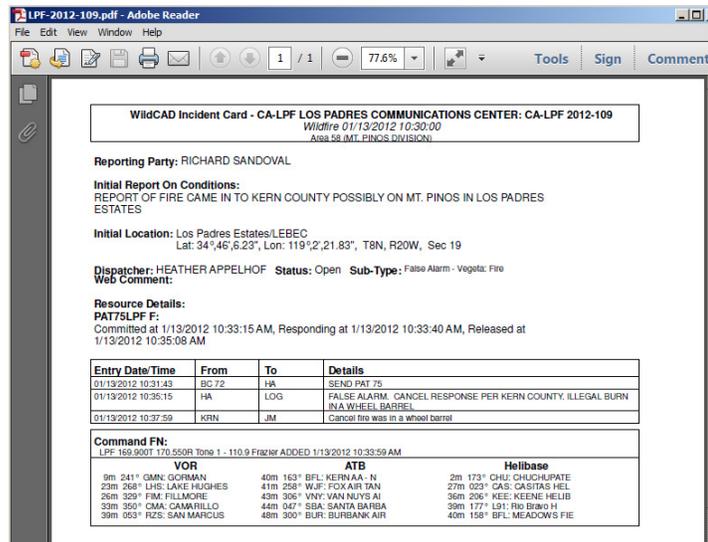


Requirement #17: Daily log and entries may be retained as part of the official record of an incident.

Each Incident includes log entries:



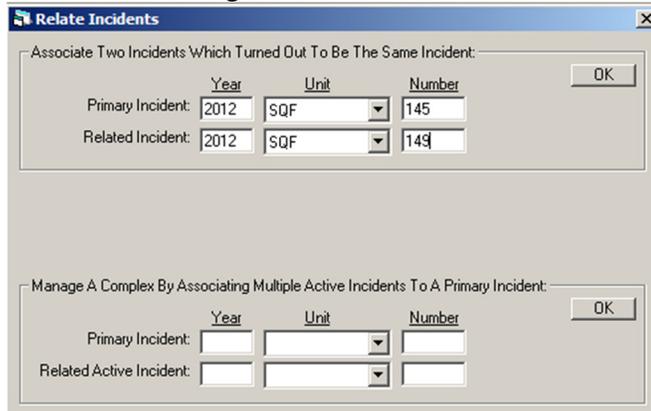
which are maintained as part of the Incident report:



Please see more complete Incident Report at the end of this document.

Requirement #18: When multiple incidents are created but should be tracked as one incident, the multiple incidents are merged, (i.e. A reported smoke incident and a reported vehicle collision, are the same incident.) When incidents are merged, all documentation and resource data is tracked in one incident.

WildCAD supports not only merging Incidents which turn out to be the same Incident, but also *relating* Incidents, such as relating a medical aid to a wildfire:



Requirement #19: The System must provide multiple ways to create an incident, such as using a function key or typing in an address or designating a map location through lat/long or GIS, etc.

Dispatchers using WildCAD can initiate an Incident by:

- Using F9 function key to start a new wildfire Incident
- Using F11 function key to start a new law enforcement Incident
- Selecting a Resource on Resource Status screen and clicking “New LE Incident”
- Using “Quick Key” command line commands
- Locating an Incident on the map (see #14 above) and clicking “New Inc” on the map:

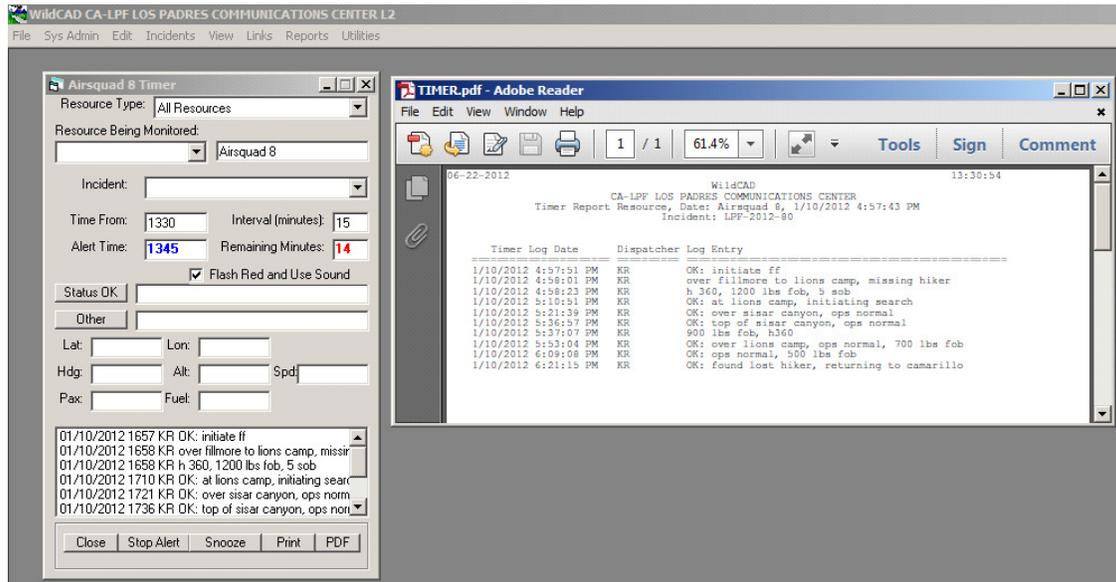


Requirement #20: The System maintains an incident log that records activity on an incident, such as radio communications, phone communications, dispatcher activity, notifications, etc.

WildCAD maintains extensive log information regarding an Incident including radio communications, phone communications, dispatcher activity, notifications, ICP location, IC designations, frequencies assigned, notifications, numbers (e.g. FireCode), and export history to WFDSS. All are included in the Incident Documentation. Please see the Example WildCAD Incident Report at the end of this document.

Requirement #21: The dispatcher must be able use a timer to track status, and position checks of resources. For example, if it is a law enforcement incident the timer will notify the dispatcher when a safety check is required. For aircraft, Automated Flight Following may want a verbal check back every 15 minutes to track the location in case of loss of contact.

WildCAD provides timers for all types of Resources, with default minutes set by the local System Administrator for each type of Resource:



Requirement #22: Standard land-based geospatial data layers should be available within the System.

WildCAD supports standard raster and vector data layers, compatible with ESRI products.

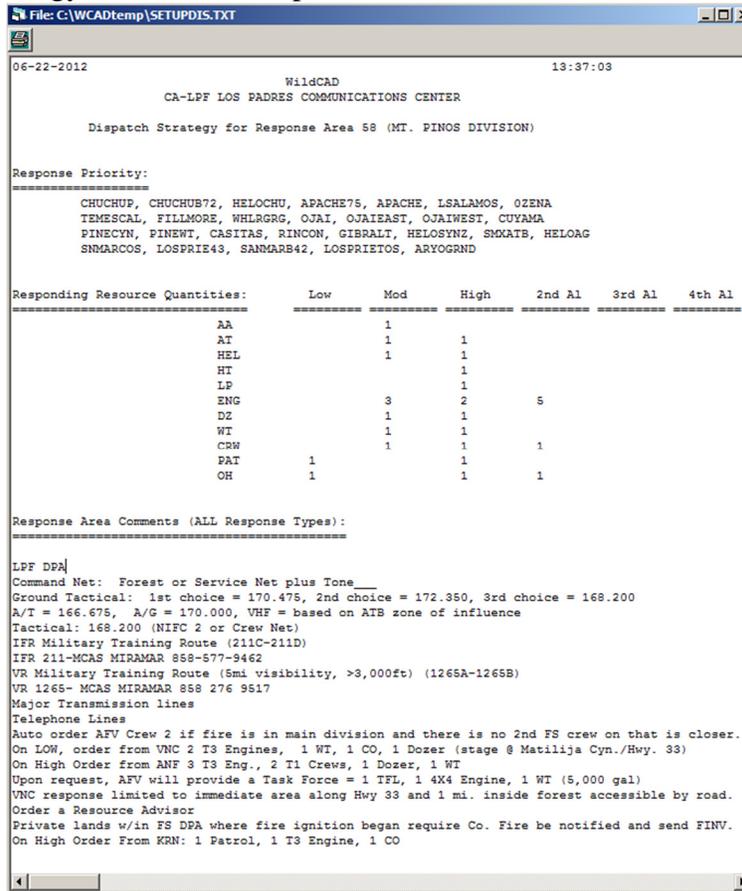
Requirement #23: Response area data includes: response levels, associated Fire Danger Rating Area, response areas.

WildCAD supports Response Areas which are associated with a Fire Danger Rating Area. Numbers and descriptions of Response Levels (e.g. Low, Moderate, High) are defined by local management:

Sequence	RespLevelCode	Describe
1	Low	Low Response
2	Mod	Moderate Response
3	High	High Response
4	2nd Al	2nd Alarm

Requirement #24: Dispatch (run cards) data includes: response types, incident types with incident subtypes, response types, response levels, dispatch strategy, copying and reporting dispatch strategies, dispatch action required.

WildCAD fully implements automated run cards, based on Response Area, Incident Type / Subtype, Response Type, Response Level and Resource Type. The Dispatch Strategies defining these run cards can be copied from one to another, and reports are available showing the strategy and nominal response:

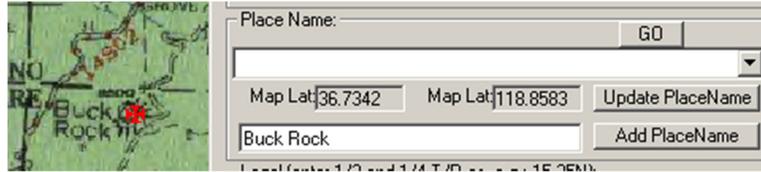


Requirement #25: Interfaces with radio console over a serial data connection to select frequencies and tones (repeaters). Dispatcher can click the [SELECT] button on the CAD screen to select dispatch frequencies and tones on the radio console screen.

WildCAD does NOT implement an interface with the radio console – many Centers dedicate one monitor to WildCAD and another to the radio console. However, Bighorn and IBM are experienced with serial data communications. One such existing interface in WildCAD is an AVLS (Automatic Vehicle Location System) interface supporting APRS (Automatic Packet Reporting System) utilized in the early 2000s on some National Forests. We welcome the opportunity to develop a serial interface with radio console vendors.

Requirement #26: Provides an application administrator with the ability to add a common place name to the geographic data file with only a latitude/longitude location (location is off-road).

WildCAD ships with place names obtained by Bighorn from USGS quad data. Additionally, system administrators may add or edit place name locations directly from the WildCAD map:



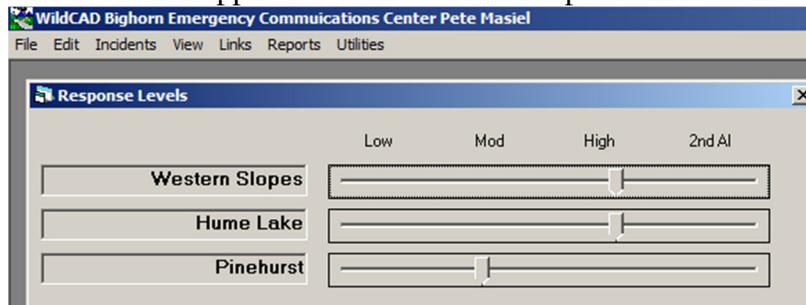
Requirement #27: Provides an application administrator with the ability to configure response areas for fixed (run order) or dynamic (road network calculation) unit recommendation.

WildCAD allows administrators to choose, for each Response Area, to utilize fixed dispatch location order or road network calculations for determining Resources to send to an Incident. In WildCAD, “AutoRoute” means to use the road network:

Area	Describe	Lat	Lon	Resp Level	Assoc Station	Comment	AutoRoute	Active
12	Cedar Grove	36.7974	118.634	532	CEDAR	KNP DPA	FALSE	TRUE
17	Stoney Creek	36.6817	118.8504	532	GRANT	SQF DPA	FALSE	TRUE
18	Cherry Gap	36.7829	118.9586	532	LAKE	SQF DPA	FALSE	TRUE
19	Kings River & Hwy 180 Corridor	36.8118	118.7963	532	CEDAR	SQF DPA	FALSE	TRUE
20	Camp 4	36.8589	119.1415	532	TRIM	SQF DPA	FALSE	TRUE
21	Speical Management Area	36.8444	118.9963	532	TRIM	SQF DPA	FALSE	TRUE
22	Monarch Wilderness North	36.8263	118.7602	532	CEDAR	SQF DPA	FALSE	TRUE
23	Monarch Wilderness South	36.7829	118.8685	532	LAKE	SQF DPA	FALSE	TRUE

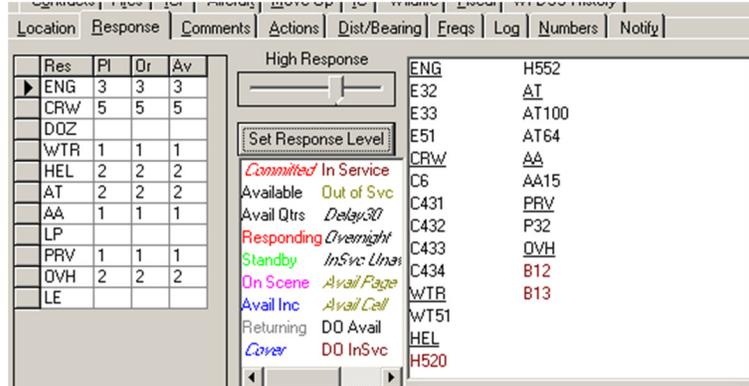
Requirement #28: Provides a dispatcher with the ability to assign a weather-based dispatch level to response areas that have been organized into dispatch zones.

WildCAD allows dispatchers to designate weather-based Response Levels to each Response Level Area, which are then applied to each attached Response Area:



Requirement #29: Recommends units based on the current weather conditions (dispatch level) in the response area associated with incident location. The dispatch level influences the selection of a response plan.

WildCAD recommends Resources based on Dispatch Level, Incident Type, and Response Area:



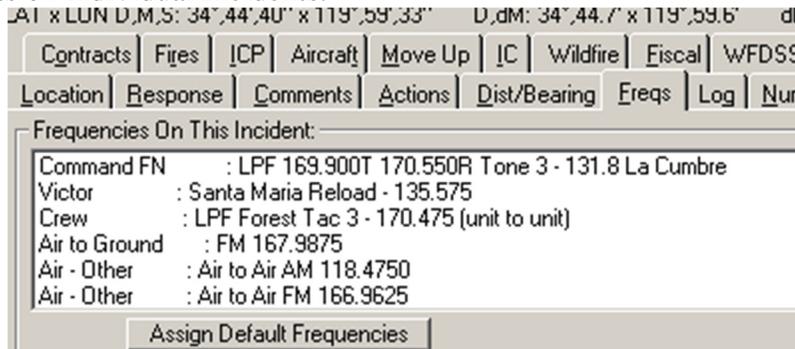
Requirement #30: Calculates a bearing and distance for recommended units that travel through the air.

WildCAD calculates bearing and distance off VOR, air tanker base, or helibase:



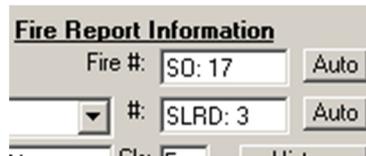
Requirement #31: Provides an application administrator with the ability to assign air-to-air and air-to-ground frequencies to individual response areas.

In WildCAD, administrators can establish default frequencies, and dispatchers can utilize those defaults on individual Incidents:



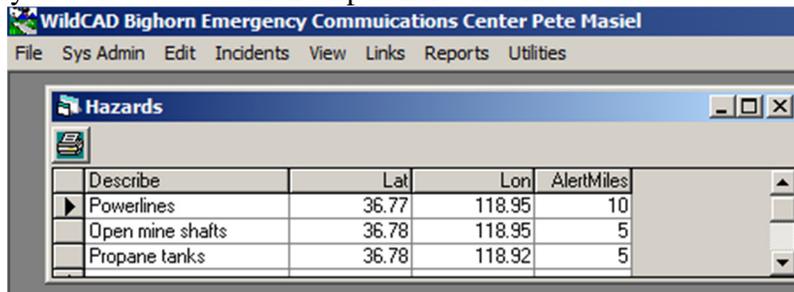
Requirement #32: Generates a fire number in addition to an incident number from a federal or local fire number counter as specified in the response area record associated with the incident location.

WildCAD generates fire numbers upon request for an Incident based on a counter for the applicable Unit (e.g. SO Fire Number) and, optionally, for the Sub Unit (e.g. Ranger District):



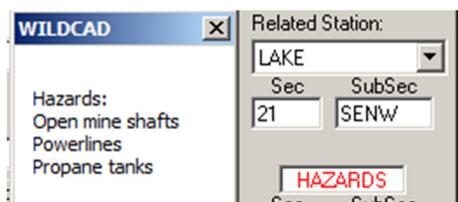
Requirement #33: Provides an application administrator with the ability to create a hazard record at a latitude/longitude location.

WildCAD allows administrators to create/edit hazard records at any latitude/longitude, and to also specify the distance at which dispatchers should be alerted:



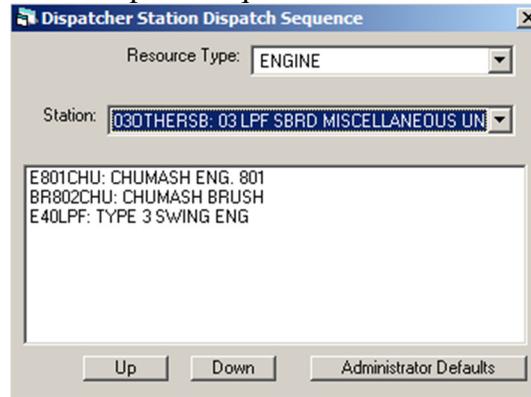
Requirement #34: Alerts the dispatcher when a call is entered at a latitude/longitude associated with a hazard record.

WildCAD alerts dispatchers when an Incident is entered at a latitude/longitude near any hazard record:



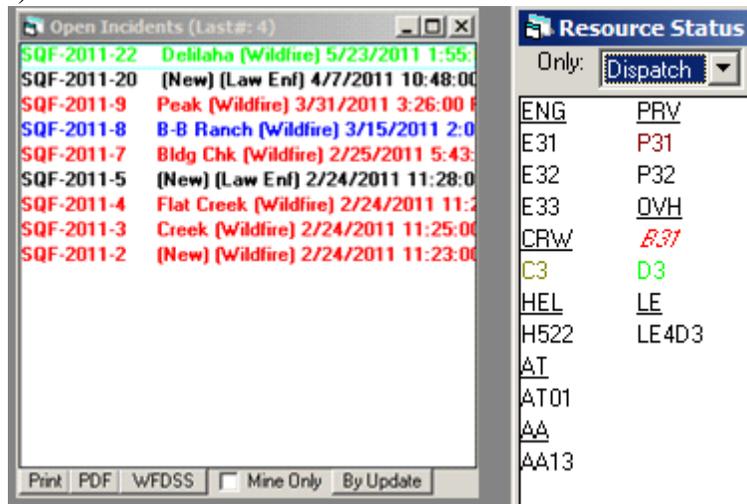
Requirement #35: Provides a dispatcher with the ability to set the dispatch priority of units in a fire station where there is more than one unit of the same type.

Dispatches may not only set the priority for Resources in a station, but may also revert to an administrator-defined default dispatch sequence:



Requirement #36: Displays an automatically-updated fire coverage window with the dispatch coverage status in green, yellow, or red.

WildCAD provides several color-coded maps and windows with dispatch and incident information. One automatically-updating window shows incident status (uncontained, contained, controlled) by color (we use green/blue/red, as yellow was more difficult for users to discern). Another color-coded window shows Resource Status:



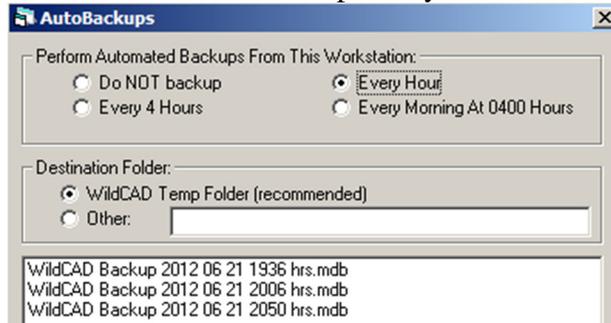
Requirement #37: Provides the dispatcher with the ability to assign the person responsible for completing the fire or investigation report by entering a command.

WildCAD dispatchers have the ability to assign the person responsible for completing the fire report or investigation:



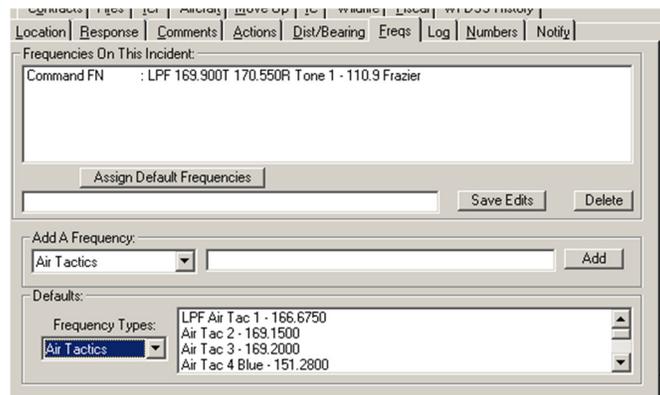
Requirement #38: Replicates live CAD incident and unit information to a backup device.

WildCAD includes automated database backup to any administrator-specified device:



Requirement #39: Provides a dispatcher with the ability to select an alternate tactical and/or air to air frequency when the primary tactical frequency is in use.

WildCAD enables dispatchers to select default and/or alternate tactical and air frequencies for an Incident:



C. Technical Information Requested

- 1. How many staff months (project management, analysis, design, coding, documenting, and testing) and calendar months do you estimate it would take to modify your CAD system to meet all of the requirements listed above?**

Three Requirements are not met in the current release of WildCAD:

- #13 (initiate Incident from www) is Pending and will be delivered (at no charge) as part of WildCAD version 5.
- #25 (interface with radio console) depends on the interface required by each radio console vendor, probably requiring a total of one calendar month total time per vendor.
- #1 (mobile access and cloud) An HTML5 mobile client and a WildCAD web-client hosted in a FISMA-compliant cloud environment will be offered as a future option based on further refinement of client requirements. Bighorn is currently refining the migration strategy for WildCAD in partnership with IBM.

- 2. How many multi-site CAD customers does your company currently have?**

We have three multi-site CAD customers: US Forest Service, US Bureau of Land Management, and National Park Service. BIA and Fish and Wildlife have at least 50 Units utilizing WildCAD in interagency Centers where FS or BLM has the lead. Several state agencies also fully utilize WildCAD in interagency environments, especially Arizona Division of Forestry, Montana Department of Natural Resources, Nevada Department of Forestry, and Washington Department of Natural Resources.

- 3. How many physical servers are required to run your full CAD system with ROSS and other interfaces including testing and training instances of the system?**

One database server is required per Dispatch Center, plus one WildCAD Integration Server providing the interface to other systems (including through iRWIn).

- 4. What is your company's estimated annual revenue from CAD system sales, consulting services, and maintenance fees?**

Approximately \$1,000,000.00 in annual revenue from WildCAD.

- 5. How many procurements for a CAD project exceeding \$2 million has your company responded to in the 24 months just prior to the release of this RFI?**

None. Bighorn is committed to the federal wildland dispatch environment.

- 6. What is the probability 0 – 10 (10 being the highest) that your company would participate in a best value Request For Proposal process for the CAD described above where all requirements must be met in order to qualify?**

10 (definitely would)

- 7. What is your estimated cost to provide a CAD system that would meet all of the requirements listed in this request for information?**

Exclusive of cloud implementation: approximately \$20,000 per any Center not covered by current WildCAD license, plus costs for mobile devices.

D. Additional Information Requested

1. Provide any additional information not requested above but which you deem important and relevant to this RFI.

Bighorn / IBM Partnership

Bighorn and IBM have a history spanning more than ten years of successfully partnering to provide systems and solutions to the Forest Service and DOI. This partnership includes the successful design and implementation of the data interface between WildCAD and WFDSS. Bighorn staff members have extensive agency experience and subject matter expertise. IBM capabilities include its Federal Data Center which is FISMA moderate and High certified and compliant with all federal rules to support cloud based solutions. We jointly understand the critical nature of support that Fire requires, and have proven performance to support that.

Additional Features

In addition to the Requirements listed in this RFI, the following features, contained in WildCAD, have proven to be critical to the wildland fire dispatch community:

- Phone Directory, customizable by local System Administrator (“SA”)
- Whiteboard, with customizable categories
- SA control over whether certain fields are editable by dispatchers
- Email/text from WildCAD with auto-populate from Incident
- SA control over whether visiting or home resources go first from station
- Color code Incident list by Dispatcher
- Customizable Dispatcher time tracking
- Display closest RAWs weather for an Incident or any spot on map
- Interface with and display of ALDS lightning data
- SA creation of Line Up groups to match current practices
- Manage and report Resource rotations
- Customizable comments by Incident Type and location
- Automated move ups
- SA customization of Incident data fields to meet local requirements
- Create shape files of WildCAD data (e.g. Dispatch Locations, Incidents)
- Import and utilize mile post data (highway mile markers)

Planned WildCAD Enhancements

Version 5 of WildCAD will be released summer 2012. The iRWIn project has placed an advance purchase order for this new version of WildCAD provided it migrates to DOT NET and SQL Server.

Additionally, Bighorn is developing the WildCAD Integration Server, both to communicate with iRWIn and to provide enhanced web support to local WildCAD centers. In particular, users will be able to login to the Integration Server and generate new Incidents or view details of ongoing Incidents – capabilities not available to the public.

Planned Mobile Access to WildCAD

Bighorn is currently working with our business partner, IBM, on the creation of a mobile WildCAD client.

Our approach leverages an open, comprehensive and advanced mobile application platform for smartphones and tablets, to efficiently develop, connect, run and manage HTML5, hybrid and native applications.

Bighorn and IBM are investigating standards-based technologies and tools to create rich, cross-platform mobile extensions for WildCAD without the use of code translation, proprietary interpreters or unpopular scripting languages. We recognize that future Wildland Fire Computer Aided Dispatch (CAD) users will require a mobility platform that provides enhanced functionality to support the development and deployment of mobile websites as well as hybrid and native mobile applications for specific mobile operating systems.

While our goals is to support major Smartphone and Tablet operating systems including Apple iOS, Google Android, RIM BlackBerry and Microsoft Windows Phone devices, we wish to engage the Forest Service and current wildland fire stakeholders to further refine requirement for Mobile Web applications.

Depending of the specific needs of the wildland fire community and use case scenarios outlined, various architectural alternatives with associated benefits will be proposed. Some of the architectural alternatives are shown in the Figure 1 below.



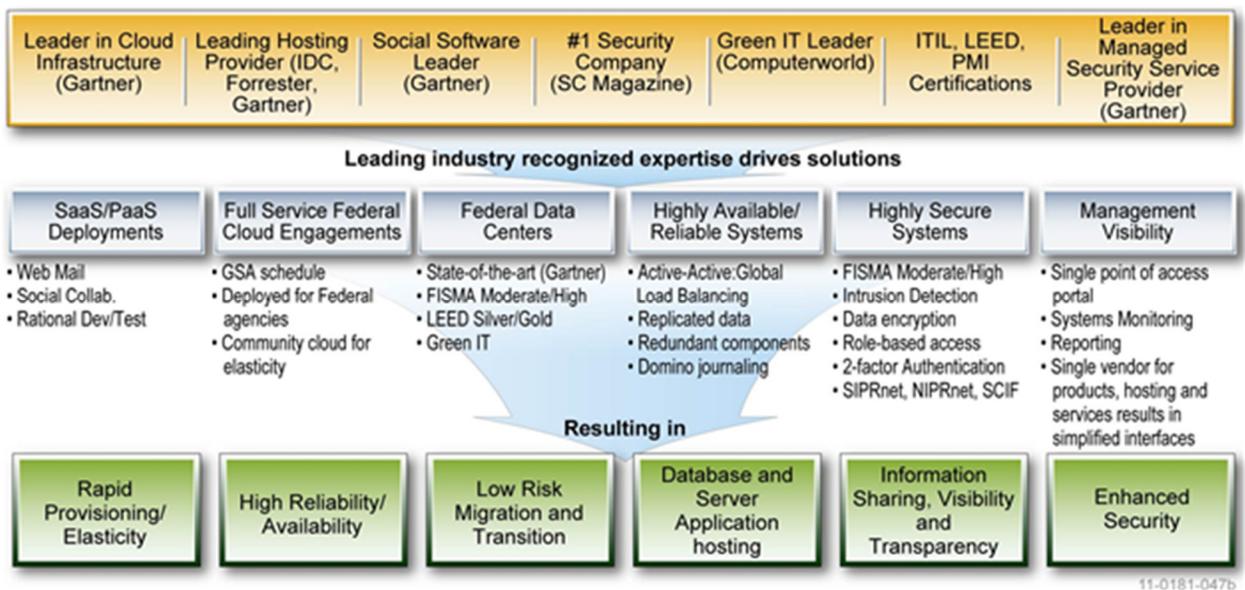
Figure 1: Bighorn is currently evaluating various architectural alternatives to develop, run and manage a variety of WildCAD mobile application types to meet Wildland Fire requirements

Planned Development of Cloud version of WildCAD

The plans are for WildCAD to be hosted at a data center and provided as a cloud service to end users. Our hosting partner, IBM, provides this capability, via their Federal Data Center which is a dedicated to provide the cloud services in a FISMA moderate environment. The WildCAD solution can be hosted as a single system for the Forest Service or as a pay as you go service. Regardless the delivery approach it is essential to provide the reliability and availability of the application hosted in a trusted and secure environment.

IBM Federal Data Center

We strongly believe that a government agency that has trust in their IT provider can focus on the core mission of the agency and allow the service provider to run, operate, and manage their IT system. Our clients have high confidence in the way we deliver enterprise-grade solutions and operate them reliably and securely. IBM also has extensive services and support capabilities with broad experience and expertise to deliver migration and integration services as required. Project management, systems engineering, change and configuration management, requirements management, technical support, transition support and security design are also among IBM's core capabilities. We use our experience, expertise, products, and core capabilities to create benefits-driven results, as shown in the figure below.



IBM Core Capabilities Result in Tangible Results

IBM's managed hosting strategy leverages mature processes, advancing technology, and economies of scale. By aligning our processes to ITIL v3, we've established defined repeatable approaches to supporting operations, resolving issues, and managing change. We keep our equipment current, according to technical refresh cycles that are normal to the industry. We have implemented a toolset including market-leading products for systems management, network management, monitoring, configuration management, problem management, change management, and release management. We coordinate with multiple carriers to help meet availability, reliability bandwidth, and communications requirements.

IBM strives to provide the most secure and efficient solutions while keeping in mind the importance of providing cost effective Cloud solution to the Forest Service.

IBM Federal Data Centers Key Features

Customer set – Federal Government customers only

Security – Separate caged area (both floor-to-floor and slab-to-slab environments available), biometric reader entry, security monitoring cameras, 24/7 physical security, locked racks, controlled access

Labor – US Citizens only with Agency-level background checks needed to support IT access positions

Network Environment – Segregated from both IBM internal and commercial customer environments; supports Federal shared or dedicated networks

Leverage – Shared infrastructure and system management tools recognized in the Federal marketplace as industry leading

ITIL – ITIL® (3)-based Service Desk utilizing Remedy

IBM Classification – IBM Tier III data center classification

FISMA Compliance – Moderate and High environments available

Federal Cost Accounting Standards – Meets standards

Managed Services Options – Server Systems Management (SSM), Service Desk (SD)

IBM Federal Data Centers are hosted within secure data centers on IBM sites in the Continental United States. These data centers are compliant with NIST SP 800-53 revision 3 Physical and Environmental Security controls for a High impact baseline.

These data centers feature additional security controls including two-factor biometric authentication, 24x7 on-site security monitoring and response, visitor access control, man-trap entry, and CCTV monitoring, and security alarm systems. Systems running in the Federal Cloud are monitored 24x7 by the Network and Security Operations Center.

IBM's SmartCloud for Government Cloud is specifically designed to help federal government organizations like the Forest Service respond to technology requirements more quickly. The secure, private cloud environment is part of IBM's established and dedicated Federal Data Centers (FDC) that provide secure and comprehensive certified computing capabilities to federal government clients.

IBM's SmartCloud for Government will enable data and services to reside in secure, scalable data centers that can be quickly accessed by federal organizations at a fraction of the cost of traditional approaches. The capabilities are dynamic and scalable to help organizations meet government consolidation policies mandated by Obama administration Chief Information Officer in February.

2. Provide any lessons learned from other similar projects.

Bighorn first delivered WildCAD in 1999. Lessons learned since then include:

- Training – our training has evolved over the years as we found more effective means to conduct new Center training and Refresher training. Initially, we also offered Dispatcher training, but found that User Guides and effective Refresher Training for Center Managers and/or System Administrators allowed them to train their own Dispatchers. Our training now incorporates a mix of instruction and individual hands on practice.
- Annual Conference – we host an annual WildCAD Conference, for Center Managers or WildCAD System Administrators to gather for a day and discuss how things are going with WildCAD – experiences (good and bad) and ideas for the future. Bighorn incorporates consensus requests into future releases of WildCAD.
- Dispatch Operations – Dispatch Centers seem to become busier and busier. It is important that WildCAD relieves, and does not add to, workload. It is also crucial that WildCAD be reliable and extremely fast. A single dispatcher can be working a dozen Incidents at one time, bombarded with radio traffic, phone calls, timers, and other critical issues.

3. Ongoing annual maintenance and technical support.

WildCAD routine maintenance includes an archive function which moves older Incidents into a separate database, which can still be accessed through WildCAD. Another key part of routine maintenance is verifying that database backups are being accomplished as scheduled.

Technical support for WildCAD is primarily accomplished through www.WildCADsupport.net (mirrored at www.WildCADsupport.com). Requests for service are immediately sent to four Bighorn technicians. Contact is then generally made by phone, although in rare instances a site visit is requested. Our technical support staff is able to relate to our customers due to their prior experience as dispatchers and/or supervising dispatch center personnel:

- Brian Booher, former state police dispatcher, prior BLM experience as direct supervisor of Center Manager, California Desert District.
- Ray Nichol, prior FS career as dispatcher and radio technician, Plumas NF, CA.
- Aaron Gelobter, prior FS experience as direct supervisor of Center Managers, Central California Interagency Communications Center (Porterville, CA), and Los Padres NF, CA.
- Jim Bailey, prior FS career as dispatcher Stanislaus NF, CA and WO fire planning.
- Pete Masiel, prior FS experience as Center Manager, Silver City, NM.

4. References

The following lists several references from national, regional and center levels:

Name	Agency	Title	Phone
Bill Kaage	NPS	National Fire Director	208-387-5225
Chuck Wamack	BLM	Acting Center Manager, NICC	208-387-5400
Nancy Ruggeri	FS	Contracting Officer	559-784-1500 x1240
Linda Lowe	FS	COR	805-938-9142 x220
Kenan Jaycox	FS	GACC Center Manager, SWCC	505-842-3473
David Geyer	AZ State	State FMO, AZ State Forestry Div	602-309-3015
Gary Moberly	FS	Center Manager, Medford, OR	541-618-2509
Kat Gonzales	FS	Asst Center Manager, Minden, NV	775-883-5995
Jennifer Rosenberger	NPS	Center Manager, Sequoia-Kings NP	559-565-3164
Elizabeth Barrera	FS	Center Manager, San Bernardino, CA	909-382-2748
Dan Scronek	BLM	Center Manager, Grand Junction, CO	970-257-4800
Brad McKelvy	FS	Center Manager, Savannah, GA	218-307-4176
Kenton Wills	BLM	Center Manager, Lakeview, OR	541-947-6316
Lynn Kenworthy	WA State	Dispatcher, NE Washington State Ctr	509-684-7474
Nick Janota	FS	Dispatcher, Cody, WY	307-578-5740
Barry Wallace	FS	Dispatcher, Prescott, AZ	928-777-5702

E. Example WildCAD Incident Report

An example WildCAD Incident Report from an actual 2011 fire is attached to show the type of Incident information stored and managed in WildCAD.

WildCAD Incident Card - CA-LPF LOS PADRES COMMUNICATIONS CENTER: CA-LPF 2011-2238
FIGUEROA Wildfire 09/03/2011 13:00:00
Area 41 (SANTA BARBARA DIVISION)

Reporting Party: Scanner

Initial Report On Conditions:

Large column of smoke near Figueroa

Initial Location: Figueroa Mtn

Lat: 34°44'40.2", Lon: 119°59'33.36", T8N, R30W, Sec 25

Actual Location (09/03/2011 19:24): 34.50.886 X 120.02.954

Incident Notes:

Assoc plate D0959110

Dispatcher: MISTY ROBERTS **Status:** Closed **Sub-Type:** Class E: Fire

Air Tanker Base: 805-934-5059 X.204 **Air Tanker Fax:** 805-937-5248

AOBD: 209-352-0209

Ordering: 805-455-5563

Job Codes: P5GEB6

Notified 1. **2 Acre Page:** 9/3/2011 1:59:29 PM Sent

Notified 1. **Forest Supervisor:** 9/3/2011 1:59:08 PM Madsen Acting FS

Notified 1. **District Ranger:** 9/3/2011 1:21:25 PM Ranger 3 notified

Notified 1. **LE&I:** 9/3/2011 2:00:14 PM 7C1 notified

Incident NOT Displayed On WildWeb.

TFR:

TFR: NOTAM- 1/7/455- released 09/03/2011 at 2238

TFR: NOTAM- 1/7/473

Timer: Closed Timer for Resource HT-746

9/4/2011 12:06:52 PM BS OK: Returning SMX

9/4/2011 12:16:29 PM BS OK: Landing

Timer: Closed Timer for Resource HEL528LPF

9/3/2011 1:12:01 PM BS OK: Pos AFF

9/3/2011 1:28:03 PM BS OK:

9/3/2011 1:32:43 PM BS OK: Returning

9/3/2011 1:42:12 PM BS OK: OTG

Timer: Closed Timer for Resource HT-746

9/5/2011 10:08:24 AM BS OK: E/R, to Fox.

9/5/2011 10:23:55 AM BS OK: 35°52.140x119°49.620

9/5/2011 10:35:52 AM BS OK: 34°49.842x119°26.580

9/5/2011 10:48:32 AM BS OK: 34°49.062x118°57.900

Timer: Closed Timer for Resource AA-76Z

9/5/2011 8:29:33 AM BS OK: pilot+1, 4fob, e/r Figueroa

Timer: Closed Timer for Resource AA-76Z

9/4/2011 4:34:16 PM BS OK: 10 min eta to SMX

Timer: Closed Timer for Resource B8

9/4/2011 3:15:25 PM BS OK: 2sob, 4.5fob,30 m eta

9/4/2011 3:28:15 PM BS OK: 35°00.510X119°33.960

9/4/2011 3:43:39 PM BS OK: 35°06.300x118°28.320

Timer: Closed Timer for Resource HEL8AH

9/4/2011 2:32:07 PM BS OK: Returning Santa Ynez, 6 min eta

Timer: Closed Timer for Resource AA-76Z

Timer: Closed Timer for Resource AA-509

9/5/2011 11:19:22 AM BS OK: 2sob, 2+45fob, on infrared flight

9/5/2011 11:31:13 AM BS OK: FF with helibase 1

Timer: Closed Timer for Resource HEL8AH
 9/4/2011 12:20:45 PM BS OK: 4 min out of Santa Ynez
Timer: Closed Timer for Resource
 9/5/2011 1:10:56 PM BS OK:
 9/5/2011 1:20:11 PM BS OK:
Timer: Closed Timer for Resource HEL528LPF
 9/4/2011 9:15:41 AM BS OK: in contact with AA
Timer: Closed Timer for Resource AA-76Z
 9/4/2011 7:53:55 AM BS OK: 15 miles out.
Timer: Closed Timer for Resource HEL528LPF
 9/3/2011 5:57:00 PM MR OK: Pilot +1, 2 hrs 20 min. fuel, heading 020
 9/3/2011 5:57:14 PM MR en route to Fig.
Timer: Closed Timer for Resource H-531
 9/3/2011 6:01:43 PM BS OK: ops normal
Timer: Closed Timer for Resource HEL8AH
 9/3/2011 4:16:54 PM BS OK: neg aff
Timer: Closed Timer for Resource HEL528LPF
 9/3/2011 3:35:59 PM BS OK: Returning Santa Ynez
Timer: Closed Timer for Resource HEL528LPF
Timer: Closed Timer for Resource HEL8AH
 9/3/2011 1:57:56 PM BS OK:
Timer: Closed Timer for Resource HEL8AH
Timer: Closed Timer for Resource AA-76Z
 9/6/2011 9:25:10 AM BS OK: P=1sob, 4fob, h080 and 10 min eta
 9/6/2011 9:29:32 AM BS OK: Over fire
Timer: Closed Timer for Resource HEL528LPF
 9/6/2011 5:54:28 PM BS OK: rtn SY
 9/6/2011 5:59:07 PM BS OK: OTG, SY
Timer: Closed Timer for Resource H-531
 9/6/2011 5:39:02 PM BS OK: 9sob, 2fob, 1 eta
 9/6/2011 5:54:12 PM BS OK: 12 miles w of kiaholo river
 9/6/2011 6:08:38 PM BS OK: discontinue FF
Timer: Closed Timer for Resource HEL8AH
 9/6/2011 5:08:23 PM BS OK: 1sob, 45fob, 7 min eta head 167
 9/6/2011 5:13:04 PM BS OK: In qtrs, SY
Timer: Closed Timer for Resource
 9/6/2011 4:01:13 PM BS OK: E/R, Fire
 9/6/2011 4:16:02 PM BS OK: Over the fire
Timer: Closed Timer for Resource HEL8AH
 9/6/2011 3:53:51 PM BS OK: 1sob, 1.45fob, 10 min eta
 9/6/2011 4:01:49 PM BS OK: discontinue ff
Timer: Closed Timer for Resource AA-76Z
 9/6/2011 2:19:19 PM BS OK: Rtrn SMX, 8 eta
 9/6/2011 2:25:54 PM BS OK: OTG
Timer: Closed Timer for Resource
 9/6/2011 1:54:47 PM BS OK: P+1, 4fob, e/r to Fire 10 eta
Timer: Closed Timer for Resource AA76Z
 9/5/2011 10:33:45 AM BS OK: Off fire returning SMX, eta 10, heading 301
 9/5/2011 10:38:15 AM BS OK: OTG
Timer: Closed Timer for Resource HEL8AH
 9/6/2011 10:57:52 AM BS OK: Rtrn SY
 9/6/2011 11:02:32 AM BS OK: In qtrs SY
Timer: Closed Timer for Resource AA-76Z
 9/6/2011 5:54:19 PM BS OK: Rtrn SMX
 9/6/2011 6:02:14 PM BS OK: OTG, SMX

Timer: Closed Timer for Resource HEL528LPF
 9/6/2011 9:04:34 AM BS OK: E/r H1, p=4, 2fob, head 350, 10 eta
 9/6/2011 9:12:17 AM BS OK: In contact H1

Timer: Closed Timer for Resource HEL8AH
 9/5/2011 5:56:28 PM BS OK: rtning SY
 9/5/2011 6:08:10 PM BS OK: OTG

Timer: Closed Timer for Resource
 9/5/2011 5:37:39 PM BS OK: E/R, SMX, h275, 9sob,2fob, 10 eta
 9/5/2011 5:42:24 PM BS OK: In contact w/ TB

Timer: Closed Timer for Resource HEL528LPF
 9/5/2011 5:16:39 PM BS OK: Retrn SY, 6sob,30fob, hdng 170
 9/5/2011 5:23:01 PM BS OK: OTG

Timer: Closed Timer for Resource AA76Z
 9/5/2011 5:15:12 PM BS OK: Returning SMX
 9/5/2011 5:24:22 PM BS OK: OTG

Timer: Closed Timer for Resource HT-749
 9/5/2011 4:35:31 PM BS OK: Pos AFF
 9/5/2011 4:43:35 PM BS OK: In contact with Angeles

Timer: Closed Timer for Resource AA-76Z
 9/5/2011 3:21:50 PM BS OK: P+1, 4fob, hdng 088, and 10 eta

Timer: Closed Timer for Resource AA509
 9/5/2011 3:17:58 PM BS OK: Off to Canyon Fire, 45 min eta
 9/5/2011 3:31:49 PM BS OK: Ops Normal
 9/5/2011 3:47:15 PM BS OK: pos aff

Timer: Closed Timer for Resource AA-76Z
 9/6/2011 11:15:16 AM BS OK: Rtrn SMX
 9/6/2011 11:21:56 AM BS OK: OTG, SMX

Incident Commander(s):
 09/03/2011 1410 BC32 Effective 1409
 09/04/2011 0648 Captain 38 LPF Effective 2331 9/3/11
 09/04/2011 0905 Smith Effective 0905
 09/07/2011 0652 BC32 Plymale Effective 9/7/2011 06:00 IC Trainee C Glendenning 9/7/2011
 06:00

Resource Details:

HEL528LPF:
 Committed at 9/3/2011 1:00:44 PM, Responding at 9/3/2011 1:11:46 PM, On Scene at 9/3/2011
 1:18:43 PM, Returning at 9/3/2011 1:32:49 PM, On Scene at 9/3/2011 2:19:26 PM, On Scene at
 9/3/2011 6:03:56 PM, Avail Inc at 9/7/2011 10:05:48 AM, Released at 9/9/2011 10:53:40 AM

HEL8AH:
 Committed at 9/3/2011 1:00:44 PM, On Scene at 9/3/2011 2:19:31 PM, Avail Inc at 9/7/2011
 10:05:49 AM, Released at 9/9/2011 9:50:17 AM

BR802CHU:
 Committed at 9/3/2011 2:30:55 PM, On Scene at 9/3/2011 2:50:58 PM, Released at 9/7/2011
 9:19:07 AM

E16LPF 4X4:
 Committed at 9/4/2011 3:04:46 PM, Responding at 9/4/2011 3:04:55 PM, Released at 9/7/2011
 9:39:46 AM

E31LPF 4X4:
 Committed at 9/3/2011 1:00:45 PM, Responding at 9/3/2011 1:06:40 PM, On Scene at 9/3/2011
 6:03:56 PM, Returning at 9/9/2011 10:07:46 AM, Returning at 9/9/2011 10:07:57 AM, Released
 at 9/9/2011 12:14:43 PM

E37LPF:
 Committed at 9/3/2011 1:00:44 PM, Responding at 9/3/2011 1:06:36 PM, On Scene at 9/3/2011
 2:31:37 PM, Returning at 9/3/2011 7:24:40 PM, Released at 9/4/2011 9:41:18 AM

E42LPF 4X4:
 Committed at 9/3/2011 1:00:44 PM, Responding at 9/3/2011 1:06:15 PM, On Scene at 9/3/2011
 2:18:29 PM, Returning at 9/5/2011 8:44:21 AM, Released at 9/5/2011 10:01:53 AM

E47LPF 4X4:

Committed at 9/3/2011 1:00:44 PM, Responding at 9/3/2011 1:07:25 PM, On Scene at 9/3/2011 3:11:38 PM, Returning at 9/6/2011 7:25:18 PM, Released at 9/7/2011 7:26:26 AM

E52LPF:

Committed at 9/3/2011 1:00:45 PM, Responding at 9/3/2011 1:06:36 PM, On Scene at 9/3/2011 3:46:43 PM, Returning at 9/3/2011 7:34:48 PM, Released at 9/4/2011 10:34:22 AM, Committed at 9/5/2011 10:30:32 AM, On Scene at 9/5/2011 10:31:09 AM, Released at 9/5/2011 10:47:39 AM

E7573ATA:

Committed at 9/4/2011 7:38:57 AM, Responding at 9/4/2011 7:39:02 AM, Released at 9/4/2011 7:53:10 AM

E801:

Committed at 9/3/2011 2:01:47 PM, On Scene at 9/3/2011 2:20:51 PM, Released at 9/7/2011 9:19:10 AM

DOZ3LPF:

Committed at 9/3/2011 6:44:48 PM, On Scene at 9/3/2011 6:44:55 PM, Released at 9/6/2011 9:05:30 AM

WTSLPF:

Committed at 9/3/2011 1:00:45 PM, Responding at 9/3/2011 1:07:55 PM, On Scene at 9/3/2011 3:11:18 PM, Returning at 9/3/2011 10:05:48 AM, Returning at 9/9/2011 10:08:11 AM, Released at 9/9/2011 11:21:39 AM

CRW1LPF:

Committed at 9/4/2011 10:43:07 AM, On Scene at 9/4/2011 10:43:10 AM, Released at 9/6/2011 8:01:02 AM

CRW7LPF:

Committed at 9/9/2011 8:58:13 AM, On Scene at 9/9/2011 8:58:17 AM, Released at 9/10/2011 7:24:47 AM

CRW8LPF:

Committed at 9/4/2011 10:45:09 AM, On Scene at 9/9/2011 8:58:08 AM, Released at 9/10/2011 7:40:30 AM

PAT18LPF F:

Committed at 9/3/2011 1:37:15 PM, Responding at 9/3/2011 1:37:23 PM, On Scene at 9/3/2011 5:49:28 PM, Returning at 9/5/2011 9:54:03 AM, Returning at 9/5/2011 10:37:32 AM, Released at 9/5/2011 1:15:02 PM

PAT36ALPF:

Committed at 9/3/2011 1:00:45 PM, Responding at 9/3/2011 1:08:29 PM, On Scene at 9/3/2011 2:56:26 PM, Returning at 9/3/2011 7:34:34 PM, Released at 9/4/2011 8:42:57 AM

PAT41LPF F:

Committed at 9/3/2011 1:00:45 PM, Responding at 9/3/2011 1:08:11 PM, On Scene at 9/3/2011 1:52:16 PM, Released at 9/5/2011 6:02:57 PM

BC12LPF:

Committed at 9/6/2011 7:50:13 PM, On Scene at 9/6/2011 7:50:30 PM, Released at 9/11/2011 6:43:49 AM

BC32LPF:

Committed at 9/3/2011 1:00:45 PM, Responding at 9/3/2011 1:09:35 PM, On Scene at 9/3/2011 2:13:34 PM, Released at 9/4/2011 10:08:13 AM, Committed at 9/4/2011 10:10:26 AM, On Scene at 9/4/2011 10:10:31 AM, Released at 9/14/2011 11:29:43 AM

DIV3LPF:

Committed at 9/4/2011 10:51:51 AM, On Scene at 9/4/2011 10:52:00 AM, Released at 9/9/2011 8:56:08 AM

DIV4LPF:

Committed at 9/3/2011 1:00:45 PM, Responding at 9/3/2011 1:09:30 PM, On Scene at 9/3/2011 2:16:30 PM, Released at 9/4/2011 7:58:42 AM

7EDW5:

Committed at 9/3/2011 1:54:23 PM, Responding at 9/3/2011 1:54:28 PM, On Scene at 9/3/2011 6:04:20 PM, Returning at 9/3/2011 7:34:56 PM, Released at 9/4/2011 10:51:51 AM

Rec34 F:

Committed at 9/3/2011 8:18:54 PM, On Scene at 9/3/2011 8:18:57 PM, Released at 9/9/2011 9:28:40 AM

Entry Date/Time	From	To	Details
09/03/2011 13:03:47	SBC	JM	Aircraft report of smoke 1 north 15mile east of Santa Maria Airport
09/03/2011 13:07:07	Rec34	JM	Looks like it is coming from the Calway Road. Going to go to the Fig lookout to see if we can see better
09/03/2011 13:11:39	BC 32	MR	Looks to be between Sisquoc River and Wild Horse Ridge,
09/03/2011 13:11:54	SBC	CH	Sending 2 Dozers, 3 Engines, 1 W1, 2 Helicopters
09/03/2011 13:13:48	SBC	JM	Looks like it is going to be on the forest
09/03/2011 13:14:35	JM	SBC	LPF is going to be the ordering point
09/03/2011 13:15:23			West of Manzana in the
09/03/2011 13:17:00	Rec34	JM	Looks like it may be in the nira area
09/03/2011 13:17:55	BC32	MR	Type 3 engine to cover Santa Maria from the MRD. Send out 2 Acre page and notify Ranger 3. Best access if in the Nira area if from the N. Fig. Mnt rd. From S Happy Canyon Rd.
09/03/2011 13:25:42	E17	CH	moving to cover santa maria Ranger station
09/03/2011 13:30:18	H528	MR	100 acres in brush and grass, rapid rate of spread, 1 str. threathend, there are structures in the area, burning on south slope, Sisquoc off of Foxen Canyon.

Entry Date/Time	From	To	Details
09/03/2011 13:34:19	SBC SO	CH	PER IC Evac Sisquac Ranch area
09/03/2011 13:36:03	BC32	MR	Order Pat 19 to respond as fire investigator.
09/03/2011 13:39:56	SB SO	YS	SB SO trans call: person who started fire; Chuck Hebard 805-478-6579, car coming down road was turning around the Yucon backing into tall brush to get out of the way and fire started. Tried to put it out and got out of control about 50x50 no service came to Rancho Sisquac Winery to call in a report. On Star came on line and said they had a Inc #6051, gave ours to her.
09/03/2011 13:42:27	BC32	MR	Order up 3 cal fire strike teams of crews, 5 additional crews
09/03/2011 13:47:13	7C1	JM	Have 7E5 respond
09/03/2011 13:47:36	7E5	JM	Respond from Ojal
09/03/2011 13:52:18	Ranger 3	JM	have Barry Peckam come to Santa Maria to help with the wildfires
09/03/2011 13:55:27	BC 32	MR	Crew 52B on scene.
09/03/2011 13:58:44	DOZ 3	CH	can get the Dozer together in about three hours
09/03/2011 14:01:59	BC32	MR	Requesting a road grater from SBC.
09/03/2011 14:04:58	Bivo55	BS	On scene.
09/03/2011 14:10:13	E52	CH	on Hwy 101 delayed due to traffic
09/03/2011 14:11:52	MR	MR	Announced IC is BC 32.
09/03/2011 14:12:20	IC	MR	Place order for two tankers off of the Hill.
09/03/2011 14:17:51	Div 4	MR	Will be operations.
09/03/2011 14:18:04	IC	MR	Requesting type 2 team.
09/03/2011 14:20:33	IC	MR	Update: 300 - 400 acres burning in grass.
09/03/2011 14:28:15	MR	IC	Best Access? Foxen Canyon to Sisquac Winery. There will be limw green flagging.
09/03/2011 14:29:17	Fig AA	BS	Fire is approx 300 acres in brush and creeping into an old burn. There are some light flashy fuels out front. Additionally, we have T-05, 74, 76, and lead 55 working the fire. Fire should lay down by tonight when the moisture comes up.
09/03/2011 14:29:53	7E5	CH	have RP stay at Sisquac winery iam and hour out, have SBC SO stay also
09/03/2011 14:39:46	E 801	MR	Responding.
09/03/2011 14:42:12	Chief 2	MR	Responding
09/03/2011 14:48:42	Fig AA	BS	The fire is holding at 300-400 acres. It is a backbg fire to the N/W. It is making small runs at this time.
09/03/2011 15:25:32	E 801	MR	On scene.
09/03/2011 15:33:44	E802	DCT	enroute to incident
09/03/2011 16:04:28	Chief 2	MR	on scene at ICP.
09/03/2011 16:06:40	MR	IC	Vandenburg is en route.
09/03/2011 16:20:27	7E5	DCT	There are four people unaccounted for in the B-Rock area of the incident on the private property portion. They will be 2 AWM and 2 AHM wearing cowboy type clothing.
09/03/2011 16:27:43	E 802	MR	On scene.
09/03/2011 16:29:04	Dozer 3441	MR	On scene.
09/03/2011 16:32:30	IC	DCT	That B Rock area is 3-4 miles away from the incident so they should have no connection to the incident
09/03/2011 16:45:00	Ops	MR	Will take the Type 2 Air Tanker.
09/03/2011 16:48:55	IC	DCT	lat long of 34.50.886 X 120.02.954 puts the POO on FS land
09/03/2011 16:53:48	AA340	BS	We have transitioned with AA460 as Figueroa AA. We will return at 1830 and re-transition.
09/03/2011 17:13:35	IC	DCT	Legal of Twnshp 9N, Range 30W, SW corner of S16. Talking with SBC reps we are confident this is FS DPA.
09/03/2011 17:42:42	9399G	MR	Strike team 9399G has arrived at helibase.
09/03/2011 17:44:05	Dozer 3	MR	En route to incident.
09/03/2011 18:17:27	Operat	BS	For tomorrow, we will need 3 type 1 HT for water drop and 2 type H for crew shuttle. We dont foresee the need for tankers.

Entry Date/Time	From	To	Details
09/03/2011 18:34:13	FigAA	BS	We have transitioned with AA340.
09/03/2011 18:46:02	DCZ3	AP1	On scene
09/03/2011 18:50:48	fig ic	AP1	Have dozer 3 stage
09/03/2011 18:51:26	Fig IC	AP1	Estimated acreage 500 with 10% containment.
09/03/2011 19:16:21	9486G	AP1	On scene
09/03/2011 19:19:48	8AH	AP1	Off Figueroa incident enroute to Santa Ynez
09/03/2011 19:21:10	PT38A	AP1	Released from Fig enroute to Figueroa Station
09/03/2011 19:22:05	E37	AP1	Released enroute Cuyama Eta 2030
09/03/2011 19:23:03	E52	AP1	Released to quarters
09/03/2011 19:24:12	Edw5	AP1	Released from incident returning to Santa Maria
09/03/2011 19:36:25	IC	AP1	Tanker Base to open at 0800
09/03/2011 19:36:56	IC	AP1	Cancel request for crew 7 they are UTF
09/03/2011 19:57:26	IC	AP1	Cancel WAFB Dozer ST
09/03/2011 20:16:50	IC	DCT	enroute to Santa Maria, contact on the incident will be Fig Ops
09/03/2011 20:51:14	BC52	DCT	ANF engines are RONG at Casillas station tonight. Contact info is Rodney Guillory 661-433-9286. Trainee is Chris St. Pierre 626-533-0822
09/03/2011 23:31:47	Ops	AP1	Capt 38 assuming IC roll for the rest of night.
09/04/2011 00:46:25	Dozer 3441	AP1	Released and available.
09/04/2011 00:54:49	SBCO Dozer	AP1	SBCO Dozer 1 and 2 released from incident
09/04/2011 08:00:35	AA 76Z	BS	We are over the fire and assuming Figueroa AA at this time.
09/04/2011 08:01:50	IC	AMD	Fire update: it held in place overnight no active flame front and they have 2 small pieces open line
09/04/2011 09:05:53	Capt 38	MR	Leaving incident base to home unit. Smith from the team will be new IC.
09/04/2011 09:12:19	MR	Figueroa	Announced new IC is Smith.
09/04/2011 10:34:50	FigAA	BS	In contact with H-8AH and also AA-509.
09/04/2011 11:24:54	AA76Z	BS	We have transitioned with AA-509 as Figueroa Air Attack.
09/04/2011 16:32:47	AA509	BS	We have relieved AA-76Z and are now Figueroa AA.
09/04/2011 18:46:54	8AH	KR	In contact with helibase, switching over
09/05/2011 08:36:36	AA-76Z	BS	Over the inc and assuming Figueroa AA.
09/05/2011 09:50:26	FigAA	BS	No need for relief AA.
09/05/2011 15:28:23	AA76Z	BS	On scene and assuming Figueroa AA.
09/05/2011 15:59:59	Pat19	YS	Assoc DL: D0959110 12/29/1937
09/06/2011 09:31:13	AA-76Z	BS	Over the fire and assuming Figueroa AA.
09/06/2011 14:03:14	AA-76Z	BS	We are over the fire and assuming Figueroa AA.
09/09/2011 08:20:35	IC(t)	DCT	Will be releasing a water tender this afternoon and will be trading crew bosses with the Sundowners today.
09/10/2011 08:04:04	Rehab	CH	advised that they are going to get all equipment out today
09/10/2011 09:04:08	IC(t)	DCT	Glendenning released from trainee IC and returning to quarters

Command FN:

LPF 169.900T 170.550R Tone 3 - 131.8 La Cumbre ADDED 9/3/2011 1:19:35 PM

Victor:

Santa Maria Reload - 135.575 ADDED 9/3/2011 1:59:03 PM

Crew:

LPF Forest Tac 3 - 170.475 (unit to unit) ADDED 9/3/2011 1:58:26 PM

Air to Ground:

170.000 ADDED 9/3/2011 2:00:44 PM
 FM 167.9875 ADDED 9/4/2011 7:48:32 AM
 170.000 DELETED 9/4/2011 9:01:03 AM

Air - Other:

Air to Air AM 118.4750 ADDED 9/4/2011 7:49:38 AM
 Air to Air FM 166.9625 ADDED 9/4/2011 7:51:01 AM

VOR	ATB	Helibase
14m 005° GVO: GAVIOTA	20m 321° SBA: SANTA BARBA	9m 006° IZA: SANTA YNEZ
18m 308° RZS: SAN MARCUS	25m 096° SMXAA: SANTA MAR	34m 127° ARG: ARROYO GRAN
22m 181° FLW: FELLOWS	62m 212° BFL: KERN AA - N	36m 287° CAS: CASITAS HEL
29m 100° GLJ: GUADALUPE (64m 135° PRB: PASO ROBLES	47m 250° CHU: CHUCHUPATE
48m 113° MQQ: MORRO BAY(S	81m 279° VNY: VAN NUYS AI	59m 211° BFL: MEADOWS FIE

Initial Report On Conditions

Fuels: Grass, brush **Acres:** 698 **W Speed:** **Dir:** **Slope:** South **Aspect:**

Spread: Rapid **Complexity:** **Jurisdiction:** FS

Structures: Yes

Access: From the N. Fig mt. Rd, From S. Happy Canyon Rd Best Access as of 1435: Foxen Canyon Rd to Sisquoc Winery. Follow the Lime Green Flagging.

Fire Report Information

Fire #: SO: 17 **SubUnit:** **SubUnit #:** SLRD: 3

Acres: 661 **Size Class:** E **Elevation:** 1080 **Land Status:** FS

Contain: 9/5/2011 6:00:00 PM **Control:** 9/9/2011 6:00:00 PM **Out:** 9/12/2011 6:00:00 AM

Statistical Cause: Equipment Use **Specific Cause:** Exhaust-Other

Incident Command Post

ICP Location:

Santa Maria Rodeo Ground

Directions:

Santa Maria Rodeo Grounds 1309 N. Bradley Rd. - Santa Maria, CA 93454. Take Hwy 101 and take Santa Maria Way Exit

Lat: **Lon:**