Rapid Lesson Sharing

Event Type: Implementing Virtual Expanded Dispatch

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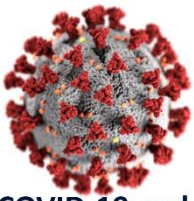

COVID-19 and Fire Season 2020 Lessons

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Implementing Virtual Expanded Dispatch

Lessons Learned Through Application

By Cobey Williamson
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Introduction

In the spring of 2020, it became apparent to Dispatch Managers that traditional expanded dispatch models would create a high-risk environment for the spread of coronavirus.

Throughout fire season 2020, the Bitterroot Dispatch Center (MT-BRC) designed and tested the viability of a virtual expanded dispatch.

This RLS report outlines this activity and shares some key lessons learned.

Design and Preparation

In early summer, I met with Kelly McKee, Bitterroot Dispatch Center Manager, to strategize and devise a plan for the implementation of a virtual expanded dispatch to support the Bitterroot Dispatch Zone. Requirements were:

- A totally remote/virtual environment.
- An ability to expand and contract in response to need.

First, we outlined the hardware and software required to operate in a networked virtual environment, consisting of:

Hardware

- High speed internet connection.
- Web browser-capable personal computer.
- Webcam.
- Smartphone.
- Handsfree headset.

Software

- Interagency Resource Ordering Capability (IROC)-compliant web browser.
- Agency-approved:
  - Email.
  - Shared drive.
  - Productivity suite (word processing, spreadsheets, etc.).
  - Teleconferencing.
  - Video conferencing.
  - Chat.

Kelly identified agency assets that could be utilized to meet the hardware needs, including laptops with and without USDA access and Verizon cellular Wi-Fi hotspots. It was noted that, while expanded dispatch members may have and prefer to use personal computing equipment, there was no mechanism for reimbursement for their use, to include internet service. It was therefore incumbent upon the government to fulfill these.

LESSON #1

The government must furnish computer, cell phone, and internet connection, as there is no mechanism for reimbursement of personally supplied equipment.

Kelly also identified several software utilities among the government-supplied productivity suite that could fill the needs for email, file sharing and storage, and chat—specifically FireNet and Microsoft Teams. She made plans to research how best to ensure interoperability and non-agency access to these platforms.

LESSON #2

Login.gov and FireNet access is a prerequisite for ADs and cooperators operating in the government digital environment.

LESSON #3

It is difficult to establish/reinstate AD and cooperator FireNet access pre-incident.

Implementation

In late July, Kelly contacted me to make arrangements for activation of the virtual Bitterroot Expanded Dispatch. As fire activity was light, dispatch was initially expanded as part of the Bitterroot National Forest COVID ISO (Incident Support Organization).

By this point, the Bitterroot Dispatch staff had fully integrated Microsoft Teams into their workflow, and this was provided as the core IT framework for expanded dispatch operations. Microsoft Teams was used to support:

- Daily activity summary.
- End of shift briefing.
- Interoffice communications (chat).
- File storage (ICS213s, travel receipts, etc.).
- File hosting (contact lists, resource lists, etc.).

A shared FireNet email account was used for all communications to and from expanded dispatch. All incident requests were sent on electronic ICS Form 213 to this email address, and all travel requests to BCD Travel were sent from it. Sharing log-in credentials, although generally discouraged, was necessary to access the shared email. Two Factor Authentication (2FA) made sharing log-in credentials challenging. 2FA requires a unique authentication code each time someone logs into a shared account. That code is sent to a designated cell phone number. Therefore, one person has to manage and distribute the codes—which are only good for 24 hours. This means code distribution for log-in access is a daily time-consuming process.

LESSON #4

A shared email inbox is a required element for virtual dispatch.

LESSON #5

2FA is an obstacle to sharing log-in credentials.

REQUISITE SOLUTION #1

Enable a shared catch-all email inbox accessible via USDA/Login.gov/FireNet.gov credentials (inclusive) for interagency dispatch centers. Such an interagency solution would provide a shared inbox that wouldn't require 2FA.

Although agency equipment was proffered, I used my personal computer, cell phone, and internet service throughout the entirety of the operation. This consisted of an Apple iMac (2013-21.5 inch, 2.9 GHz i5, 8 GB DDR3, macOS Mojave), Apple iPhone SE (2020), and 12 Mbps radio broadband internet service. In my opinion, this equipment meets the very minimum equipment requirements. Ideally, I would upgrade this hardware to include a second 21 inch+ monitor, faster CPU, and 16 GB RAM.

Redundant internet access is definitely recommended. I often found myself maxing out my computing power and/or internet access while operating multiple applications (MS Teams, Adobe Acrobat) alongside two browser windows (Safari - shared FireNet email; Chrome - IROC, personal FireNet email).

Bitterroot Expanded Dispatch operated in the main Bitterroot Dispatch Teams environment. However, it may be preferable for a wholly separate Expanded Dispatch Teams environment be established strictly for expanded operations. This would be a benefit if the expanded organization was large, in order to maintain the integrity of the main dispatch center files. However, this may severely restrict communications between the expanded dispatchers and regular dispatch staff.

LESSON #6

A separate Teams environment for expanded dispatch will ensure that access to main dispatch center records can be restricted.

LESSON #7

Chat access to local knowledge is extremely useful and important.

Workflows, SOPs, and protocols for working within the IT framework were reasonably well established by the time expanded dispatch was activated. Therefore, implementation and integration of the expanded dispatch element was relatively seamless.

Operations

Generally, virtual expanded dispatch operations followed practices similar to traditional expanded models.

A shared FireNet email account was used for all communications to and from expanded dispatch. All incident requests were sent on electronic ICS Form 213 to this email address and entered into IROC to be filled or placed. Protocols were established for how local resource availability and drawdown would be addressed. Travel requests were initiated with BCD Travel using fillable PDF and travel receipts were filed electronically in the Bitterroot Dispatch Teams. Correspondence with all resources, both agency overhead and contract, was accomplished via email, with or without PDF attachment.

Regular contact, via Teams or phone, was made with the Acting Center Manager. Teams chat was utilized for the bulk of communication and problem-solving between the expanded organization and dispatch center. Expanded dispatch start and stop times were also accounted for and recorded in Teams chat via in-service and out-of-service announcements.

On-Boarding

While the operation remained predominantly small, two additional dispatchers were on-boarded. Both already had Teams and FireNet access. Therefore, roadblocks to on-boarding into the virtual dispatch environment were minimal.

Teams provided an invaluable resource for briefing and localized training. Video call via Teams allowed for screen-sharing and provided the ideal platform for training incoming dispatchers on IROC, ordering channel protocols, and local procedures.

LESSON #8

Onboard incoming dispatchers via Teams video call. Screen sharing offers an excellent platform for demonstrating local workflows and file systems.

Personnel Management

While expanded dispatch operations are technically feasible, management is the greatest obstacle, particularly management of dispatch personnel performance. Although Bitterroot Expanded Dispatch experienced no such problems, the potential for underperformance by employees at all levels is significant. Personal accountability is paramount to success in the virtual remote environment.

Careful evaluation of the timely completion of tasks to the appropriate standard and quick corrective action is critical to ensuring operational success. Demonstrating poor performance would be difficult, if not entirely impossible. Early detection and mitigation, up to and including demobilization, of poorly performing remote workers is paramount in providing consistent, effective expanded dispatch services in the decentralized virtual setting.

LESSON #9

Active management by supervisory personnel, center managers, and their designees of personnel performance is crucial to operational success.

Conclusion

Bitterroot Dispatch, along with other wildland fire dispatch offices and emergency communication centers across the country, has demonstrated the viability of the decentralized remote virtual expanded dispatch operation. While many lessons were learned, the benefits that virtual expanded dispatch provides, scalability and redundancy in particular, were shown to greatly outweigh the challenges.

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