Jim -- down below is what the Fire Desk and the Region have pulled together for the SecAg interview w CBS.

Let me kno if you need more -
Jay, Robert, below are the finalized Station Fire Review documents:

/s/Iva Sanders (for)
James E. Hubbard
Forest Service
Deputy Chief, State and Private Forestry
ejhubbard@fs.fed.us
office phone: (202) 205-1657
office fax: (202) 205-1174
Subject: Station Fire on the Angeles National Forest

To: Deputy Chief for State and Private Forestry

The Station fire on the Angeles National Forest, Pacific Southwest Region, is without a doubt a fire of national significance. This fire exhibited unusually extreme fire behavior, even for Southern California and we want to learn as much as we can from this incident. There was loss of life, homes, and property, and the Forest Service owes a review of the effectiveness of our actions to the local communities and those who suffered losses in this event. Therefore I am directing you to immediately begin a review of the initial phases of the Station fire.

I expect this review to be interagency and collaborative. You are to reach out to our partners in unified command and request their participation in the review, especially the Los Angeles County Fire Department, and CALFIRE. The operational review should focus on environmental conditions, interagency coordination, response, and suppression actions.

Provide me frequent assessments of progress on this project and provide me a written report by December 1, 2009.

/s/ Thomas L. Tidwell
THOMAS L. TIDWELL
Chief

cc: Randy Moore
Station Fire Initial Attack Review

Introduction
Safe, effective, and successful initial attack of fires is important. The USDA Forest Service as an agency is successful in its initial attack nearly 98% of the time. The Angeles National Forest of the Pacific Southwest Region of the Forest Service has exceeded the national average initial attack success rate during the 2008-2009 fire season, having experienced only two escapes of nearly 200 fires that have occurred to date. The 160,500 acre Station Fire on the Angeles National Forest, Pacific Southwest Region was one of the fires which escaped initial attack.

In order to learn from our experience and to improve our practices, the Chief of the USDA Forest Service has initiated a review of the initial attack of the Station Fire.

This review is solely focused on the period between the discovery and report of the fire (August 26, 2009) to transfer of command of the incident to California Team 5 (Dietrich) on August 28, 2009. This review addresses neither the performance of California Team 5 nor the predisposing vegetative and societal factors which contributed to the Station Fire.

The primary objectives of the review are to:

1. Determine if the unit’s (the Angeles National Forest) preparedness actions before the Station Fire were in alignment with existing plans (staffing/action guides, Land and Resource Management Plan, Fire Management Plans e.g.) and cooperative agreements.

2. Determine if the decision processes and actions taken during initial attack, including key decisions during the initial attack, were reasonable and prudent in view of the known environment, current information, and other circumstances existing at the time of the event.

3. Examine the role of the agency administrator in providing leader’s intent and input to strategic decisions for the incident initial attack.

The general operating protocols for this review are adapted from the “After Action Review” format described in the National Wildland Fire Coordinating Group Incident Response Pocket Guide (PMS #461). The intent, to be achieved through honest and open discussion and review, supported by factual information, is to discover what did and did not occur and why. The end-state of this review will be to articulate these findings and identify the means and methods to improve performance.

Review Team Composition

- James E Hubbard, Deputy Chief for State and Private Forestry, USDA Forest Service. Team leader.
- Ken Pimlott, Deputy Chief for Fire Operations, California Department of Forestry and Fire Protection. Member
John Tripp, Chief Deputy for Fire Operations, Los Angeles County Fire Department. Member

Referral of Findings Outside the Scope of the Review
Investigation of potential criminal or administrative misconduct falls outside the scope of the team jurisdiction. The team should refer these issues to the Chief USDA Forest Service or the appropriate agency.

Review Protocols
The Regional Forester, Pacific Southwest Region, will designate a local team liaison to help coordinate logistical support and arrangements for work space, lodging, and local transportation. The liaison will meet with the team upon their arrival to discuss and finalize arrangements.

The liaison arranges for the in-briefing with the team and staff and may also coordinate scheduling of other briefings and interviews with local agency personnel. The liaison also helps arrange for access to documentation resources.

The in-briefing with the agency administrators, including the Forest Supervisor for the Angeles National Forest, should include the following:

- A discussion of the review team’s direction from the Chief, USDA Forest Service.
- Review of local issues and concerns.
- Identification of additional cooperating agencies, entities and individuals, and any respective interests that may merit consideration in the review process.

The team will conduct interviews with agency and incident personnel and review documentation as necessary to accomplish their task.

Interagency Review – Reporting
Upon completion of document review and interviews, the team will prepare a report for submission to the Chief, USDA Forest Service by 06 November 2009.

The report will include the following sections:

(1) Introduction
(2) Process Review
(3) Objectives
(4) Executive Summary
(5) Findings and Recommendations
(6) Appendices
Station Fire Initial Attack Review
Methodology and Timeline

The review team will be supported by staff which will gather facts, assemble a chronology and assist in the preparation of the report. The staff will complete their work remotely if possible. Contact of principals by the support staff will be limited to questions regarding clarification of events. Interviews, if needed, will be conducted by the Review team during on site visit(s).

The first draft of the review report will be completed by 10/30/09 in order to meet the Secretary's timeline. Assuming concurrence with the interagency partners, Don McGregor has been selected to write the report and assist in the risk/exposure aspects of the report.

Communicating the results of the review to the public, Congressionals and the media will be handled by the three leads and the Regional Forester, as well as the Angeles National Forest Supervisor. A detailed outline of a rollout will be developed by the Angeles Public Affairs Officer with support of a designated Public Affairs representative from Washington DC. The Point of Contact is Joe Walsh.

The following are the data required to initiate the review. This should not be viewed as an exhaustive list and may be modified.

1. Angeles National Forest Staffing Guides
2. Dispatch Logs or Run Cards
3. Transcript of Radio Recorder
4. Weather Data
   a. Predicted
   b. Observed
   c. National Fire Danger Ratings
5. Pre-Attack Plans
6. Decision Documentation (ICS - 214, Logs, etc)
7. Maps
8. Initial Attack Incident Commander briefing package
9. Situation Reports (ICS-209)
Upon receipt and review of the data, the staff will recommend a set of actions regarding interviews. This recommendation would include potential interviewees, and potential questions. The staff may request additional data.

The timeline is as follows:

10/16/09 – Staff receives data
10/19/09 – Review team on-site, Angeles National Forest
10/23/09 – Data collection complete
10/30/09 – First Draft of report
11/06/09 – Final Report to USDA Forest Service Chief
11/09/09 – During this week key Congressionals, State officials and others are briefed prior to release of the report, after coordination with interagency partners.
Sounds right.

----------------------------------
Sent from my BlackBerry Handheld.

Tom Harbour

----- Original Message ----- 
From: Tom Harbour  
Sent: 10/20/2009 08:28 PM EDT  
To: James Hubbard  
Subject: Note from Mike Rogers 

Jim -- got a note from Mike today asking me to give him a call -- he is obviously still very well connected on the ANF -- if it's OK with you, I'm going to call him when I get a minute and tell him that yes, I was there -- yes, there was a review team, yes, we did interviews, no we haven't formed any conclusions and when we do those will be presented first to the Chief -- how's that sound?
Ken Pimlott
Deputy Director
Chief of Fire Protection
CAL FIRE
Office: (916) 653-9424
Fax: (916) 653-4171

-----Original Message-----
From: Kim_Zagaris@oes.ca.gov [mailto:Kim_Zagaris@oes.ca.gov]
Sent: Thursday, October 22, 2009 10:45 AM
To: Pimlott, Ken
Subject: Station Fire Town Hall

(See attached file: MatthewBettenhousen.doc)
October 5, 2009

Matthew Bettenhousen
Acting Secretary
California Emergency Management Agency
3650 Schriever Avenue
Mather, CA  95655

Dear Secretary Bettenhousen:

Let me begin by commending the outstanding performance of our firefighters during the Station Fire. Certainly, our communities would have endured far more property damage with a lesser effort than what was put forth by the State, Federal, County and Local Firefighters who were dispatched and who fought to preserve the communities threatened by the fire. Having visited the command center and attended multiple briefings during the height of the fire, I was impressed by the magnitude of resources that were deployed in Los Angeles County. As a frequent visitor to the front line activity in Altadena, La Cañada and La Crescenta, there seemed to be significant resources and able men and women doing their best to keep the fire from homes nestled in the foothills.

However, recent concerns echoed by residents and highlighted in the media prompt the question of whether the initial response was appropriately enacted and whether there was adequate communication and coordination between the multiple agencies that worked in concert to fight the blaze. From the outset of the fire, there were concerns raised about air resources and whether they were used to their fullest capabilities and strategic value. Many of us have also read about the leases on the Super Scoopers, whether they could have been deployed sooner and whether the state needs to ensure their availability earlier in the fire season or even permanently. The recent Los Angeles Times story about the early decision made to fight the blaze also raises legitimate questions about whether state, federal and county agencies were on the same page about the potential magnitude of the problem and whether stronger early efforts would have made an impact in the ultimate size and damage caused by this historic fire.

It is my hope that the concerns being expressed lead the California Emergency Management Agency and other agencies to come together publicly to address them and, more importantly, to share plans on how California hopes to improve its emergency response. Most people and organizations improve their performance when there are periodic reviews of past experiences. It seems only logical that we use this historic fire to have a public discussion on its impact and to use that discussion to improve our emergency response.
I would like to formally invite you to co-host and participate in a town hall forum on the Station Fire. My hope is to address the following issues:

- What went right?
- What went wrong?
- How do we improve for next time?
- Are greater air resources needed? When, what and where?
- Is California’s emergency response system properly funded? How do we ensure that we have the resources to properly address California’s emergency response needs?
- What can we do now to prepare for mud slides that are sure to follow?

It is my hope that we can bring together State, Federal, County and Local emergency personnel to participate in this public debriefing of the Station Fire to help California improve its emergency response. It would be my desire to hold this discussion at the Los Angeles County facility, Descanso Gardens, in La Cañada Flintridge. I would work with you on finding an appropriate date and on the list of officials we would hope to bring together. Although I envision public safety personnel conducting this round table discussion, I also envision an opportunity for the public to ask questions at an appropriate time in the evening.

In closing, I want to make it clear, that it is my hope to use the experience of the Station Fire to move California forward in its ability to manage disasters and meet the challenges inherent with them. It is my sincere hope that our region, county and state benefit from this self examination.

Please advise me on the person in your office to whom this is best coordinated.

Respectfully,

Anthony J. Portantino
Assemblymember, 44th District

Cc:  Hon. Laura Olhasso, Mayor, La Canada Flintridge
     Hon. Bill Bogaard, Mayor, Pasadena
     Hon. Geno Sund, Chair, Altadena Town Council
     Hon. Steve Pierce, President, La Crescenta Town Council
     P. Michael Freeman, Fire Chief, Los Angeles County
     Jody Noiron, Forest Supervisor, Angeles Crest National Forest

AJP:jh
----- Original Message -----  
From: Tom Harbour  
Sent: 11/18/2009 09:13 PM EST  
To: James Hubbard  
Subject: Re: Fw: LA County Report Stories - Response Needed?  
maybe we'd say --  

-our actions at initial attack were reasonable and prudent -  
-aviation doesn't put fires out - boots on the ground put fires out  
-thanks for your ideas, you are a good partner, we'll evaluate them  

-

or is that too simple??  

(Embedded image moved to file:  
pic00041.jpg)
Jim -- in a couple hours or less I'll have the first shot of the products the Chief was asking for Friday afternoon. I think they are answering the Chiefs questions, but since I was taking notes while in the dentist chair I wonder if you would like to take a look at them before I ship the first draft to the Chief -- your choice -- what do u think?

PS -- been interesting today to find out about the LAC night flying confusion -- Spyrison did in fact specifically order LAC Chopper 14 at 1726 hours on 26 Aug -- LAC H 14 is night flying capable and according to Spyrison, it was his intention to have LAC H14 continue with operations as long as they were needed, past dark if thats what was needed -- all that became a moot point when LAC asked for LAC H14 to be released at 1801 for EMS coverage.
Here are documents we've created for the Chief in response to his request of Friday afternoon:

(1) Our first shot at the "timeline" showing IC names, when they were in charge, pertinent aircraft orders, and an explanation of the disposition of the aircraft

Station Fire Timelines for Chef 23 Jan 2010 2300 hrs EST.doc

(2) Our first shot at the "night flying" issues - where we've been, where we are, where we're headed

Night flying BP for the Secretary 21 Jan 2010.docx

The Chief is on duty upstairs awaiting materials for his review -- Let me kno if we are close -- what kinds of changes, input, etc you see we need-

thx --
The following information has been gathered from the following sources; Dictaphone Audio recordings of the Angeles National Forest frequencies on 08/26/09 and 08/27/09, Los Angeles County Fire Department Call History #F09206965, Station Fire Resource Ordering and Status System, Angeles National Forest WildCAD incident card 08/26/09 and 08/27/09, William J. Fox Air Tanker Base daily aircraft summary.

The previously identified information recording and documenting systems have been reconciled; however individual systems with date and time stamping may reflect slight differences in time recordings.

**August 26, 2009**

<table>
<thead>
<tr>
<th>Time</th>
<th>Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:20</td>
<td>Initial Call from ANF Patrol 11 (Ochoa) reporting a walk in report of a possible vegetation fire. Responding to a fire 1.5 miles north of Angeles Crest Station on Angeles Crest Hwy.</td>
</tr>
</tbody>
</table>
| 15:23  | A full brush fire response is dispatched from the Angeles National Forest The initial order included the following aircraft and Chief Officer assignments from ANF. This does not include all resources of the initial dispatch.  
  1 Division Chief (Division 1, Spyrison)  
  1 Battalion Chief (Battalion 13, Aguirre)  
  1 Fixed Wing Air Attack-12 (AA-12) already in the air and diverted from the Morris Fire)  
  1 Lead Plane  
  2 Airtankers, Tanker 45 and Tanker 11(diverted from the Morris Fire by AA-12)  
  1 Helitanker – HT 792 (diverted from the Morris Fire by AA-12)  
*Estimated flight time from the Morris fire to the Station fire, approximately 5 minutes.* |
| 15:24  | A full brush fire response is dispatched by LA County Fire Department per the Annual Operating Agreement. The following aircraft and Chief Officer resources responded to the Station Fire. This does not include all resources of the initial assignment.  
  Battalion Chief – 4, Dave Thies  
  Battalion Chief – 6, Buck Buchanan  
  Helicopter – 18  
  Helicopter – 19  
  Helitanker – 732 (Los Angeles County Exclusive Use Contract)  
  Los Angeles City Fire Department Helicopter Fire 5 |
<p>| 15:24  | ANF Patrol 11(Ochoa) arrives on scene, reporting 3 acres burning uphill in brush, with light winds, burning mid-slope to up-slope. |
| 15:27  | ANF Patrol 11(Ochoa) requesting aircraft to be diverted from the Morris Fire. (Aircraft already diverted by the aircraft desk at ANF ECC from the Morris Fire during the initial attack response at 15:23). |
| 15:30  | ANF Engine 12 arrives on scene |
| 15:34  | Los Angeles County Battalion Chief 46 (Hale) is dispatched to the Station fire by Los Angeles County Command and Control Dispatch Center. Arrived on scene at 15:44 |
| 15:36  | ANF Captain 12 (Martinez) assumes Incident Commander of the Station Fire. |</p>
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:49</td>
<td>ANF Division 1, (Spyrison) arrives on scene</td>
</tr>
<tr>
<td>15:50</td>
<td>Los Angeles County Helicopter 12 arrives on scene (Unknown source of order)</td>
</tr>
<tr>
<td>15:51</td>
<td>Division 1 assumes Incident Commander Type 3 of the Station Fire</td>
</tr>
<tr>
<td>16:07</td>
<td>ANF ECC created [ROSS request A-6] for a relief Air Attack to be over the Station fire at 17:30</td>
</tr>
<tr>
<td>16:17</td>
<td>Los Angeles County Battalion Chief 4 Assigned to Operations by Station IC, Los Angeles County Battalion Chief 6 assigned as the Agency Representative.</td>
</tr>
<tr>
<td>16:21</td>
<td>Los Angeles County Assistant Chief 3, Luke Claus arrives on scene. (Unknown position on the Station Fire)</td>
</tr>
<tr>
<td>16:22</td>
<td>Lead Plane 47 departed FOX Air Tanker Base, en-route to the Station Fire</td>
</tr>
<tr>
<td></td>
<td><em>Estimated flight time from FOX to the Station Fire approximately 10 minutes.</em></td>
</tr>
<tr>
<td>17:00</td>
<td>CAL Fire Air Attack 310 [ROSS request A-6] departed Hemet Ryan Air Tanker Base en-route to the Station Fire. Approximate flight time 25 minutes.</td>
</tr>
<tr>
<td>17:26</td>
<td>Station Fire IC, (Spyrison) requesting Los Angeles County Helicopter 14 for night flying operations.</td>
</tr>
<tr>
<td>17:34</td>
<td>Los Angeles County Battalion Chief 6 (Buchanan) advises Los Angeles County Command and Control Dispatch Center, of request for Helicopter 14 for night flying operations.</td>
</tr>
<tr>
<td>17:43</td>
<td>Los Angeles County Helicopter 14 dispatched to the Station fire by Los Angeles County Command and Control Dispatch Center.</td>
</tr>
<tr>
<td>17:43</td>
<td>Station IC (Spyrison) requesting 2 medium water dropping helicopters for 08/27/09 at 0800hrs. ROSS Request #’s A-13 and A-14, requests placed to Southern California Geographic Area Coordination Center. [ROSS request A-13] was filled by Helicopter 523 from the Sequoia National Forest. Helicopter 520 from the Sierra National Forest was planned to be assigned to [ROSS request A-14] by the Southern California Geographic Area Coordination Center.</td>
</tr>
<tr>
<td>17:53</td>
<td>ANF ECC created the request for Helicopter 14. [ROSS request A-11].</td>
</tr>
<tr>
<td>18:01</td>
<td>Per Los Angeles County Battalion Chief 46 (Hale) and Command and Control Dispatch Center Battalion Chief (Unknown), release Helicopter 14 immediately for EMS coverage. (Documented in Los Angeles County Command and Control Dispatch Center call history).</td>
</tr>
<tr>
<td>18:08</td>
<td>Los Angeles County Command and Control Dispatch Center filled request for Helicopter 14 [ROSS request A-11]. This request was filled in ROSS for documentation purposes.</td>
</tr>
<tr>
<td>18:39</td>
<td>Helitanker 732, released by Air Attack from Station Fire, en-route to fuel.</td>
</tr>
<tr>
<td>18:40</td>
<td>Los Angeles County Assistant Chief 3 (Claus) released and available.</td>
</tr>
<tr>
<td>18:58</td>
<td>Air Tanker 11 released by Air Attack, on the ground at FOX Air Tanker Base</td>
</tr>
<tr>
<td>19:05</td>
<td>CAL Fire Air Attack 310 released per Station IC (Spyrison), ETA back to Hemet Ryan 19:33</td>
</tr>
<tr>
<td>19:20</td>
<td>Lead Plane 47 released by Air Attack, on the ground at FOX Air Tanker Base</td>
</tr>
<tr>
<td>19:23</td>
<td>Air Tanker 45 released by Air Attack, on the ground at FOX Air Tanker Base</td>
</tr>
<tr>
<td>19:26</td>
<td>Los Angeles County Helicopter 19, released from the Station Fire, and notified Los Angeles County Command and Control Dispatch Center they were available.</td>
</tr>
<tr>
<td>19:37</td>
<td>Los Angeles County Helicopter 18, released from the Station Fire, and notified Los Angeles County Command and Control Dispatch Center they were available.</td>
</tr>
<tr>
<td>Time</td>
<td>Event Description</td>
</tr>
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<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>19:40</td>
<td>Los Angeles City Fire Department Copter Fire 5, released from the Station Fire</td>
</tr>
<tr>
<td>19:53</td>
<td>Los Angeles County Copter 12, released, available from the Station Fire, and notified Los Angeles County Command and Control Dispatch Center they were available.</td>
</tr>
<tr>
<td>19:55</td>
<td>HeliTanker 792 released by Station IC (Spyrison).</td>
</tr>
<tr>
<td>20:18</td>
<td>Los Angeles County Battalion Chief 42 (Hale) assumes Agency Rep, Los Angeles County Battalion Chiefs 4 (Thies) and 6 (Buchanan) released from the fire.</td>
</tr>
<tr>
<td>22:35</td>
<td>ANF Captain 17 (Bastedo) assumes Incident Commander Type 4 with ANF Patrol 16 (Dimaculangan) as the trainee Incident Commander Type 4.</td>
</tr>
</tbody>
</table>

*Air Tanker 45 and Air Tanker 11 dropped 4 loads each totaling 16,656 gallons of retardant.*
<table>
<thead>
<tr>
<th>Time</th>
<th>Facts</th>
</tr>
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<tbody>
<tr>
<td>00:50</td>
<td>ANF Division 1 (Spyrison) requesting 1- Type 1 Helitanker [ROSS request A-15], 3- Air Tankers (any type) [ROSS request A-16, A-17, A-18], 1 Air Attack [ROSS request A-19] and 1 Lead Plane [A-20]. Aircraft orders requested to be over the fire by 0700 because of the spot fires below HWY 2. At the time of this request the air tanker crews were on their 10 hours uninterrupted rest requirement as referenced in the National Air Tanker Contract. Had the air tanker crews been contacted at this time (00:50), their 10 hour uninterrupted rest requirement would have been restarted further delaying their response time.</td>
</tr>
<tr>
<td>01:38</td>
<td>ANF Division Chief 1 (Spyrison) requests a Type 3 Incident Commander for Station Fire day shift. Order filled with ANF Battalion Chief 33 (Gomez).</td>
</tr>
<tr>
<td>02:29</td>
<td>ANF Division Chief 1 (Spyrison) assumes Incident Commander Type 3 due to the spot fires below the Angeles Crest HWY and the complexity of the fire behavior. Due to the fire behavior at this time crews were unable to make access to the spot fires without compromising the 10 Standard Fire Orders, 18 Situations that Shout Watch Out and the Downhill Line Construction Checklist.</td>
</tr>
<tr>
<td>04:06</td>
<td>ANF Battalion Chief 33 (Gomez) requests priority trainee ANF Captain 18 (Conklin) to be assigned as the Type 3 IC trainee.</td>
</tr>
<tr>
<td>04:43</td>
<td>Southern California Geographic Area Coordination Center advised ANF ECC that [ROSS request A-14] will not be filled with Helicopter 520 from the Sierra National Forest due to a divert of the aircraft to an immediate need request by Yosemite National Park due to spot fires. Southern California Geographic Area Coordination Center advises they will attempt to fill the order elsewhere.</td>
</tr>
<tr>
<td>04:45</td>
<td>ANF ECC advised Station IC (Spyrison) status of request [ROSS request A-14]</td>
</tr>
<tr>
<td>04:45</td>
<td>Station IC (Spyrison) suggests attempting to fill [ROSS request A-14] with a Los Angeles County Helicopter.</td>
</tr>
<tr>
<td>04:46</td>
<td>ANF ECC contacted Los Angeles Command and Control Dispatch Center via telephone, of availability of a helicopter for day shift to fill [ROSS request A-14]</td>
</tr>
<tr>
<td>04:47</td>
<td>Los Angeles County Command and Control Dispatch advised ANF ECC, via telephone, unable to fill [ROSS request A-14]. Per Los Angeles County Command and Control Dispatch Chief (Unknown) unable to fill due to pilot shortage.</td>
</tr>
<tr>
<td>04:47</td>
<td>ANF ECC advises Station IC (Spyrison), Los Angeles County unable to fill [ROSS request A-14].</td>
</tr>
<tr>
<td>04:50</td>
<td>Station IC (Spyrison) advises ANF ECC to check with Los Angeles City Fire Department on the availability of a helicopter to fill [ROSS request A-14]</td>
</tr>
<tr>
<td>05:03</td>
<td>Los Angeles City Fire Department Battalion Chief (Sullivan) advised ANF ECC, via telephone, Helicopter Fire2 can fill [ROSS request A-14] if nothing comes up between now and the time you need them.</td>
</tr>
<tr>
<td>05:54</td>
<td>Los Angeles City Fire Department Battalion Chief (Sullivan) advised ANF ECC, not able to fill [ROSS request A-14].</td>
</tr>
<tr>
<td>06:35</td>
<td>CAL Fire Air Attack 310 [ROSS request A-19] departed from Hemet Ryan Air</td>
</tr>
</tbody>
</table>
Tanker Base. ETA to the Station Fire 06:55.

06:45 CAL Fire Air Attack 310, in radio communication with ANF Battalion Chief 11 (Garcia). (Per audio recording). ANF Battalion Chief 11 (Garcia) was acting as Station Operations while the Station IC (Spyrison) briefed the incoming IC (Gomez).

06:50 From ANF Battalion Chief 11 (Garcia) to ANF ECC aircraft desk, per Station Air Attack CAL Fire Air Attack 310, launch the Lead Plane. (Per audio recording)

06:56 ANF ECC aircraft desk (with late log entry), contacted Morris Fire Air Operation Branch Director and requested 1 helitanker [ROSS request A-15] 3 Air Tankers [ROSS requests A-16, A-17, A-18] and 1 Type 2 helicopter to fill [ROSS request A-14]

07:01 Morris IC [Woychak] advised ANF ECC aircraft desk, the Morris Fire will fill [ROSS request A-14] with Helicopter 554 for water dropping only. And will fill [ROSS request A-15] with Helitanker 792 and the Station fire can have the Lead Plane [ROSS request A-20] and 3 Air Tankers from the Morris Fire to fill [ROSS requests A-35, A-36, A-3]. Morris IC (Woychak) requests ANF ECC to create an order to fill behind Helicopter 554 for the Morris Fire.

07:30 Station IC, (Spyrison) requests 1 additional Type 1 Helicopter.

07:35 Helitanker 792, off Bracket Helibase en-route to the Station Fire with a 9 minute ETA.

08:00 Station Fire IC Type 3, (Spyrison) transfers command of the Station Fire to ANF Battalion Chief (Gomez) as the Type 3 IC and ANF Captain 18 (Conklin) as the trainee Type 3 Incident Commander.

08:02 Lead Plane 57 [ROSS request A-21] departs FOX Air Tanker Base, en-route to the Station Fire. Approximate flight time 10 minutes.

08:21 Station Fire Incident Commander (Gomez) requests 4 additional Type 1 Helicopters. [ROSS requestsA-30, A-31, A-32, A-33]

08:22 ANF ECC ordered a Los Angeles County Chief Officer (Agency Rep) [ROSS request O-8] at the request of the Station IC (Gomez).

08:42 Air Tanker 55 [ROSS request A-35] departs from FOX Air Tanker Base with a 10 minute ETA to the fire.

08:51 Air Tanker 11 [ROSS request A-36] departs from FOX Air Tanker Base with a 10 minute ETA to the fire.

08:56 Air Tanker 43 [ROSS request A-38] departs from FOX Air Tanker Base with a 10 minute ETA to the fire. Air Tanker 43 assigned to the Station Fire at the request of CAL Fire Air Attack 310.

09:00 Helicopter 523 [ROSS request A-13] departs from Kernville Helibase with a 1 hour ETA to the Station Fire.

09:03 Air Tanker 45 [ROSS request A-37] departs from FOX Air Tanker Base with a 10 minute ETA to the fire.

* The dayshift Aircraft dispatcher created [ROSS requests A-35, A-36, A-37] to fill the air tanker request placed by ANF Division Chief 1 (Spyrison) at 00:50 at time of departure from FOX Air Tanker Base on 08/27/09 at 08:40. While reviewing unfilled aircraft orders created in ROSS, the dayshift Aircraft dispatcher cancelled [ROSS requests A-16, A-17, A-18]
which had been created at 00:50 by the night aircraft dispatcher. This was an administrative decision made by the dayshift aircraft dispatcher and the ECC Manager after determining that all air tanker requests placed at 00:50 had been filled.

* At the time of release of fixed wing aircraft on 08/26/09 from the Station Fire there were no requests for air tankers on the Station Fire for 08/27/09. All air tankers on base at FOX Air Tanker Base were assigned to the Morris fire and were requested to be on duty by 0700 on 08/27/09 by the Morris Fire Air Operations Branch Director. On 08/26/09 no aircraft were refueled at FOX Air Tanker Base in order to meet duty day limitations and be on duty at 0700 on 08/27/09 as requested.

* On the morning of 08/27/09, after refueling, all air crews were required to attend the mandatory morning air operations safety briefing. Aircraft were dispatched and launched at the earliest time possible after the briefing.

09:09 ANF Helitanker 734 [ROSS request A-32] reassigned from the Morris Fire to the Station Fire, with a 5 minute ETA.

09:12 Los Angeles County Chief Officer Steve Martin [ROSS request O-8] on scene of the Station Fire.

09:15 Cleveland National Forest Helitanker 781 [ROSS request A-30] off Hemet Ryan, en-route to the Station Fire with a 1 hour ETA to the fire.

09:20 Los Angeles County Helitanker 732 [ROSS request A-31] departed from Van Nuys Airport en-route to the Station Fire with a 20 minute ETA.

09:35 Helicopter 554 [ROSS request A-14] on scene of the Station Fire.

09:41 Los Angeles City Helitanker 743 [ROSS request A-33] departed from Van Nuys Airport en-route to Station Fire with a 20 minute ETA.

10:07 Helicopter 523 [ROSS request A-13] on scene of the Station Fire

13:10 Station Fire IC (Gomez) and Los Angeles County Assistant Chief Jim Powers enter into Unified Command for the Station Fire.

16:25 Station Air Attack requests 2 additional Air Tankers. Due to fire spread to the south. Air Tanker 27 reassigned from the Morris Fire to the Station Fire [ROSS request A-40]. Air Tanker 12 reassigned from the Morris Fire to the Station Fire [ROSS request A-41].

* During the day of 08/27/09 Air Attack 310, 410, 509, Lead Planes 57 and 47 were assigned to the Station Fire.

* Air Tanker 55 [ROSS request A-35] flew 7 sorties on the Station Fire and dropped a total of 14,574 gallons of retardant.

* Air Tanker 11 [ROSS request A-36] flew 11 sorties on the Station Fire and dropped a total of 22,902 gallons of retardant.

* Air Tanker 45 [ROSS request A-37] flew 10 sorties on the Station Fire and dropped a total of 20,820 gallons of retardant.

* Air Tanker 43 [ROSS request A-38] flew 7 sorties on the Station Fire and dropped a total of 14,574 gallons of retardant.

* Air Tanker 27 [ROSS request A-40] flew 4 sorties on the Station Fire and dropped a total of 9,993 gallons of retardant.

* Air Tanker 12 [ROSS request A-41] flew 2 sorties on the Station Fire and
dropped a total of 4,164 gallons of retardant.

* Total 87,027 gallons of retardant dropped on 08/27/09

On 08/27/09 all Rotor Wing Aircraft assigned to the Station Fire remained on duty until cutoff time or were released by air attack.
US Forest Service
Fire and Aviation Management
Briefing Paper

Date: January 22, 2010

Topic: Night Flight Fire Operations

Issue: Night flying low level rotor wing tactical operations introduces additional risk and cost with limited unknown benefits

Background:

The Forest Service does not currently prohibit night flights. Rather, night flights are allowed with the following restrictions contained in Forest Service Manual 5716.2-Night Flying:

- Use only multi-engine aircraft for night flights. Pilots flying night missions shall not land at an airport or heliport unless it meets Federal Aviation Administration (FAA) lighting standard, except:
  1. This restriction does not apply to pilots flying night-vision goggle missions in single-engine helicopters for the purpose of training.
  2. Single-engine aircraft flights at night are authorized only for ferry and cargo-carrying missions at the vendor’s option and in accordance with FAR 91 (14 CFR Part 91).

The Forest Service currently conducts approximately 500-600 hours of high altitude fixed wing night flights per year. The majority of these flights are almost all fire mapping and imaging using infrared and line scanning technology. These flights are conducted in fixed-wing aircraft at high altitude and require little additional training or equipment.

On the other hand, night flights in the tactical low-level firefighting environment, while not prohibited, are rarely conducted by the Forest Service. FS Fire and Aviation experts have generally concluded that the risks of night flying outweigh the benefits of night flying. Night flights in the wildland environment are difficult to accomplish without visual aids such as night vision goggles, moving map displays and forward looking infrared radar (FLIR). While this technology is currently available in the marketplace, and there is growing interest within the commercial helicopter industry to explore the possibility of conducting tactical operations (mainly water drops) at night, most Forest Service contract aircraft are not equipped for night flying. Equipping aircraft for night flying and would require a large funding commitment for this additional capability. The question of whether or not the benefits of night flight in the tactical low-level firefighting environment exceed the cost has not been adequately answered.

Ground firefighting operations are routinely curtailed at night where there are firefighter safety concerns such as reduced visibility of hazards associated with snags and terrain. This has led to an overall reduction in the request for tactical low-level night flights within the Forest Service. Without the aid of firefighters on the ground, water and retardant drops are generally ineffective.

The Forest Service has some experience, albeit dated, with night flying helicopter operations. On July 24, 1977, a Bell 212 helicopter on contract to the Forest Service collided with a Bell 205 A-1 helicopter belonging to Los Angeles County. Both helicopters were conducting night water
drops on the Angeles National Forest using night vision goggles. The accident occurred as the two helicopters were approaching to land at the Mill Creek Heliport. Los Angeles County discontinued night firefighting flights immediately after that accident. The Forest Service continued to operate at night until 1984 when it discontinued low-level night flights due to low utilization of night flying and a lack of a positive benefit compared to the cost and a lack of funding.

Los Angeles County Fire Department, Los Angeles City Fire Department, and San Diego City Fire Department now have night flying capability for their helicopters. The night flying capability is justifiable because of the emergency medical service (EMS) mission of these fire departments. Recently, they have reversed their decision and, along with several other government agencies in California, now operate firefighting helicopters at night. However, they do not conduct tactical operations (e.g., water dropping) drop on FS land unless there is a cooperative agreement, or there is a direct threat and they are in unified command with the FS.

Recent wildfires on the Angeles NF (or Los Padres NF) that were supported by Los Angeles County night firefighting helicopters are as follows:

- 2009-Station Fire, and Jesuita Fire (Los Padres NF)
- 2008-Marek Fire, Sesnon Fire, Sayers Fire, and Tea Fire (Los Padres NF)
- 2007-Cabin Fire, and Canyon Fire
- 2003-Los Alamos Fire

The Forest Service recently engaged the San Dimas Technology and Development Center to conduct a feasibility study of night helicopter operations for firefighting. The study is scheduled to be completed by September 30, 2010 and will address the following:

- Mission Definition and Scope
- History of Night Helicopter Operations and Lessons Learned
- Review of Existing Helicopter Night Operations Programs
- Review of Visual Aids for Night flight
- Risk Assessment
- Cost Evaluation

The Forest Service fire and aviation managers plan to evaluate low level fixed wing operations (e.g., retardant drop) at night after night helicopter operations have been addressed.

Any plan to change current operations would require a significant analysis and presentation to the Deputy Chief for a decision.

**Observations:** There are some advantages to night flying. Water drops are more effective at night, when fuel temperatures are lower and fuel moisture and humidity are higher, than in daylight conditions. At night, fire is easier to detect by air.

However, there are some disadvantages to night flying. There is increased risk in night flight. Depth perception and visual cues are less defined. Illumination is reduced and there is a series of visual illusions which can cause problems for pilots at night. However, many of these risks can be mitigated with training and technology.

Ground firefighting operations are routinely curtailed at night due to firefighter safety concerns such as reduced visibility of hazards associated with snags and terrain. This has led to an overall
reduction in tactical low-level night flights within the Forest Service. Without the aid of firefighters on the ground, water and retardant drops are often ineffective.

**Forest Service Policy:** The Forest Service does not prohibit night flights. Rather, night flights are allowed with the following restrictions contained in FSM 5716.2 Night Flying:

- Use only multi-engine aircraft for night flights. Pilots flying night missions shall not land at an airport or heliport unless it meets Federal Aviation Administration (FAA) lighting standard, except:
  1. This restriction does not apply to pilots flying night-vision goggle missions in single-engine helicopters for the purpose of training.
  2. Single-engine aircraft flights at night are authorized only for ferry and cargo-carrying missions at the vendor’s option and in accordance with FAR 91 (14 CFR Part 91).

**Cost:** There is some significant cost associated with night flying. Pilots would require training and qualification for night vision goggles. This training is available commercially from Bell Helicopters and other FAA part 141 approved schools. Aircraft need modifications for night flight consisting of low intensity cockpit lights, low intensity exterior lights and supplemental illumination for low ambient light conditions. There is also an increased workload associated with night vision goggles that may require additional crew rest and additional crewmembers. Initial qualification and aircraft modification is approximately $65,000 for one aircraft and pilot. Annual pilot re-currency training is an additional $25,000 per year. FLIR systems and moving map displays can be installed for $30-50,000 per aircraft.

Finally, there are some other options for the FS regarding night flying. These include options such as Options:

- Contracting with cooperators (like LA County) for use on FS incidents, conducting evaluation contract with Los Angeles County for a night-equipped helicopter.
- Conduct initial night evaluating flights using Region 5’s FireWatch helicopter.
- Contracting with the Air National Guard or defense cooperators ask the military to provide night helicopter support.

**Contact:** James Hubbard, Deputy Chief, State and Private Forestry, 202-205-1657
There are 6 documents here in this message. All of them are documents the Chief has requested. Additional specific information about helicopter hours and gallons need to be compiled with assistance from folks who can mine data from our data bases. I'm not red-carded for that!!

This is the most updated timeline/chronology which has been updated in accordance with the Chiefs wishes:

This is the document which breaks out the ordering and deployment of large airtankers on the Station Fire for August 26 and 27:

This is the document which explains our night flying practice:

This is the document which has a paragraph about "double crewing":

This is the document where I took the statement from the IC and pasted it into a word document:

This is a document which summarizes the location and status of large airtankers in SoCal the mornings of 26 and 27 August

Hope this meets his needs -
The following information has been gathered from the following sources; Dictaphone Audio recordings of the Angeles National Forest frequencies on 08/26/09 and 08/27/09, Los Angeles County Fire Department Call History #F09206965, Station Fire Resource Ordering and Status System, Angeles National Forest WildCAD incident card 08/26/09 and 08/27/09, William J. Fox Air Tanker Base daily aircraft summary.

The previously identified information recording and documenting systems have been reconciled; however individual systems with date and time stamping may reflect slight differences in time recordings.

The Morris Fire started on August 25, 2009 in San Gabriel Canyon on the Angeles NF. It escaped initial attack and SO CA IMT 2 (Woychak) took command of the Morris fire at 0600 on 8/26. ANF resources committed to the Morris fire included all five forest hotshot crews, all forest aircraft and a Type 3 engine strike team. There was also a heavy air resource commitment from LA County, along with federal resources from other R5 Forests and surrounding regions. Fire was aggressively and actively burning to the east and north. At the time the Station fire started, the Morris fire was approx 1500 acres and less than 20% contained. It was the highest priority fire in the Southern Geographic Coordination Area. As per standard operating procedures, when the Station fire started, a significant amount of air resources were diverted from the Morris to the Station fire for initial attack.

On 8/26 and 8/27 the CL 215s (Super Scoopers) were not under contract yet to LA County. Because of fire activity in Southern CA, LA County activated the contract one day earlier than scheduled and the aircraft arrived in the area on 8/31.

The Palace Verdes Fire started on 8/28 in LA County fire jurisdiction. All LA County air resources assigned to the Station fire were diverted by LA County for initial attack on the Palace Verdes fire on 8/28.

Official sunrise/sunset: 0608hr/1905hr for 8/26 and 0608hr/1904hr for 8/27.

**August 26, 2009**

<table>
<thead>
<tr>
<th>Time</th>
<th>Facts</th>
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<tbody>
<tr>
<td>06:08</td>
<td>Official Sunrise for August 26, 2009</td>
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<tr>
<td>15:20</td>
<td>Initial Call from ANF Patrol 11 (Ochoa) reporting a walk in report of a possible vegetation fire. Responding to a fire 1.5 miles north of Angeles Crest Station on Angeles Crest Hwy.</td>
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</tbody>
</table>
| 15:23   | A full brush fire response is dispatched from the Angeles National Forest. The initial order included the following aircraft and Chief Officer assignments from ANF. This does not include all resources of the initial dispatch.  
1 Division Chief (Division 1, Spyrison)  
1 Battalion Chief (Battalion 13, Aguirre)  
1 Fixed Wing Air Attack-12 (AA-12) already in the air and diverted from the Morris Fire)  
1 Lead Plane  
2 Airtankers, Tanker 45 and Tanker 11(diverted from the Morris Fire by AA-12)  
1 Helitanker – HT 792 (diverted from the Morris Fire by AA-12)  
*Estimated flight time from the Morris fire to the Station fire is approximately 5 minutes.* |
| 15:24   | A full brush fire response is dispatched by LA County Fire Department per the Annual Operating Agreement. The following aircraft and Chief Officer resources responded to the Station Fire. This does not include all resources of the initial assignment.  
Battalion Chief – 4, Dave Thies  
Battalion Chief – 6, Buck Buchanan |
15:24 ANF Patrol 11(Ochoa) arrives on scene, reporting 3 acres burning uphill in brush, with light winds, burning mid-slope to up-slope.

15:27 ANF Patrol 11(Ochoa) requests aircraft to be diverted from the Morris Fire. (Aircraft already diverted by the aircraft desk at ANF ECC from the Morris Fire during the initial attack response at 15:23).

15:30 ANF Engine 12 arrives on scene

15:34 Los Angeles County Battalion Chief 46 (Hale) is dispatched to the Station fire by Los Angeles County Command and Control Dispatch Center. Arrived on scene at 15:44

15:36 ANF Captain 12 (Martinez) assumes Incident Commander of the Station Fire.

15:49 ANF Division 1, (Spyrison) arrives on scene

15:50 Los Angeles County Helicopter 12 arrives on scene (Unknown source of order)

15:51 ANF Division 1 (Spyrison) assumes Incident Commander Type 3 of the Station Fire

16:07 ANF ECC created [ROSS request A-6] for a relief Air Attack to be over the Station fire at 17:30

16:17 Los Angeles County Battalion Chief 4 (Thies) assigned as Operations Section Chief by Station IC(Spyrison), Los Angeles County Battalion Chief 6 (Buchanan) assigned as the LA County Agency Representative.

16:21 Los Angeles County Assistant Chief 3, Luke Claus arrives on scene. (Unknown position on the Station Fire)

16:22 Lead Plane 47 departed FOX Air Tanker Base, en-route to the Station Fire

* Estimated flight time from FOX to the Station Fire is approximately 10 minutes.*

17:00 CAL Fire Air Attack 310 [ROSS request A-6] departed Hemet Ryan Air Tanker Base en-route to the Station Fire. Approximate flight time 25 minutes.

17:26 Station Fire IC, (Spyrison) requests Los Angeles County Helicopter 14 for night flying operations. The request was made because IC Spyrison felt the night flying helicopter would expedite the mop-up operation on the southern flank of the fire. Excessive steepness of terrain was making the hose lay progression slow. IC Spyrison still felt the control objectives were being met and thought the addition of a night flying water dropping helicopter resource, if available, would be beneficial for a few hours after dark.

17:34 Los Angeles County Battalion Chief 6 (Buchanan) advises Los Angeles County Command and Control Dispatch Center, of request for Helicopter 14 for night flying operations.

17:43 Los Angeles County Helicopter 14 dispatched to the Station fire by Los Angeles County Command and Control Dispatch Center.

17:43 Station IC (Spyrison) requests 2 medium water dropping helicopters for 08/27/09 at 0800hrs. ROSS Request #’s A-13 and A-14, requests placed to Southern California Geographic Area Coordination Center. [ROSS request A-13] was filled by Helicopter 523 from the Sequoia National Forest. Helicopter 520 from the Sierra National Forest was planned to be assigned to [ROSS request A-14] by the Southern
California Geographic Area Coordination Center. Aircraft order was based on the current fire conditions and what was anticipated as needs for the next day. The fire was 15 acres, the fireline was being constructed by ground crews and control objectives were being met. Mop-up and line construction was progressing well.

17:53 ANF ECC created the request for Helicopter 14. [ROSS request A-11].

18:01 Per Los Angeles County Battalion Chief 46 (Hale) and Command and Control Dispatch Center Battalion Chief (Unknown), LA County orders release of Helicopter 14 immediately for County EMS coverage. (Documented in Los Angeles County Command and Control Dispatch Center call history).

18:08 Los Angeles County Command and Control Dispatch Center filled earlier request for Helicopter 14 [ROSS request A-11] in the system. This request was filled in ROSS for documentation purposes.

18:39 Helitanker 732, released by Air Attack from Station Fire, en-route to fuel. The aircraft releases between now and 19:55 were based upon current fire conditions and recommendations for the releases from CAL Fire Air Attack 310 to both LA County Operations Section Chief (Thies) to Station IC (Spyrison).

18:40 Los Angeles County Assistant Chief 3 (Claus) released and available.

18:58 Air Tanker 11 released by Air Attack, on the ground at FOX Air Tanker Base

19:05 Official Sunset for August 26, 2009
CAL Fire Air Attack 310 released per Station IC (Spyrsion), ETA back to Hemet Ryan 19:33

19:20 Lead Plane 47 released by Air Attack, on the ground at FOX Air Tanker Base

19:23 Air Tanker 45 released by Air Attack, on the ground at FOX Air Tanker Base

19:26 Los Angeles County Helicopter 19, released from the Station Fire, and notified Los Angeles County Command and Control Dispatch Center they were available.

19:37 Los Angeles County Helicopter 18, released from the Station Fire, and notified Los Angeles County Command and Control Dispatch Center they were available.

19:40 Los Angeles City Fire Department Copter Fire 5, released from the Station Fire

19:53 Los Angeles County Copter 12, released, available from the Station Fire, and notified Los Angeles County Command and Control Dispatch Center they were available.

19:55 Helitanker 792 released by Station IC (Spyrison).

20:18 Los Angeles County Battalion Chief 42 (Hale) assumes LA County Agency Rep, Los Angeles County Battalion Chiefs 4(Thies) and 6 (Buchanan) released from the fire. Station IC (Spyrison) and LA County Agency Rep (Hale) along with fire line crew leaders discussed whether or not to burn out a small, less than ¼ acres island, in the center of the burn above the highway. A mutual decision was made not to burn it out due to steepness of terrain (safety concerns) and anticipated night time down canyon breezes. It was felt a burn out operation would further increase the risk and potential for spotting from the burnout operation, and compromise the safety of personnel working above the highway. The decision was made to let the island burn out on its own.

22:35 ANF Captain 17(Bastedo) assumes Incident Commander Type 4 with ANF Patrol 16 (Dimaculangan) as the trainee Incident Commander Type 4.

* Air Tanker 45 and Air Tanker 11 dropped 4 loads each totaling 16,656 gallons of retardant.
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<th>Time</th>
<th>Facts</th>
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| 00:50 | ANF Division 1 (Spyrison) requesting 1- Type 1 Helitanker [ROSS request A-15], 3- Air Tankers (any type) [ROSS request A-16, A-17, A-18], 1 Air Attack [ROSS request A-19] and 1 Lead Plane [A-20]. Aircraft orders requested to be over the fire by 0700 because of the spot fires below HWY 2. **At the time of this request the air tanker crews were on their 10 hours uninterrupted rest requirement as referenced in the National Air Tanker Contract. Had the air tanker crews been contacted at this time (00:50), their 10 hour uninterrupted rest requirement would have been restarted further delaying their response time.**  
Spot fires are occurring below the Angeles Crest Highway. Three to four spot fires have been successfully suppressed by engines and ground crews. One spot fire, estimated at 2-5 acres, 200-300 feet below the highway was inaccessible with unburned fuels between the spot fire and the highway. Access to the spot fire is difficult. Line personnel cannot find safe access points to begin downhill line construction and mitigate safety protocols and downhill line construction guidelines (reference 10 and 18 Fire Orders). Mop-up continued on the portion of fire above the highway with good progress being made. |
| 01:38 | ANF Division Chief 1 (Spyrison) requests a Type 3 Incident Commander for Station Fire day shift. Order filled with ANF Battalion Chief 33 (Gomez). Spot fire below the highway still remained at 2-5 acres, and the fire above the road was still around 15 acres, it had not increased in size through the night. IC Spyrison felt the complexity of the fire was back in the Type 3 complexity level. |
| 02:29 | ANF Division Chief 1 (Spyrison) assumes Incident Commander Type 3 due to the spot fires below the Angeles Crest Highway and the complexity of the fire behavior. Due to the fire behavior at this time crews were unable to make access to the spot fires without compromising the 10 Standard Fire Orders, 18 Situations that Shout Watch Out and the Downhill Line Construction Checklist. |
| 04:06 | ANF Battalion Chief 33 (Gomez) requests priority trainee ANF Captain 18 (Conklin) to be assigned as the Type 3 IC trainee. |
| 04:43 | Southern California Geographic Area Coordination Center advised ANF ECC that [ROSS request A-14] will not be filled with Helicopter 520 from the Sierra National Forest due to a divert of the aircraft to an immediate need request by Yosemite National Park due to spot fires. Southern California Geographic Area Coordination Center advises they will attempt to fill the order elsewhere. |
| 04:45 | ANF ECC advised Station IC (Spyrison) status of request [ROSS request A-14] |
| 04:45 | Station IC (Spyrison) suggests attempting to fill [ROSS request A-14] with a Los Angeles County Helicopter. |
| 04:46 | ANF ECC contacted Los Angeles Command and Control Dispatch Center via telephone, of availability of a helicopter for day shift to fill [ROSS request A-14]. All attempts to engage the spot fire below the highway were unsuccessful, with no access points being found to provide safe anchor points for firefighters. Station IC (Spyrison) decides helicopter support at first light is the best solution |
to try and keep the fire from spreading and to provide some chance for firefighters to safely access the spot fire below the highway.

04:47 Los Angeles County Command and Control Dispatch advised ANF ECC, via telephone, unable to fill [ROSS request A-14]. Per Los Angeles County Command and Control Dispatch Chief (Unknown) unable to fill due to pilot shortage.

04:47 ANF ECC advises Station IC (Spyrison), Los Angeles County unable to fill [ROSS request A-14].

04:50 Station IC (Spyrison) advises ANF ECC to check with Los Angeles City Fire Department on the availability of a helicopter to fill [ROSS request A-14]

05:03 Los Angeles City Fire Department Battalion Chief (Sullivan) advised ANF ECC, via telephone, Helicopter Fire2 can fill [ROSS request A-14] if nothing comes up between now and the time you need them.

05:54 Los Angeles City Fire Department Battalion Chief (Sullivan) advised ANF ECC, not able to fill [ROSS request A-14].

06:08 Official Sunrise for August 27, 2009

06:35 CAL Fire Air Attack 310 [ROSS request A-19] departed from Hemet Ryan Air Tanker Base. ETA to the Station Fire 06:55.

06:45 CAL Fire Air Attack 310, in radio communication with ANF Battalion Chief 11(Garcia). (Per audio recording). ANF Battalion Chief 11 (Garcia) was acting as Station Operations while the Station IC (Spyrison) briefed the incoming IC (Gomez). ANF ECC Manager (Edward Hesbol) and ANF Battalion Chief 11 (Garcia) both recall hearing a radio conversation between CAL Fire Air Attack 310 and an unknown contact on the condition of the fire as CAL Fire Air Attack 310 arrived on scene. CAL Fire AirAttack 310 was asking the unknown contact what air resources were ordered for the station fire that morning and advised that the fire was very smoked in on the lower portion below the highway, he felt it would be hard to get aircraft into the areas below the highway at this time, very hazy conditions exist on upper portions of the fire, but felt he could safely work some aircraft on the ridges above the fire.

06:50 From ANF Battalion Chief 11 (Garcia) to ANF ECC aircraft desk, per Station Air Attack CAL Fire Air Attack 310, launch the Lead Plane. (Per audio recording)

06:56 ANF ECC aircraft desk (with late log entry), contacted Morris Fire Air Operation Branch Director and requested 1 Helitanker [ROSS request A-15] 3 Air Tankers [ROSS requests A-16, A-17, A-18] and 1 Type 2 helicopter to fill [ROSS request A-14]

07:01 All aircraft and aircrews assigned to the FOX Air Tanker Base are on duty as of 0700 performing aircraft preflight checks, refueling and attending morning fire situation and safety briefings. Morris IC [Woychak] advised ANF ECC aircraft desk, the Morris Fire will fill [ROSS request A-14] with Helicopter 554 for water dropping only. And will fill [ROSS request A-15] with Helitanker 792 and the Station fire can have the Lead Plane [ROSS request A-20] and 3 Air Tankers from the Morris Fire to fill [ROSS requests A-35, A-36, A-37]. Morris IC (Woychak) requests ANF ECC to create an order to fill behind Helicopter 554 for the Morris Fire.
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>07:30</td>
<td>Station IC, (Spyrison) requests 1 additional Type 1 Helicopter.</td>
</tr>
<tr>
<td>07:35</td>
<td>Helitanker 792, departed Bracket Helibase en-route to the Station Fire with a 9 minute ETA.</td>
</tr>
<tr>
<td>08:00</td>
<td>Station Fire IC Type 3, (Spyrison) transfers command of the Station Fire to ANF Battalion Chief (Gomez) as the Type 3 IC and ANF Captain 18 (Conklin) as the trainee Type 3 Incident Commander.</td>
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<tr>
<td>08:02</td>
<td>Lead Plane 57 [ROSS request A-21] departs FOX Air Tanker Base, en-route to the Station Fire. Approximate flight time 10 minutes.</td>
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<tr>
<td>08:21</td>
<td>Station Fire IC (Gomez) requests 4 additional Type 1 Helicopters. [ROSS requests A-30, A-31, A-32, A-33] Station IC Gomez requests additional aircraft resources based on increased fire activity below the highway. Aggressive spreading of the fire down canyon towards the communities of La Canada - Flintridge. Fast uphill slope fire runs were being witnessed by ground personnel. Air Attack suggested adding 1 additional Air Tanker to the previously 3 ordered, for a total of 4. The order was placed via Air Attack to Fox ECC aircraft desk via radio, order was filled.</td>
</tr>
<tr>
<td>08:22</td>
<td>ANF ECC ordered a Los Angeles County Chief Officer (Agency Rep) [ROSS request O-8] at the request of the Station IC (Gomez).</td>
</tr>
<tr>
<td>08:42</td>
<td>Air Tanker 55 [ROSS request A-35] departs from FOX Air Tanker Base with a 10 minute ETA to the fire.</td>
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<tr>
<td>08:51</td>
<td>Air Tanker 11 [ROSS request A-36] departs from FOX Air Tanker Base with a 10 minute ETA to the fire.</td>
</tr>
<tr>
<td>08:56</td>
<td>Air Tanker 43 [ROSS request A-38] departs from FOX Air Tanker Base with a 10 minute ETA to the fire. Air Tanker 43 assigned to the Station Fire at the request of CAL Fire Air Attack 310.</td>
</tr>
<tr>
<td>09:00</td>
<td>Helicopter 523 [ROSS request A-13] departs from Kernville Helibase with a 1 hour ETA to the Station Fire.</td>
</tr>
<tr>
<td>09:03</td>
<td>Air Tanker 45 [ROSS request A-37] departs from FOX Air Tanker Base with a 10 minute ETA to the fire.</td>
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</table>

* The dayshift Aircraft dispatcher created [ROSS requests A-35, A-36, A-37] to fill the air tanker request placed by ANF Division Chief 1 (Spyrison) at 00:50 at time of departure from FOX Air Tanker Base on 08/27/09 at 08:40. While reviewing unfilled aircraft orders created in ROSS, the dayshift Aircraft dispatcher cancelled [ROSS requests A-16, A-17, A-18] which had been created at 00:50 by the night aircraft dispatcher. This was an administrative decision made by the dayshift aircraft dispatcher and the ECC Manager after determining that all air tanker requests placed at 00:50 had been filled. |

* At the time of release of fixed wing aircraft on 08/26/09 from the Station Fire there were no requests for air tankers on the Station Fire for 08/27/09. All air tankers on base at FOX Air Tanker Base were assigned to the Morris fire and were requested to be on duty by 0700 on 08/27/09 by the Morris Fire Air Operations Branch Director. On 08/26/09 no aircraft were refueled at FOX Air Tanker Base in order to meet duty day limitations and be on duty at 0700 on 08/27/09 as requested. |

* On the morning of 08/27/09, after refueling, all air crews were required
To attend the mandatory morning air operations safety briefing. Aircraft were dispatched and launched at the earliest time possible after the briefing.

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<tr>
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<tr>
<td>09:09</td>
<td>ANF Helitanker 734 [ROSS request A-32] reassigned from the Morris Fire to the Station Fire, with a 5 minute ETA.</td>
</tr>
<tr>
<td>09:12</td>
<td>Los Angeles County Chief Officer Steve Martin [ROSS request O-8] on scene of the Station Fire.</td>
</tr>
<tr>
<td>09:15</td>
<td>Cleveland National Forest Helitanker 781 [ROSS request A-30] off Hemet Ryan, en-route to the Station Fire with a 1 hour ETA to the fire.</td>
</tr>
<tr>
<td>09:20</td>
<td>Los Angeles County Helitanker 732 [ROSS request A-31] departed from Van Nuys Airport en-route the Station Fire with a 20 minute ETA.</td>
</tr>
<tr>
<td>09:35</td>
<td>Helicopter 554 [ROSS request A-14] on scene of the Station Fire.</td>
</tr>
<tr>
<td>09:41</td>
<td>Los Angeles City Helitanker 743 [ROSS request A-33] departed from Van Nuys Airport en-route to Station Fire with a 20 minute ETA.</td>
</tr>
<tr>
<td>10:07</td>
<td>Helicopter 523 [ROSS request A-13] on scene of the Station Fire. Station IC (Gomez), Trainee IC (Conklin) and ANF Forest Fire Chief 2 (John Thomas) discuss trigger points for consideration to enter into unified command with LA County Fire based on fire progression to the west, and south towards the communities of La Canada-Flintridge and Big Tujunga canyon. Fire is burning aggressively with fast uphill runs being witnessed. The fire below the highway is still problematic with access and anchor points being difficult to establish by ground crews. Some line progression is being made below the highway and above the highway by ground crews with aerial support.</td>
</tr>
<tr>
<td>13:10</td>
<td>Station Fire IC (Gomez) and Los Angeles County Assistant Chief Jim Powers enter into Unified Command for the Station Fire. The fire has reached established trigger points previously discussed by Gomez, Conklin and Thomas. The fire is spreading down canyon rapidly, making strong fast uphill runs. Crews are having difficulty hanging on to established control lines.</td>
</tr>
<tr>
<td>13:42</td>
<td>ANF Forest Fire Chief (David Conklin) places an order for a Type 1 Incident Command Team (IMT) for the Station fire. The complexity of the fire had reached the Type 1 level.</td>
</tr>
<tr>
<td>15:30</td>
<td>ANF Forest Fire Chief (David Conklin) and Morris IC (Woychak) agree via phone conversation that the Station Fire will become a branch under the Morris Fire at 1800 that evening. The Station fire is still under Unified Command with Los Angeles County.</td>
</tr>
<tr>
<td>16:25</td>
<td>Station Air Attack requests 2 additional Air Tankers. Due to fire spread to the south. Air Tanker 27 reassigned from the Morris Fire to the Station Fire [ROSS request A-40], Air Tanker 12 reassigned from the Morris Fire to the Station Fire [ROSS request A-41]. These additional air resources were requested by Air Attack through the Station ICs (Gomes and Powers), due to fire progression to the south and fire not holding on the main ridge line above the Angeles Crest Fire Station.</td>
</tr>
</tbody>
</table>

* During the day of 08/27/09 Air Attack 310, 410, 509, Lead Planes 57 and 47 were assigned to the Station Fire. *

* Air Tanker 55 [ROSS request A-35] flew 7 sorties on the Station Fire and dropped a total of 14,574 gallons of retardant. *
* Air Tanker 11 [ROSS request A-36] flew 11 sorties on the Station Fire and dropped a total of 22,902 gallons of retardant.

* Air Tanker 45 [ROSS request A-37] flew 10 sorties on the Station Fire and dropped a total of 20,820 gallons of retardant.

* Air Tanker 43 [ROSS request A-38] flew 7 sorties on the Station Fire and dropped a total of 14,574 gallons of retardant.

* Air Tanker 27 [ROSS request A-40] flew 4 sorties on the Station Fire and dropped a total of 9,993 gallons of retardant.

* Air Tanker 12 [ROSS request A-41] flew 2 sorties on the Station Fire and dropped a total of 4,164 gallons of retardant.

* Total 87,027 gallons of retardant dropped on 08/27/09

On 08/27/09 all Rotor Wing Aircraft assigned to the Station Fire remained on duty until cutoff time or were released by air attack.

18:00 Morris IC (Woychak) assumes command for Station Fire as a branch under the Morris incident until 1400hrs on 8/28 when the Type 1 IMT that had been ordered, assumed command of the Station fire.

19:04 Official Sunset for August 27, 2009
USE OF AIRTANKERS ON THE STATION FIRE FROM AUGUST 26 THRU AUGUST 27, 2009

August 26, 2009

<table>
<thead>
<tr>
<th>Time Ordered</th>
<th>Ross#</th>
<th>Aircraft</th>
<th>Departure Time</th>
<th>#Trips</th>
<th>Total Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:23</td>
<td>A-1</td>
<td>AT45</td>
<td>15:23 from Morris</td>
<td>4</td>
<td>8,328</td>
</tr>
<tr>
<td>15:23</td>
<td>A-2</td>
<td>AT11</td>
<td>15:23 from Morris</td>
<td>4</td>
<td>8,328</td>
</tr>
</tbody>
</table>

16,656 Total 8/26

August 27, 2009

<table>
<thead>
<tr>
<th>Time Ordered</th>
<th>Ross#</th>
<th>Aircraft</th>
<th>Departure Time</th>
<th>#Trips</th>
<th>Total Gallons</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:50</td>
<td>A-16/A-35</td>
<td>AT55</td>
<td>08:42 from Fox</td>
<td>7</td>
<td>14,574</td>
</tr>
<tr>
<td>A-17/A-36</td>
<td>AT11</td>
<td>08:51 from Fox</td>
<td>11</td>
<td>22,902</td>
<td></td>
</tr>
<tr>
<td>A-18/A-37</td>
<td>AT45</td>
<td>09:03 from Fox</td>
<td>10</td>
<td>20,820</td>
<td></td>
</tr>
<tr>
<td>08:21</td>
<td>A-38</td>
<td>AT43</td>
<td>08:56 from Fox</td>
<td>7</td>
<td>14,574</td>
</tr>
<tr>
<td>16:25</td>
<td>A-40</td>
<td>AT27</td>
<td>16:25 from Morris</td>
<td>4</td>
<td>9,993</td>
</tr>
<tr>
<td>A-41</td>
<td>AT12</td>
<td>16:25 from Morris</td>
<td>2</td>
<td>4,164</td>
<td></td>
</tr>
</tbody>
</table>

87,027 Total 8/27

Notes:
Approximate flight time from Morris fire to Station Fire is 5 minutes
Approximate flight time from Fox Air Tanker Base to Station Fire is 10 minutes
On 8/27 All Pilots and flight crews reported to duty at 0700 at Fox Air Tanker Base. Because of work/rest guidelines in their contracts and the hours they worked and flew on 8/26 they were unable to start their shift until 0700.
All Air Tanker orders for 8/26 and 8/27 were filled
US Forest Service
Fire and Aviation Management
Briefing Paper

Date: January 22, 2010

Topic: Night Flight Fire Operations

Issue: Night flying low level rotor wing tactical operations introduces additional risk and cost with limited unknown benefits

Background:
The Forest Service does not currently prohibit night flights. Rather, night flights are allowed with the following restrictions contained in Forest Service Manual 5716.2-Night Flying:

- Use only multi-engine aircraft for night flights. Pilots flying night missions shall not land at an airport or heliport unless it meets Federal Aviation Administration (FAA) lighting standard, except:
  1. This restriction does not apply to pilots flying night-vision goggle missions in single-engine helicopters for the purpose of training.
  2. Single-engine aircraft flights at night are authorized only for ferry and cargo-carrying missions at the vendor’s option and in accordance with FAR 91 (14 CFR Part 91).

The Forest Service currently conducts approximately 500-600 hours of high altitude fixed wing night flights per year. The majority of these flights are almost all fire mapping and imaging using infrared and line scanning technology. These flights are conducted in fixed-wing aircraft at high altitude and require little additional training or equipment.

On the other hand, night flights in the tactical low-level firefighting environment, while not prohibited, are rarely conducted by the Forest Service. FS Fire and Aviation experts have generally concluded that the risks of night flying outweigh the benefits of night flying. Night flights in the wildland environment are difficult to accomplish without visual aids such as night vision goggles, moving map displays and forward looking infrared radar (FLIR). While this technology is currently available in the marketplace, and there is growing interest within the commercial helicopter industry to explore the possibility of conducting tactical operations (mainly water drops) at night, most Forest Service contract aircraft are not equipped for night flying. Equipping aircraft for night flying would require a large funding commitment for this additional capability. The question of whether or not the benefits of night flight in the tactical low-level firefighting environment exceed the cost has not been adequately answered.

Ground firefighting operations are routinely curtailed at night where there are firefighter safety concerns such as reduced visibility of hazards associated with snags and terrain. This has led to an overall reduction in the request for tactical low-level night flights within the Forest Service. Without the aid of firefighters on the ground, water and retardant drops are generally ineffective.

The Forest Service has some experience, albeit dated, with night flying helicopter operations. On July 24, 1977, a Bell 212 helicopter on contract to the Forest Service collided with a Bell 205 A-I helicopter belonging to Los Angeles County. Both helicopters were conducting night water
drops on the Angeles National Forest using night vision goggles. The accident occurred as the two helicopters were approaching to land at the Mill Creek Heliport. Los Angeles County discontinued night firefighting flights immediately after that accident. The Forest Service continued to operate at night until 1984 when it discontinued low-level night flights due to low utilization of night flying and a lack of a positive benefit compared to the cost and a lack of funding.

Los Angeles County Fire Department, Los Angeles City Fire Department, and San Diego City Fire Department now have night flying capability for their helicopters. The night flying capability is justifiable because of the emergency medical service (EMS) mission of these fire departments. They recently reversed their decision and, along with several other government agencies in California, now operate firefighting helicopters at night. However, they do not conduct tactical operations (e.g., water dropping) there on FS land unless there is a cooperative agreement, or there is a direct threat and they are in unified command with the FS.

Recent wildfires on the Angeles NF (or Los Padres NF) that were supported by Los Angeles County night firefighting helicopters are as follows:

- 2009-Station Fire, and Jesuita Fire (Los Padres NF)
- 2008-Marek Fire, Sesnon Fire, Sayers Fire, and Tea Fire (Los Padres NF)
- 2007-Cabin Fire, and Canyon Fire
- 2003-Los Alamos Fire

The Forest Service recently engaged the San Dimas Technology and Development Center to conduct a feasibility study of night helicopter operations for firefighting. The study is scheduled to be completed by September 30, 2010 and will address the following:

- Mission Definition and Scope
- History of Night Helicopter Operations and Lessons Learned
- Review of Existing Helicopter Night Operations Programs
- Review of Visual Aids for Night flight
- Risk Assessment
- Cost Evaluation

The Forest Service fire and aviation managers plan to evaluate low level fixed wing operations (e.g., retardant drop) at night after night helicopter operations have been addressed.

Any plan to change current operations would require a significant analysis and presentation to the Deputy Chief for a decision.

Observations: There are some advantages to night flying. Water drops are more effective at night, when fuel temperatures are lower and fuel moisture and humidity are higher, than in daylight conditions. At night, fire is easier to detect by air.

However, there are some disadvantages to night flying. There is increased risk in night flight. Depth perception and visual cues are less defined. Illumination is reduced and there is a series of visual illusions which can cause problems for pilots at night. Many of these risks can be mitigated with training and technology.

Ground firefighting operations are routinely curtailed at night due to firefighter safety concerns such as reduced visibility of hazards associated with snags and terrain. This has led to an overall
reduction in tactical low-level night flights within the Forest Service. Without the aid of firefighters on the ground, water and retardant drops are often ineffective.

**Forest Service Policy:** The Forest Service does not prohibit night flights. Rather, night flights are allowed with the following restrictions contained in FSM 5716.2 Night Flying:

- Use only multi-engine aircraft for night flights. Pilots flying night missions shall not land at an airport or heliport unless it meets Federal Aviation Administration (FAA) lighting standard, except:
  1. This restriction does not apply to pilots flying night vision goggle missions in single-engine helicopters for the purpose of training.
  2. Single-engine aircraft flights at night are authorized only for ferry and cargo-carrying missions at the vendor's option and in accordance with FAR 91 (14 CFR Part 91).

**Cost:** There is some significant cost associated with night flying. Pilots would require training and qualification for night vision goggles. This training is available commercially from Bell Helicopters and other FAA part 141 approved schools. Aircraft need modifications for night flight consisting of low intensity cockpit lights, low intensity exterior lights and supplemental illumination for low ambient light conditions. There is also an increased workload associated with night vision goggles that may require additional crew rest and additional crewmembers. Initial qualification and aircraft modification is approximately $65,000 for one aircraft and pilot. Annual pilot re-currency training is an additional $25,000 per year. FLIR systems and moving map displays can be installed for $30-50,000 per aircraft.

Finally, there are some other options for the FS regarding night flying. These include options such as:

- Contracting with cooperators (like LA County) for use on FS incidents, conducting Evaluation Contract with Los Angeles County for a night equipped helicopter,
- Conducting night evaluations using Region 5's FireWatch helicopter, or -
- Contracting with the Air National Guard or defense cooperators, Ask the military to provide night helicopter support.

**Contact:** James Hubbard, Deputy Chief, State and Private Forestry, 202-205-1657
Topic: Double Crewing Airtankers

Issue: Can the Forest Service (FS) require airtanker vendors to double crew their aircraft?

Background: The Forest Service currently does not require airtanker vendors to double crew their aircraft for the purpose of expanding operations from sunrise to sunset. The FS has studied this option carefully and has determined that because of the extensive maintenance requirements on our aging fleet, we would sacrifice safety by expanding operations beyond the current fourteen hour duty day. Since much of the maintenance is conducted in the field, the ability to inspect and service the aircraft during daylight hours is critical to detecting and preventing structural damage and repairing defects before they become critical. If newer aircraft become available, this option could be re-evaluated.

Contact: James Hubbard, Chief, State and Private Forestry, 202-205-1657
On August 27, 2009 At 015 hours the Station fire spotted below the Crest highway. We sized up the spot and could not mitigate the risk based on Lookouts, Communication, Escape Routes and Safety Zones (LCES), so we were unable to attack the spot fire with ground firefighters.

During that time I placed an order for aircraft to be over the incident at 0700 or first light as I recognized the potential of the fire to be outside the threshold of control of the firefighting resources on scene do to the weather conditions and steepness of slope and the ability to mitigate the risk through Lookouts, Communication, Escape Routes and Safety Zones LCES. This led to a sense of urgency to have the aircraft over the incident as early as possible.

There are several factors that have to be met before aircraft can fly. These factors are duty limitations on aircraft pilot’s flight time such as how many hours did the pilot fly the day before:

In general, the regulation, FAR 121.471, “Flight Time Limitations and Rest Requirements: All Flight Crewmembers,” reads that no certificate holder, i.e., the owner of the airplane, shall assign and no crewmember shall accept any duty in excess of the following, nor fly more than:

1. 1,000 hours in any calendar year (begins at midnight Jan 1)
2. 100 hours in any calendar month (begins at midnight on 1st day of month)
3. 30 hours in any 7 consecutive days (the day begins at the beginning of the trip and looks forward, or at the end of the trip and looks back)
4. 8 hours between required rest periods for a flight crew of two pilots (a crew may fly more than 8 hours in 24 hours with an intervening rest period)

The other requirements that have to be met are aircraft must pass a pre-flight inspection of the aircraft and the pilot must be briefed on the assignment.

These factors may have led to a delay of aircraft over the Station incident in the early morning hours of an incident.

I ordered the aircraft to be over the incident at 0700 hours or first light knowing that I needed them as soon as possible for the morning of August 27, 2009. Based on standard protocols listed above; I understood aircraft may not arrive on scene at requested time and usually do not fly on an incident till between 0800 to 0900 hours.

If you take into account on August 26, 2009 I had ordered 7 helicopters two fixed wing air tankers, plus an Air attack plane. It took every bit of this aircraft to hold the fire at approximately 15 to 20 acres. This would tell you the need for aircraft under these extreme fire weather and topography conditions.

I had a transition briefing with incoming Incident Commander Ramiro Gomez at 0600 hours at the Angeles Crest fire station. This briefing included modules leaders, what aircraft was ordered and leaders intent. In the briefing we discussed the sense of urgency to get the aircraft over the incident as soon as possible.

After the briefing Ramiro Gomez assumed the responsibility of the Type III Incident Commander. Ramiro and I went over the checklist for Type III Incident Commanders that is a requirement of the Standard Operating Procedures for Type III Incident Commanders in Region 5 of the Forest Service to make sure that we had covered all the requirements as outlined in the Standard Operating Procedures for Type III Incident Commanders.
After the transition of command I was timing out on the work rest requirements. Once the transition was complete I returned to Little Tujunga to the district office and went off duty.

In summary myself and incoming incident Commander Ramiro Gomez, understood the immediate need of aircraft to be over the incident as soon as possible on the morning of August 27, 2009. We had this discussion prior to the Incident transition briefing. If the aircraft were not on scene by 0900, the Incident commander would be contacting dispatch expressing concern about the sense of urgency to get the aircraft on the incident.

/s/ Will Spyrison
Division Chief (Initial Attack Incident Commander Station Fire)
24 January 2010

Question: How many large air tankers were available in Southern California the morning of the 26 August?

Response: The Daily Resource Report reflects that on 8/26/09 @ 1100 hrs 3 Large Airtankers (T/1or T/2) Airtankers were committed with the reload Base as San Bernardino Air Tanker Base. 1 Very Large Airtanker (SCPR 223 Martin Mars) was shown as committed to the Cottonwood Incident with the reload as Lake Elsinore 8/26/09 @ 1100 hrs.

Question: How many large air tankers were available in Southern California the morning of the 27 August?

Response: The Daily Resource Report reflects on 8/27/09 @ 1100 hrs 5 Large Airtankers T/1or T/2 were committed with the reload base as William J. Fox Air Tanker Base and 1 very Large Airtanker (SCPR 223 Martin Mars) was committed with reload base reflected as Lake Elsinore. (Tanker may have been relocated to Lake San Antonio or Castaic). The DC-10 T-911 was on Available at Victorville.

Note: The airtankers committed on 26 August were focused on the Morris Fire (ANF). They were reloading at the San Bernardino Air Tanker Base (near San Bernardino, CA).

Note: The airtankers committed on 27 August were focused on the Station Fire (ANF). They were reloading at the Fox Air Tanker Base (located near Palmdale, CA).
here they are
Why weren’t aircraft over the fire at 7am as requested?

Large airtankers and helicopters had attacked the Station Fire into the evening on 26 August, flying until shortly after sunset to attempt to contain the fire during its initial attack stages. Because of the requirement for 10 hrs of rest after a day of flying, pilots of the FS aircraft came back on duty at 0700 hrs on 27 August and were preparing for the day of firefighting. On 27 August 2009, Air Attack was over the fire at 0644. The first heavy (type 1) helicopter is over the fire in contact with Air Attack at 0743. The first lead plane was launched from Fox at 0802. The first airtanker launched at 0842.

Who makes the determination to release airtankers?

At the tactical level, the Incident Commander (IC) orders airtankers. The local dispatch center, in consultation with Geographic and National center, assigns the airtankers, as available, to fill the IC order. Because of high demand for airtankers, the Geographic and National centers scrutinize use. If there is no higher need, when the IC is finished with the tactical mission of the aircraft, they are returned to one of our airtanker bases.

The IC makes the determination at the local tactical level. The Geographic Area Coordination Center makes the determination at the “regional” level. The National Interagency Coordination Center makes the determination at the national level.

Why wasn’t another set of pilots standing on stand-by while first set was resting during required downtime?

The FS does not “double crew” our contract aircraft.

Why were airtankers not refueled and ready to go?

Refueling was not the limiting factor for the large airtankers being “on duty” the morning of the 27th. Pilot rest, pilot safety briefings, and maintenance are the key factors in airtanker availability. In this specific case, because of the lack of fuel available from the vendor at the airtanker base in the evening, the airtankers were refueled in the morning. Parenthetically, because of the requirement to have the pilot/co-pilot oversee refueling, if the refueling had been done in the evening before, the duty day would have been extended and the “on duty” time the morning of the 27th would have been further extended.

Any other entities have night vision air ops besides the County?

For wildland fire, the only entities with night vision capability are either in Los Angeles County/City or San Diego City. Los Angeles City Fire Department and San Diego City Fire Department have night flying capability for water dropping helicopters.
Would retardant have slowed the fire if it had been dropped at night, even if ground crews were not in the area? i.e., would night drops have slowed the fire so when day broke ground forces could get a jump?

Not likely. To apply retardant to the fires deep down in the draw or canyon, aircraft would have to fly very high, release the load, and then allow “retardant mist” to settle on the vegetation. When “retardant mist” (i.e., very low coverage levels) is applied to vegetation, it is generally not effective, especially without ground forces to reinforce even minimal impact.

After reading briefing paper it’s not clear to me if FS would allow other air resources with night vision to fly on FS fires? Fly on unified command fires?

Yes, Los Angeles County Fire Department, Los Angeles City Fire Department, and San Diego City Fire Department have all made the investment in machine, equipment, and training to allow night flying water dropping. The FS could/can/does utilize these aircraft on FS fires. The requirement for night flying has its primary need based in emergency medical responses, but wildland fire night flying within those jurisdictions is an important component of the justification for these aircraft.
To Karla J Hawley/USDAFS@FSNOTES, James E Hubbard/USDAFS@FSNOTES
cc
bcc
Subject most recent Station

Additional questions 25 January 2010 1230 hrs EST.docx
Who were the IC’s of the Station Fire during initial and extended attack (26 and 27 August)?

Incident Commander List Station Fire

August 26, 2009

1520 Initial report of possible fire
1536 ANF Captain 12 (Martinez) assumes Incident Commander on Station
1551 ANF Division 1 (Spyrison) assumes ICT3 of the Station Fire
2235 ANF Captain 17 (Bastedo) assumes ICT4 and ANF Patrol 16 (Dimaculangan) as ICT4 trainee

August 27, 2009

0229 ANF Division Chief (Spyrison) assumes ICT3
0800 ANF Battalion Chief (Gomez) assumes ICT3 and ANF Captain 18 (Conklin) as ICT3 trainee
1310 Station Fire IC (Gomez) and LA County Assistant Chief Jim Powers enter into Unified Command
1800 Morris IC (Woychak) assumes command for Station Fire as a Branch under Morris Incident until 1400 hours on 8/29 when the IMT1 assumes command.

Provide additional explanation of why air tankers were not over the fire at 0700 hrs 27 August as requested by the IC.

The Forest Service (FS) first priority is safety. Aviation accidents are one of the two leading causes of deaths in the line of duty for the FS fire and aviation management program. We mitigate risk by obeying standards and best practices from both general aviation and from our experience.

The airtankers assigned to the Station Fire all required rest from the evening before. Airtankers which might not have been assigned directly to initial attack on 26 August were either fighting fire on the Morris Fire, providing initial attack in other areas, or being ferried from other states to reposition at Fox Air Tanker Base. The pilots require rest. The aircraft must be inspected and maintained. The pilots and staff require pre-flight briefings, weather reports, clear assignment of frequencies for air attack,
coordination with lead planes, assignments of incident specific elevation and flight patterns, and other specific information before they fly. Additionally, the Los Angeles Basin airspace is some of the most congested and complex in the world, so the coordination with the FAA for airspace is essential.

With Air Attack over the fire by 0644, inquiring about the status of aircraft, and the first of the helitankers over the fire by 0743, there was aviation activity over the fire the morning of the 27th. The airtanker pilots came back on duty at 0700, went through the kind of daily preparation and briefings which lead to firefighter, aviator, and civilian safety prior to their departure and were “wheels up” at 0842. The Station Fire is about 10 minute’s flight from the Fox Air Tanker Base.

Also, the IC (Spyrison) understood that aircraft would be on the fire as soon as possible. To quote from his statement:

“I ordered the aircraft to be over the incident at 0700 hours or first light knowing that I needed them as soon as possible for the morning of August 27, 2009. Based on standard protocols listed above; I understood aircraft may not arrive on scene at requested time and usually do not fly on an incident till between 0800 to 0900 hours.”

**Was there any aviation activity over the fire on the morning of 27 August?**

Yes. Air Attack arrived at 0644, the first Helitanker arrived at 0743. The lead plane launches at 0802. The first airtanker is off Fox at 0842, followed quickly by three more airtankers. The next helitanker arrives shortly after 0900, followed by other rotor wing aircraft.

During the morning of the 27th of August, the fire utilized 4 large airtankers, four helitankers and two medium helicopters. This is an intense utilization of aircraft for a fire which started the day somewhere 40 to 50 acres in size.

**Was the transition of IC’s on the morning of 27 August efficient?**

Yes, to quote again from the initial attack IC statement:

“I had a transition briefing with incoming Incident Commander Ramiro Gomez at 0600 hours at the Angeles Crest fire station. This briefing included modules leaders, what aircraft was ordered and leaders intent. In the briefing we discussed the sense of urgency to get the aircraft over the incident as soon as possible.

After the briefing Ramiro Gomez assumed the responsibility of the Type III Incident Commander. Ramiro and I went over the checklist for Type III Incident Commanders that is a requirement of the Standard Operating Procedures for Type III Incident Commanders in Region 5 of the Forest Service to make sure that we had covered all the requirements as outlined in the Standard Operating Procedures for Type III Incident Commanders.”
Transition on Type 3 incidents is where most of our fatalities occur. Our protocol is specific and our ICs are trained to properly execute the transition. This was the IC’s focus. The Operations Section Chief and the Air Attack were dealing with the specific tactical aircraft issues of the morning.

**Did refueling the airtankers the morning of the 27th instead of the evening of the 26th cause delay?**

No. If refueling had been attempted the evening of the 26th, the pilots duty day may have been further extended, causing later arrival on the morning of the 27th. As worked out with the air tanker base, refueling proceeded in the morning under the direction of the co-pilot while the pilot attended mandatory briefings. This arrangement made more efficient use of the pilots time.

The airport (not the large airtanker contractor) is responsible for aviation fuel. With two major fires, as well as initial attack and rotor wing aircraft using fuel from the airport, the surge in fuel use was unexpected. However, with fuel replenishment during the night, fuel was readily available the next day.
Tony -- Jim -- try this -- it ain't purtied up on the proper format -- but blve the intent is met --

Station Fire 25 Feb 2010.docx
Station Fire – Angeles National Forest

The Station Fire was reported at 1520 hours PDT on 26 August 2009 on national forest system lands within the Angeles national forest (ANF).

Fire response and actions for fires in this area of the ANF are guided by direction outlined in the forest land management plan (LMP) and the subordinate forest fire management plan (FMP).

Direction in the LMP states:

**Linked to National Strategic Plan Goal 1 - Reduce the risk from catastrophic wildland fire, objectives 1 and 3.**

**Fire 3 - Fire Suppression Emphasis**
All fires either on the national forest or that threaten the national forest will be suppressed. Wildland fires that pose life safety threats, threaten communities, improvements or infrastructure will receive a management response commensurate with minimizing acres burned.

**Linked to National Strategic Plan Goal 1 - Reduce the risk from catastrophic wildland fire, objective 2.**

**Fire 4 - Firefighter and Public Safety**
Improving firefighter and public safety is the primary objective in fire management. All other activities are tiered to this core value. Integrate fire management activities with those of other government agencies that share a mutual interest or benefit in fire activities on the national forest.

The FMP provides further specificity to direction in the LMP and states:

Suppression of wildland fires is the first priority for program managers. All wildland fires on southern California national forests are considered to be a threat to communities. Aggressive fire suppression and prevention strategies will be implemented near communities to achieve the objectives to protect life and property from wildland fire, subsequent floods and debris flows.

The wildland urban intermix consisting of private property, structures and federal facilities represent the greatest values to be protected.

Consequently, at 1523 hours an aggressive interagency response was launched to suppress the fire. The following table provides the details of that response:
Despite the efforts of firefighters from both the Forest Service and Los Angeles County, the fire escaped initial attack and at 1310 hours PDT the following day, a formal “Unified Command” was established. The event was detailed in the table below:

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 27, 2009</td>
<td>13:10 Station Fire IC (Gomez) and Los Angeles County Assistant Chief Jim Powers enter into Unified Command for the Station Fire. The fire has reached established trigger points previously discussed by Gomez, Conklin and Thomas. The fire is spreading down canyon rapidly, making strong fast uphill runs. Crews are having difficulty hanging on to established control lines.</td>
</tr>
<tr>
<td></td>
<td>15:24 A full brush fire response is dispatched by LA County Fire Department per the Annual Operating Agreement. The following aircraft and Chief Officer resources responded to the Station Fire. This does not include all resources of the initial assignment. Battalion Chief – 4, Dave Thies Battalion Chief – 6, Buck Buchanan Helicopter – 18 Helicopter – 19 Helitanker – 732 (Los Angeles County Exclusive Use Contract) Los Angeles City Fire Department Helicopter Fire 5</td>
</tr>
</tbody>
</table>

Because of his concern about the actions surrounding the initial attack, the Chief commissioned a panel to review the initial and extended attack actions of the Forest Service.

The review panel found no evidence or indication that initial attack incident commanders felt unduly constrained to inappropriately reduce direct suppression costs.
In fact, at the height of the fire, over 5,000 personnel were actively engaged in fire suppression activity. Ground efforts were supplemented by the assignment of nearly two dozen helicopters and fixed wing aircraft to provide aerial support to these firefighters. During its duration, the Station Fire was the highest priority fire in the United States. Resources which were ordered by the Incident Commander were moved expeditiously to the fire. Expenditures to supply personnel, aircraft, and support exceeded $90 million dollars.

The Station Fire was the largest fire in the recorded history of Angeles National Forest (est. 1892) and the 10th largest fire in California since 1933.
Mr Pringle will find these more interesting. If he reads close there are several interesting "bursts" of verbiage about aircraft.

at 0310 - Will asks ANF dispatch ".did we get confirmation of all aircraft for tomorrow morning?" and ANF responds - "At this time the orders have been placed but we'll we're gonna see at morning time if we can get them reassigned from Morris." and Will responds "Copy that thank you"

Mr Pringle might ask "why not be working more a/c orders at 0310 hrs?" and the answer is that since Will had placed his orders for aircraft at 0050, ANF had been working on filling those orders.

its only interesting, but at 0653 Will and dispatch discuss aircraft status again. This shows the IC is well informed about what is happening with the aircraft.

note that at 0658 reference to a "TSR" should be a "TFR" which is a temporary flight restriction

at 0756 Battallion eleven asks Chief one (who is the Forest FMO) to get four heavy helos from Morris. Ram tells Dave that the Crest Station is threatened and that the fire has already spotted over the road, he (B11 as the IC) is unable to pick it up and its back on the upper side.

This is interesting because by 0756 the fire is already extraordinarily active and has come back across the road.

at 0929 someone (not identified but probably B11) calls "Matt" -- this is Matt Conklin the trainee IC - and expresses concern that they still only have two helitankers

Mr. Pringle might ask "why?, where are those other two helitankers?" If you'd like me to follow up, I can -- I'm not sure there were two more heavys to get in SoCal.

at 1221, ANF dispatch tells the Station Air Attack that info from South Ops is that there are no air tankers available.. (they must have been inquiring about additional ATs beyond the four they had working at that time). Hank/Jim -- remember, this is one of those informal inquiries, additional orders for LATs were never placed. Remember that Will initially ordered 3 LATs which were filled, then at 0821 the fourth (and final) LAT was ordered and filled.

Tom note to Hank/Jim -- South Ops had 11 LAT's available by the close of 27 August, with 2 having DO's, so 9 would have been available. There would have been LAT's committed to the Station, the Morris, and any other emerging fires. I don't know the exact commitment of LATs, but their first priority (LATs) is Initial Attack. SoCal had 11 of the 19 aircraft in all the nation.

at 1841 the transcript references a "B two 10" which is obviously the DC-10

at 1852 there is dialog about the DC-10 and confirmation that there will be NO request for the DC-10

at 1856, there is more discussion about the DC-10 with the transcript noting ". Chief Two (JT Thomas - retired as of Friday) he decided not to order the DC-10..

let me kno if you need more -- thanks
CONFIDENTIAL --

Jennifer and Becky -- this is NOT the report on the fatalities on the Station Fire --and it may have no linkage to the final report, --

I still have no lead regarding the full report, nor its release date. Since I have this information confidentially, we can’t get ahead of LAC with their release, and I still don’t know when that is.

I will keep you posted if and when I get additional information - in the meantime, please keep close, but begin working on our response -- thanks --
Jim -- see any other issues here??

----- Forwarded by Tom Harbour/WO/USDAFS on 03/29/2010 10:43 AM -----

STATION FIRE Trip Revised.ppt
County of Los Angeles
FIRE DEPARTMENT

STATION INCIDENT
Wednesday, August 26, 2009
Sunday, August 30th:

The fast approaching fire impacted Camp 16 at approximately 1645 hrs.

During this time a vehicle accident, shelter deployments and the sheltering of personnel in structures and vehicles occurred.

The burn-over contributed to two Los Angeles County Fire Department personnel receiving fatal injuries in a vehicle accident and 13 personnel received other injuries such as stress, smoke inhalation and eye irritation.
Sunday, August 30th:

The camp kitchen/dining hall was identified during planning sessions as the building to be used for sheltering of personnel.

A planned firing operation was initiated on a mid-slope road just below Camp 16 and running parallel to the ridge.

The fire began impacting the camp on the north end. Communication with the firing team was lost when the fire began impacting the southern end of the Camp.
Sunday, August 30th:

It became apparent to the fire personnel inside the kitchen/dining hall that the building had become involved with fire.

The command was given to prepare their fire shelters for deployment in anticipation of exiting the structure.

As the fire crested the ridge near the south end of the camp, flame lengths were in excess of 200 feet. Shelters were deployed and used to protect the personnel from the radiant heat as they progressed from the kitchen/dining room to the vehicles.
Sunday, August 30th:

All personnel sheltered in the vehicles and personnel accountability reports were given to the Battalion Chief.

When no response was received from the firing team the Battalion Chief ordered a search of the area for the two missing personnel.

The firing team and their vehicle were discovered approximately 800 feet off the road in the ravine to the south of the camp.
Sunday, August 30th:

Both personnel assigned to the firing operation were found deceased and by 0430 hours on August 31, 2009, the bodies of the deceased firefighters were removed.
**Camp 16 Incident – Sequence of Events**

**Saturday, August 29th:**

Supt. Hall, Camp Foreman and CDCR staff met in the morning at Camp 16 and discussed a plan to protect the camp from the approaching Station Fire.

Work assignments were made, and a discussion established that would initiate specific actions within the camp.
Camp 16 Incident – Sequence of Events

Saturday, August 29th:

Supt. Hall, Camp Foreman and CDCR staff met in the morning at Camp 16 and discussed a plan to protect the camp from the approaching Station Fire.

Work assignments were made, and a discussion established that would initiate specific actions within the camp.

Staff and inmates worked throughout the day opening scuttles for attic access, moving wood piles away from structures, preparing generators and clearing vegetation from around buildings.
Camp 16 Incident – Sequence of Events

Saturday, August 29th:

Supt. Hall was in contact with Camp Battalion Chief. Supt. Hall discussed his firing operation with the Battalion Chief and identified one of the trigger points to begin firing operations as the bottom of the drainage below camp 16.

Supt. Hall requested two additional fire engines to assist with protecting camp 16 (engines 131 & 80).

Supt. Hall and his Foreman’s patrolled and watched the fire throughout the night into early morning.
Camp 16 Incident – Sequence of Events

Sunday, August 30th:

Camp preparation continued through the early morning hours for the impending fire.

At 1130 hrs. two camp foreman’s watch the approaching fire from the helipad where they observed the fire as it crested Lightning Point, approximately 2 miles southwest of Camp 16.

About this same time Supt. Hall and LACo Battalion Chief call for an additional briefing with the company officers from E-131 & E-80, as well as CDCR officers and camp Foreman.
Sunday, August 30th:

At 1400 hrs. Patrol 80 arrive at Camp 16 with one Captain and Firefighter, they are retained to assist the efforts at Camp 16.

At 1610 hrs. E-131 & E-80 were at their assigned locations for structure protection.

At 1613 hrs. the fire was observed on the east side of “Ice Patch”, a local designation on Mt. Gleason Road, approximately one mile west of Camp 16.

At 1625 hrs. Supt. Hall instructed Foreman Quinones to assist him with a firing operation on the access road below Camp 16.
Sunday, August 30th:

Several minutes later the Fire Captain from patrol 80 watched Supt. Hall drive west of the helipad and turn around. He parked the vehicle below the helipad facing east. Foreman Quinones was seen preparing a drip torch for the firing operation and Supt. Hall was seen launching three or four rounds from a Very pistol.

The Captain from patrol 80 advised Supt. Hall on the radio, “You got fire behind you, you got fire below you” and “You got to get out”
The Captain from patrol 80 repeated his radio message and observed Supt. Hall get in the vehicle, driving further to the east but still below the helipad.

Foreman Quinones was on foot behind the vehicle, lighting fire with the drip torch. The Captain from patrol 80 repeated his warning to Supt. Hall again, this time by yelling at him directly and blowing a whistle – trying to warn of the fire’s progress.

The Captain from patrol 80 recalls seeing both Supt. Hall and Foreman Quinones moving to the vehicle as if preparing to leave the area.
Sunday, August 30th:

At 1630 hrs. a Camp Foreman (acting as a self appointed lookout) gave a radio report that the fire was impacting the north end of the camp.

At 1631 hrs. the camp crews were sent to the dining hall and the Camp Foremen were in their assigned locations.

By 1648 hrs. Engine 80 had to abandon their structure protection assignment on the south side of camp.

At 1643 hrs. a transmission on the radio from Supt. Hall was heard, instructing “keep the road clear”…….
Camp 16 Incident – Sequence of Events

Sunday, August 30th:

At 1644 hrs. there were multiple spot fires burning throughout the compound.

A few minutes later there was a radio transmission advising the dorm roof was completely engulfed and 200 foot flame lengths were observed.

Crews sheltered in the dining hall were directed to get their fire shelters out and ready.

The order was given to evacuate the inmates and personnel from the dining hall to crew carriers that were positioned away from the advancing fire.
Sunday, August 30th:

At 1707 hrs. the Battalion Chief contacted Command & Control BC and reported Supt. Hall and Foreman Quinones were missing.

At or about 1730 hrs. E-131 approaches the location where Supt. 16 vehicle tracks were observed over the edge of the road.

A heroic rescue effort was attempted by member from E-131, Engine and Patrol 80 and personnel from Camp 16.

However, the Captain from E-131 radioed confirming he had found the vehicle and there were no survivors.
Camp 16 Incident – Sequence of Events

Sunday, August 30th:

At 2000 hrs. a task force of rescue resources arrived at Camp 16

At 2345 hrs. Los Angeles Deputy Coroner arrived at scene

At 0303 hrs. the first body was brought up to the road, draped in an American flag

At 0416 the second body was brought up to the road, draped in an American flag

All resources were released from the scene by 0600 hrs.
Camp 16 Incident – Findings

Communications External:

No communications between the Command and General Staff of the Station Fire and personnel assigned to Camp 16

Personnel from Camp 16 did not attend Station Fire briefings

The resources ordered for Camp 16 did not appear on the IAP for the Station incident

Fire Watch 509 was not able to make direct contact with personnel at Camp 16 to provide emergency fire situation information
Communications Internal:

Tactical communications at Camp 16 were on two different frequencies on two different bands.

Supt, 16 provided face-to-face briefing with personnel assigned to Camp 16 and met with Battalion Chief face-to-face to discuss plan.

The well established working relationship between personnel from LACoFD and CDCR prior to the burn-over, led to the rapid implementation of the plan to protect Camp 16.

The Battalion Chief required continuous personnel accountability reports during and after the burnover.
Management Command & Control:

There was not adequate time to complete the planned firing operation due to changing fire conditions.

The only plausible escape routes for the firing team was to the south on Mt. Gleason Road.

There were no escape routes identified from Camp 16.

All personnel assigned to Camp 16 had confidence in, and responded to, the direction of their leadership.

Camp 16 was not identified as an asset at risk by the Station Fire Incident Management Team.
Camp 16 Incident – Findings

Environmental:

Actual fire behavior exceeded expected fire behavior when the fire impacted Camp 16.

The plan to protect the camp did not evolve with the observed fire behavior prior to the burn-over.

Camp 16 personnel were aware of the changing weather conditions prior to the burnover.
Camp 16 Incident – Findings

Human Factors:

Individuals who didn’t have fire shelter training were provided PPE and shelters and instructed on how to use the fire shelters.

Supt. 16 had all the requirements for division/group supervisor except S-234 firing operations.

E80 operator had difficulty transferring vehicle from pump to drive while attempting to retreat to a safer location.
Camp 16 Incident – Findings

Fuels:

No record of fire history in the vicinity of Camp 16 for approximately 90 years

Fuel loading was estimated at 40 tons per acre in the North Fork of Mill Creek Drainage

Fuel moistures were at critical levels for live and dead fuels

Live fuel moistures were estimated at 55%

One-hour dead fuel moistures were estimated at 2 to 4%
Camp 16 Incident – Findings

Topography:

Slopes on the south side of Mt. Gleason Road, below the camp, ranged from 50 to 80% with an average slope recorded at 70%

The south slope between the camp and Mt. Gleason Road averaged 90%

The southwest facing aspects typically have the highest fuel temperatures in the afternoon hours

Camp 16 was located on a ridge between two prominent saddles
Causal Factor:

The decision to protect Camp 16 and shelter in place and allow the firing operation was made at the Battalion Chief’s management level without contact with the Station IMT.

The lack of contact with the Station Incident prevented Camp 16 leadership from knowing about predicted fire behavior and available resources.

The firing operation on the Mt. Gleason Road was not successful due to the extreme fire behavior which exceeded the prediction of the plan.
Causal & Contributing Factors

Contributing Factors:

The organizational culture allows firefighters to accept a notably higher risk to protect structure on wildland fires. A sense of ownership may have also influenced the decision to defend the facility.

The fire burned in rugged terrain and the burnover occurred in the upper end of a steep drainage with fuel loads at seasonal low fuel moistures levels.

Resources assigned to Camp 16 were utilizing two different frequencies for tactical discussions and reports. Effective communication controls were not in effect prior to the incident.
Recommendation 1

Incident Resource Accountability:

Review the procedures for Incident Command accountability of all resource within an incident operational area

Ensure that all resources within an operational area are identified and assigned within the incident management structure
Recommendation 1

Incident Resource Accountability “Discussion”:

Resources and personnel at Camp 16 were not assigned to the Station Fire Incident management organization.

While Camp 16 personnel did have supervision from internal department resources, those supervisory resources were not all assigned to the Station incident.

If Camp 16 personnel had been included in the incident command system organization, they would have benefited from information, resources, and management decisions.
Recommendation 2

Communications:

Utilize communications equipment and procedures appropriately

“Discussion”

The Camp 16 incident identified several issues related to fire ground and incident command communications

Department personnel must utilize current policies and procedures to ensure reliable communications between all units and personnel in an operational area
Recommendation 3

Department Facility Protection:

Revise emergency plans at all department facilities within Very High Fire Hazard Severity Zone (VHFHSZ) to include a wildland fire threat assessment and structure protection analysis

Identify fuel management needs for each department facility within the emergency plans
Recommendation 3

Department Facility Protection “Discussion”:

Each department facility shall be evaluated for the threat of a wildland fire

A written emergency plan shall be developed to address the facility protection needs and identified decision points to include evacuation or abandonment of the site if needed.
Recommendation 4

Fire Behavior Analysis:

The department shall evaluate its process for an analysis and dissemination of fire behavior information to appropriate resources.

“Discussion”

There is a need to provide more comprehensive and relevant fire behavior information to all personnel to enhance the ability to make accurate fire behavior predictions.
Jim Robin John -- the document below -- entitled "lessons learned" - is one which the Chief intends to hand to Senator Feinstein tomorrow -- we are engaging the Region this evening to finalize, but they have offered their input for both ANF and R5 actions. The "lessons learned" at the national level are the ones which the Chief was comfortable with at this afternoons discussion, altho David needs to validate the specific wording in the first item.

All OK with you? comments thoughts? This needs to be finalized by about 0800 hrs EDT tomorrow morning.

----- Forwarded by Tom Harbour/WO/USDAFS on 05/25/2010 08:16 PM -----
Darrel Schwilling/R8/USDAFS

To Tom Harbour/WO/USDAFS@FSNOTES, Larry Brosnan/WO/USDAFS@FSNOTES
cc George Custer/WO/USDAFS@FSNOTES, Curtis G Heaton/R3/USDAFS, Bruce Palmer/WO/USDAFS@FSNOTES
Subject Murkowski Questions and Lessons Learned

Tom, we split the Murkowski questions up between us, Larry, and Paul so only a few are answered here. We will combine our answers into one document in the morning but wanted to give you a chance to review tonight if you want. Also here are the Lessons Learned for National, Regional and Local for your review.

Senator Murkowski questions.docx  R5 Lessons Learned.docx
Darrel Schwilling
Planning Section Chief - Atlanta Team
National Incident Management Organization
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Alaska Hiring on fire crews

For the BLM

1. Does the BLM have a preference system to ensure fire crews fighting fire in Alaska are staffed with Alaskans? If not why not?

2. How do you handle the hiring for the BLM/ State of Alaska Smoke Jumper crew? Is there a preference for hiring Alaskan's on that crew?

3. Do you know if the State of Alaska Fire Service hotshot and Type II crews provide such a preference?

For both the Forest Service and BLM

4. If the Village Corporations, or Tribal governments would invest in the training to ensure some of their members are qualified, would you consider giving a preference to Alaskans with the proper credentials?

5. Which is more expensive - bring up crews from the lower 48 to fight fires or cooperating with Tribal government to provide train so that Tribal members can qualify to fight fires in Alaska?

Aerial Fire Suppression Strategy

I would note that the Administration without fan-fare has finally transmitted its Aerial fire suppression strategy to the Hill - five years late but it has arrived and I want you to know I appreciate that you have done that. I do however have a number of questions that I need to ask about strategy.

While I appreciate that the agency has embraced a diversity of fire fighting aircraft I do note that the agencies currently employee up to 3 Bombardier CL-315 or 415 water scooping aircraft and that your strategy only calls for maintaining that level, rather than increasing the number available to your fire managers.

1. I know that the BLM and to a lesser extent the Forest Service have found these aircraft to be very useful, especially in Alaska. Why have you not recommend a more robust number of these aircraft?

2. I know many of the European Countries have found these aircraft (particularly the CL-415 scoopers to be exceptionally useful for fire fighting in their countries. What is so different about our urban interface communities in the United States that you do not see a need for additional water scooper aircraft?

   A number of factors play into the differences including fuel types, fuel loading, suppression strategies and tactics, terrain, and availability and size of water sources. As with any tool, these aircraft can be used very effectively under certain conditions and less effective in others. In the arid regions of the western United States these aircraft are not as affective largely due to lack of water sources. Because we move aircraft from region to region depending on fire activity, we have found that our large airtanker fleet gives us more operational advantages in a wider range of conditions.

If I remember correctly it was the wing-box failures on the early model C-130 aircraft that caused the agency to ground those aircraft and move towards later model C-130 G, H, and J models for fire fighting.

1. If we put the majority of our eggs in the C-130 J aircraft and they develop structural infirmities, how will the Forest Service deal with getting aerial heavy aircraft when the strategy works to eliminate most of the other options?
I see that it is estimated that a new C-130 J with a MAFF II unit is expected to cost between $75 and $100 million per plane. I am also told that the cost to re-wing the existing P-3 Orion aircraft is about $15 million dollars and that work is expected to extend the useful life of those aircraft for 20 or more years. In your report you suggest the current usable expected life all but one of the P-3V Privateers is only 2014 and the other will phase out in 2019. You also suggest the newer P-3 Orion aircraft will phase out by the end of 2019. Which suggests that by 2020 you will have to purchase 18 C-130 J aircraft to replace the ageing fleet and if I read your chart correctly by 2019 an additional 14 C-130 J aircraft to fulfill this strategy.

Let split the difference on the cost estimate at $87.5 million per each C-130 J. You could re-wing 186 P-3 Orion aircraft and get another 20 years of useful life from those planes for the same amount of money. Additionally, we know that Navy is likely to phase out of using these aircraft as it shifts to the new P-8 Poseidon (converted Boeing 737 aircraft).

1. Why the headlong rush to spend $28 billion on the C-130 J aircraft when you could use re-winged P-3 Orion and other aircraft companies like Minden, Aerounion and Neptune Aviation are working on converting?

2. Do you seriously think this Committee can funnel all that money into new C-130 J aircraft without taking it out of other parts of the Forest Service budget?

3. Do you have recommendations from where within the existing budget that shift in funding could come from?

A draft military study suggests the it costs double to own and operate a C-130J.

4. What am I missing here - why buy and operate a aircraft that costs twice what the existing aircraft are costing?

As I understand the strategy the Forest Service would purchase the aircraft and hand them over to the Air National Guard to operate and maintain.

5. What does it cost the military to pay for and operate a C-130J with a MAFF unit when on federal fire? Please include all of the support staff and equipment the Air National Guard sends along and pays for when they spend time on federal fires?

6. How does the number of people and cost of operating a P-2V or P-3 or other aircraft cost in comparison?

7. Aren't you worried that in time of war that the Air National Guard Units may not be able to fulfill their commitment to send the aircraft and support crews to the fire fighters?

We understand that Aerounion is no longer building the MAFF II units.

7. Where will those units be manufactured and at what cost?

General fire cost containment

In last years Interior Appropriations bill this committee adopted the FLAME Act which was under consideration in the Senate Energy and Natural Resource Committee. Over the years the Forest Service and the Department have testified repeatedly that 3% of the fires are responsible for 85 to 95% of the cost of suppression. Yet in the agencies budget request for FY 2011 you
requested only about 1/3rd of the total suppression budget be allocated to the FLAME fund and a 2nd Emergency suppression fund.

1. Why did the Administration propose the 2nd Emergency suppression fund, rather than just allocating all of that funding to the FLAME fund?

2. Why didn't the Administration request 85 to 95% of the suppression funding go into the FLAME Account?

3. The FLAME Act provisions also included language that encouraged work to reduce the fire suppression costs; what specific steps has the agency taken this fiscal year to reduce the costs of fire suppression?

I note that some people at this hearing have concerns about the lack of fire fighting, including aerial operations, that takes place at night.

1. Isn't it true that fire behavior generally less aggressive at night and that in the past (1990 and earlier) that the agency many times would spend more people out on night shift than on the day shift?

   Yes, fire behavior is generally less aggressive at night. I cannot accurately comment on what happened before 1990 however, Incident Commanders have full authority to fight fire at night when they feel the actions will be productive and hazards to firefighters can be effectively mitigated. Fuel conditions, terrain, and firefighter fatigue are all taken into consideration when making those decisions.

2. What factors have played into the shift away from more fire fighting at night?

   There has not been a conscious shift away from night time firefighting by the agency. Indeed nighttime firefighting continues to be a valuable strategy when the benefit outweighs the risk. Incident Commanders are empowered to make decisions specific to their incident. In an effort to decrease the alarming rise of wildland firefighting fatalities we have placed an emphasis on managing risk and decreasing unnecessary firefighter exposure. Every action on every incident is based on our number one objective of firefighter and public safety.

3. What would it take the agency to shift back to more aggressive night time operations?

   Again, we empower our incident commanders to make risk informed decisions. As we continue to improve our ability to manage risk we will continue to use all options available. During the last administration the Undersecretary of Agriculture spend some quality time in a Missoula Montana court room defending the use of phosphate based slurry for fire fighting.

1. Can you update us on the progress you have or have made in finding a replacement for the current slurry that you use to fight fires?

2. If God-forbid, Judge Malloy or some other judge outlaws the use of this slurry - what are your contingency plans?

3. Can you provide me with a detailed accounting of how many acres burned in each of the last 10 years by state, as well as the federal cost of suppressing those fires on an annual per acre basis for each state for each year?
Lessons Learned from the Station Fire

National Office

Incident Communications

Work with the Department of Agriculture to develop a rapid response strategy to provide timely, accurate information for media relations on fires of national significance.

Night Flying of Aircraft

The Chief of the Forest Service has initiated a national review to assess night flying operations with preliminary findings due as early as July.

Resource Ordering and Status System (ROSS) Enhancements

Determine necessary steps to prevent duplication of orders and promote accuracy.

Fire Behavior Rate of Spread (ROS) modeling improvements

Fire behavior models, specifically rate of spread, need to be updated to reflect changes in fuel conditions and observed fire behavior. Plume dominated fire behavior is extremely difficult to predict and model; determine if any new and emerging technologies can aid in modeling plume-dominated fires.

Reinforce the intent of the Fire Spread Probability (FSPRO) model and its limitations as part of the Wildland Fire Decision Support System (WFDSS) training package.

Working with urban/interface communities in volatile fuels

Recognize the distinction of fast-moving, highly volatile fuel types and engage communities and cooperators in planning, evacuations and defensible space where human life and critical infrastructure is at risk.

Building upon Region 5’s experience, consider a set of national standards for defensible space on National Forest lands based upon Firewise principles or state standards, if stricter.
Tracking aircraft water delivery

Continue to test and evaluate the tracking of airborne water/retardant delivery via GPS to assist in real-time and post-incident evaluation of aircraft use.

Interagency Agreements

Cooperative Agreements and Annual Operating Plans (AOP) need to be updated annually. Ensure that Cooperative Agreement and AOPs are reviewed and understood by agency and elected officials.

Engage Agency Retirees

Engage FS retirees both formally and informally to share information and changes in FS policy and procedures.

Documentation and Record Keeping on Incidents

The need for thorough and accurate documentation cannot be understated. Encourage record keeping at all levels of incident management. Share the Angeles NF Lessons Learned nationally.
Pacific Southwest Region

Use of Night Flying Helicopters

Explore and develop training for managing night flying operations for all Incident Management Teams in the Region.

Develop night flying operations briefing package for out of area resources including Incident Management Teams.

Augment existing aviation management training to include management of night flying operations.

Dispatching /Emergency Communication Center Protocol

Share Angeles lessons learned with all Emergency Communications Centers in Region.

Incident Commander Type III Refresher

The review of the initial attack reinforces the value of Type III Incident Commander Time/Pressure Simulations for Qualification Certification.

Interagency Coordination

Continue, with individual national forests, to strengthen relationships and communication with cooperator agencies.

Defensible Space Around Structures

On December 17, 2009 the Pacific Southwest Regional Forester issued a letter directing that the minimum requirement for defensible space around structures within and adjacent to National Forest lands in California be increased from the Federal minimum of 30’ to 100’. Utilizing a 100’ minimum makes the Forest Service standard consistent with California State and Los Angeles County standards for defensible space. Each Forest Supervisor has the authority to authorize more than 100’ clearance, if warranted by site specific conditions. The Angeles NF is currently working with LA County Fire and Forestry protection to implement this new direction.
Angeles National Forest

Use of Night Flying Helicopters

The Angeles NF Forest Supervisor and LA County have agreed to modify the Cooperative Agreement Annual Operating Plan (AOP) to specify management’s expectations regarding night flying. **Routine training and operations will ensure Incident Commanders (IC) are aware that they may approve the use of night-flight approved helicopters at night to contain a fire that is an immediate threat, or may become a threat to life and property, when appropriate, and or when both agencies are in Unified Command. This would apply to all Angeles NF lands, including lands within the Initial Action Zones.** Angeles NF personnel will receive additional training on safety requirements when using night flying helicopters.

The Chief of the Forest Service has initiated a national review to assess night flying operations with preliminary findings due as early as July.

Dispatching /Emergency Communication Center Protocol

The Angeles National Forest will continue to use the “Closest Forces” concept to request additional resources as described in the California Mobilization Guide regardless of agency affiliation.

The Angeles National Forest currently utilizes and will continue to utilize mutual aid agreements to obtain available resources such as aircraft, handcrews, equipment and key overhead resources from local fire agencies.

The Angeles National Forest will not make any “informal” requests for resources. All requests will be entered into the Resource Order and Status System” (ROSS) and placed either to cooperators with mutual aid agreements that may be able to provide the resource or to the Geographic Area Coordination Center (GACC). This will provide a documentation record of what requests are declined or filled and by whom.

The Angeles National Forest will document when and why resources are released from an incident, such as by the request of a providing agency, they are excess resources, etc. This will be documented by the Incident Commanders as well as the Dispatch Center.

The Angeles will continue to record all radio traffic that is transmitted to the Emergency Communications Center.

Incident Commander Type III Refresher

Annually the Forest will continue to use Time Pressure Simulations for all Type III Incident Commanders. These simulations were completed by all ANF Type III Incident Commanders during the month of April 2010.

The Forest will continue to train with Chief Officers from our cooperating Agencies on the Unified Command Process and Procedures.
Transitional Briefings - Transfer of Command

Incident Commanders (IC) will ensure that an accounting of all resources on the incident, released from the incident and ordered resources is relayed to the incoming IC regardless of complexity. This information will also be validated through the Emergency Operations Center. This will ensure that a seamless transition has occurred and all resources are accounted for.

All Incident Commanders will follow the guidelines that are spelled out in the 2010 Interagency Standards for Fire and Fire Aviation Operations Guide.

Copies of all the Incident Commander’s documentation will be given to the incoming IC. The outgoing IC will also retain a copy of the documentation that was given to the incoming IC.

Defensible Space Around Structures

On December 17, 2009 the Pacific Southwest Regional Forester issued a letter directing that the minimum requirement for defensible space around structures within and adjacent to National Forest lands in California be increased from the Federal minimum of 30’ to 100’. Utilizing a 100’ minimum makes the Forest Service standard consistent with California State and Los Angeles County standards for defensible space. Each Forest Supervisor has the authority to authorize more than 100’ clearance, if warranted by site specific conditions. The Angeles NF is currently working with LA County Fire and Forestry protection to implement this new direction.
R5 and ANF told me last nite about 2300 hrs EDT that they had reviewed and were OK -- I think we are good -- one last review from you guys -- then I'll hand this to the Chief --

----- Forwarded by Tom Harbour/WO/USDAFS on 05/26/2010 07:18 AM -----

Darrel Schwilling/R8/USDAFS

To Tom Harbour/WO/USDAFS@FSNOTES

cc

Subject Fw: Lessons learned

file still is called R5 but this is all - National R5 and local
Bruce Palmer/WO/USDAFS
05/25/2010 05:51 PM

To: Darrel Schwilling/R8/USDAFS@FSNOTES
cc:()

Subject: LL

[attachment "R5 Lessons Learned.docx" deleted by David Sandretti/NONFS/USDAFS]

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