SAFECOM’s by Aircraft Type

For the month of August there were 102 USFS SAFECOM’s submitted, almost half of the 10 year average. Of the 102 SAFECOM’s reported, 29 were airplane, 4 airtanker, 2 SEAT, 62 helicopter and 5 N/A. The chart below shows the percentage of SAFECOM’s by aircraft type.

SAFECOM’s by Category

There are often more than one category assigned to a SAFECOM, resulting in a grand total greater than the total number of SAFECOM’s. There were 8 airspace, 37 hazard, 32 incident, 42 maintenance related, 4 mishap prevention and 3 management SAFECOM’s reported in August. Below is the percent of SAFECOM’s for each category.
SAFECOM’s by Category continued...

AIRSPACE - There were 8 airspace events reported, of which 5 were intrusions, 2 conflicts, 1 congestion and 1 procedures. Intrusions into TFR’s are typically the most reported in this category. TFR’s never have or never will keep all other aircraft out; SEE and AVOID is crucial.

HAZARD - There were 37 hazard reports and as usual, communication issues account for nearly a third of them. There were 4 that were verbal issues, 4 frequency management and congestion, 1 written, 1 ground radios and repeaters and 4 other. Pilot action accounted for 7 of the reports, 6 preflight action reports, 5 policy deviation and 3 each on flight following and instructions. Three of the 5 policy deviations were aircraft busting pumpkin time.

INCIDENT - There were 32 incidents reported, the most reported were 12 precautionary landings, of which 10 were mechanical related. There were 4 dropped loads and 2 dragged loads reported which are normally the most reported in this category. There were a few reports regarding cargo letdown in which a decision was made to discontinue splitting cargo loads on a single letdown line. The remainder of the reports were single events such as aircraft damage, injury, main rotor strike, security, dip site management, overloaded SEAT, cross wind and a cross loaded sky genie.

MAINTENANCE - Thirty-four percent (42 reports) had maintenance associated issues. The most reported were engine, electrical, airframe, avionics, hydraulics and mission equipment.

MANAGEMENT - There were 3 internal management reports. One was comments relating to the rappel program, one on the latitude/longitude problems and the other was regarding the toning of base stations and aircraft radios. 

MISHAP PREVENTION - There were 4 reports categorized as Mishap Prevention: A passenger noticing the fuel gauges indicating less fuel than the pilot thought he had; a pilot making excellent risk management decisions when backhauling a poorly rigged fold-a-tank; great CRM from a crew that experienced a smoking TDFM 136A radio and a mechanic finding a dent in the leading edge of the tail rotor blade.

SAFECOM Survey update: WOW, we received 75 pages of comments from the survey and are in the process of reviewing and analyzing the data. The next few pages show the responses to some of the questions, but due to the amount of data collected it is going to take us some time to analyze it all and have a complete report out. A full report on the survey will be finalized and distributed by November. Again, Thanks to all who participated in the survey and gave us your feedback.
### SAFECOM Survey Information

#### 2. Are you a...?

<table>
<thead>
<tr>
<th>Role</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Employee</td>
<td>340</td>
</tr>
<tr>
<td>State Employee (including counties and municipalities)</td>
<td>43</td>
</tr>
<tr>
<td>Vendor</td>
<td>63</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>27</td>
</tr>
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</table>

#### 3. Are the nature of your duties primarily...?

<table>
<thead>
<tr>
<th>Field, Management, Pilot</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field</td>
<td>173</td>
</tr>
<tr>
<td>Management</td>
<td>228</td>
</tr>
<tr>
<td>Pilot</td>
<td>67</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>76</td>
</tr>
</tbody>
</table>

#### 4. Which of the following services have you used the SAFECOM system for in the past year?

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submitted a SAFECOM</td>
<td>206</td>
</tr>
<tr>
<td>Searched SAFECOM data</td>
<td>294</td>
</tr>
<tr>
<td>Requested a SAFECOM-related report</td>
<td>84</td>
</tr>
<tr>
<td>Received or read a SAFECOM summary (monthly or annual)</td>
<td>337</td>
</tr>
<tr>
<td>Required administrative assistance (password, permissions, etc.)</td>
<td>48</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>45</td>
</tr>
</tbody>
</table>

#### 5. Have you received any training, either through workshops, unit-level training, or fire-related courses, on how to use the SAFECOM system?

<table>
<thead>
<tr>
<th>Receipt of Training</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>273</td>
</tr>
<tr>
<td>No</td>
<td>191</td>
</tr>
</tbody>
</table>

#### 6. Do you view the SAFECOM system as a lessons learned accident prevention reporting tool?

<table>
<thead>
<tr>
<th>View of SAFECOM System</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>392</td>
</tr>
<tr>
<td>No</td>
<td>67</td>
</tr>
</tbody>
</table>

#### 7. The SAFECOM system is NOT convenient and easy to use.

<table>
<thead>
<tr>
<th>Convenience Perception</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>22</td>
</tr>
<tr>
<td>Agree Slightly</td>
<td>59</td>
</tr>
<tr>
<td>Neither Agree Nor Disagree</td>
<td>114</td>
</tr>
<tr>
<td>Disagree Slightly</td>
<td>123</td>
</tr>
<tr>
<td>Disagree</td>
<td>146</td>
</tr>
</tbody>
</table>

Total Count: 464
### 8. People can report safety discrepancies without fear of negative repercussions.

- Agree: 150
- Agree Slightly: 104
- Neither Agree Nor Disagree: 60
- Disagree Slightly: 84
- Disagree: 67
- Total: 465

### 9. Aviation personnel (agency and vendor) are NOT actively involved in identifying safety concerns.

- Agree: 18
- Agree Slightly: 51
- Neither Agree Nor Disagree: 74
- Disagree Slightly: 95
- Disagree: 223
- Total: 461

### 10. Aviation personnel (agency and vendor) are NOT actively involved in resolving safety concerns.

- Agree: 22
- Agree Slightly: 57
- Neither Agree Nor Disagree: 63
- Disagree Slightly: 111
- Disagree: 211
- Total: 464

### 11. Safety is a core value in the Federal land management aviation program.

- Agree: 284
- Agree Slightly: 95
- Neither Agree Nor Disagree: 33
- Disagree Slightly: 34
- Disagree: 15
- Total: 462

### 12. Over the past year, how would you rate the overall quality of service received regarding the SAFECOM system?

- Very Good: 72
- Good: 204
- Average: 138
- Poor: 30
- Very Poor: 11
- Total: 455
These are samplings from the SAFECOM’s submitted for the month of July. We hope you will select a couple of them a day to discuss and use the lessons learned in your daily briefing. Some of the SAFECOM’s have been edited due to length; to read the entire SAFECOM, please click on the link.

SAFECOM 10-544: We hired the aircraft for fire reconnaissance for the Central portion of the state. Aircraft and observers had completed a recon of the AAA National Forest and the BLM earlier in the day. After lunch break they headed out to the BBB NF for Recon. Prior to departure dispatch informed them of neighboring recon on the CCC NF. They departed at approximately 1434 hours, at approximately 1600 I received a phone call from the neighboring dispatch that we needed to get our recon out of there area - he had ventured down there to take a look at a smoke and they had aircraft in the area. We contacted recon on the radio and had them return to their normal route to the north. Upon further investigation and phone calls - it looks like the smoke was 4 miles to the south of the our border. COREC-TIVE ACTION: Dispatcher talked with observers and pilot upon return and reminded them that the protocol was to ask permission to go outside of boundaries before doing so - even if they saw a smoke. We have the knowledge and information on what our neighbors are doing with aircraft. They acknowledged their mistake. Talked with UAO and he is aware of situation as well. UAO: Will discuss with the AO.

SAFECOM 10-546: Helicopter was asked to configure for a sling mission almost 1 hr before the mission took place. The crew was notified of the mission and began to reconfigure the helicopter with the requested 150ft length of line. This meant removing the bucket that was currently attached and connecting an additional 75ft line to the 75ft line already installed. Also an electric swivel was added just above the remote hook. Each section of line was tested and passed per the hook open check. I the Pilot in command for the helicopter received the word from our helicopter manager to proceed with the sling mission. Upon starting the helicopter, a hook check was performed using the hook open switch located on the pilot’s collective. We then proceeded to the helispot to pick up the cargo which consisted of one 360 gallon water blivet and one cargo net above that contained various cargo including backpack pumps. I then proceeded to the drop point at the fire, the spot was on a ridge top and was well marked, I was asked to take a look at the drop point which was adjacent to a helispot. After completing one circle, I set up the ap-
proach into wind. As we were short final to the spot, roughly 300 yards before the ridge, the load departed the aircraft and contacted the slope below the drop point. The approach path was free of persons and no one was injured by the load. The first conversation that took place was to ensure that neither I nor my copilot could have released the load. My thumb was located safely on the right side of the collective over two inches from the release switch. The co-pilots hands were not on the controls at all. As soon as I was clear of the fire area, we began to trouble shoot the problem to find the cause of the release. We noted that the Sacs-a-foam control head, which is used to dispense foam agent into the bucket, had a light indicating that it was supplying power to the longline. Upon landing it was also noted that the swivel had an open circuit on the foam pin of the nine pin plug. It was reading 9vdc from the foam control head, normally the output is 24vdc. **CORECTIVE ACTION:** AMI

**Comments:** The CanAM DART Swivel Assy shorted out causing hook to fail in the open position. There was an open wire found in the inside of the Swivel Assy, which is the power wire to the saxophone motor, it came in contact with another wire or shorted out on metal casing inside Swivel from a loose plug, causing unit to fail in the open position and dropping the load. This is a swivel issue, not an Sacs-a-foam issue. RASSM Comments. If you are using this type of electrical swivel, be aware when working with them and please share this incident with your pilots.

**SAFECOM 10-558:** I was serving as ATGS during the IA phase of the incident. XXX was the first helicopter to arrive with the ability to conduct bucket work for fire personnel. About three hours into the first burning period I determined that heavy airtankers and a lead plane were needed to reinforce the fireline. Upon arrival of the leadplane and tankers I attempted, unsuccessfully, to contact the helicopter several times on the assigned victor {air-to-air} channel: after five or six attempts I then switched to the air-to-ground frequency and was successful after 4 attempts. I explained to the pilot that, as this was an emerging large fire, there would be a heavy influx of air resources and would like him to monitor the victor channel: the pilots response was, “I don’t want to hear everyone’s life story so I will be switching it off on occasion.” During the remainder of the afternoon I frequently found myself in a position where, unable to raise the helicopter, I spent additional time and effort contacting this one air resource. As the incident in question was less than 10 minutes from the primary tanker base with extreme fire behavior and structures threatened, the tempo for this initial response was very rapid with extremely short turnarounds on the tankers. As a result tankers were forced to orbit and hold while efforts were made to reach the helicopter to clear the airspace. **CORECTIVE ACTION:** Upon arrival back at the Tanker Base I documented the problems I encountered with the helicopter and the following morning, spoke with the manager for the aircraft. The manager stated he had spoken with the pilot and would be addressing the problem with the contract vendor. UAO: The HIP was informed of the situation and will discuss communication protocols with the pilot. RASM Comment: The HIP was asked to discuss this event with the pilot. To ensure the safety of the aviation resources on a fire every pilot must be fully aware of what is happening around them. HIP Comment: This event was discussed in person with the pilot. Monitoring the correct radio frequencies is a challenge every wildfire pilot must master and we discussed improvements to aid with situational awareness.

**SAFECOM 10-560:** While traveling point to point on a resource order request, helicopter was utilizing the National Flight Following frequency to maintain flight following. After transitioning from dispatch A and departing, I attempted to make contact with dispatch B. I was able to hear their transmission L&C, but they stated they were unable to hear me. I attempted to make contact with dispatch C, but they too were unable to hear. I was able to maintain FF with dispatch A into XXX. On the ground I called dispatch B via landline and they told me there was a code guard of 110.9 on both the transmit and receive
frequency of NFF \(\{168.650\}\). I called the Coordination Center via landline and they stated a CG of 110.9 on only the TX side. I programmed that into our NAT system and was able to FF with dispatch B on departure. I requested the pilot file an FAA flight plan for the remaining legs of our trip so I did not utilize NFF further. Upon arrival, I spoke with the AC desk at dispatch D and they stated they were utilizing 110.9 on only the TX. On return, again FF via NFF, there was variation in utilization of the 110.9 CG on TX, RX, or both. **CORECTIVE ACTION:** Submitter comment: Programmed 3 variations of NFF into NAT radios: 110.9 on TX, 110.9 on both TX and RX, and no CGs on NFF and monitored those frequencies as well as attempt contact on all three variations while FF nationally. Dispatch E informed me that a “tech note” instructed the use of 110.9 on TX and the use of 110.9 on RX was “area optional.”

**NASS Comments:** While the CIO letter and Tech Bulletin IA 2010-02 states that NFF will be toned on the Transmit and Receive for both aircraft and base stations no later than June 25, 2010, nationwide implementation is uneven with some areas fully implemented and others only partially implemented. Flight crews need to be aware of the issue while transitioning through dispatch centers. If the aircraft has just the transmitter toned to 110.9 Hz they should not have any problems being able to communicate with all base stations (ie dispatch centers). Toning aircraft receivers at this time is not recommended except in the areas indicated in the Tech Alert, due to the inconsistency of the toning of the base stations. USFS and DOI ISO have been notified of the issue. We’ve requested a status report on compliance of base stations.

**SAFECOM 10-561:** Fixed-wing recon aircraft was departing the airport and announced their intentions. Pilot and observer in fixed-wing heard helicopter call position and had visual on take off. Helicopter did not hear fixed-wing announce intentions nor did he have visual. When the helicopter spotted the fixed wing he took evasive action by flying over a parked aircraft on the helibase. **CORECTIVE ACTION:** Fixed-wing recon radio was not transmitting on victor which was unknown to pilot and AOBS. Not sure if radio malfunctioned or if it was operator error. Helicopter did not have visual of fixed-wing on take off and was surprised when the airplane flew by which caused the helicopter to take evasive action. Fixed wing pilot and AOBS both felt there was ample clearance between the aircraft. **UAO Comments:** See and avoid was discussed. Radio used in fixed-wing was a slip in/portable unit which was new to the pilot and AOBS. Pilot and AOBS should have done a radio check on AM and FM prior to takeoff, this was discussed. **Recommend in the future that the Regional CWN light fixed wing aircraft contract require aircraft carded for recon/detection be required to have a contractor furnished in dash fm radio.** **RASM Comment:** I will explore the radio issue because we have had reoccurring problems with these temporary radio consoles. Part of the problem may be the way they are connected to the aircraft and the fact they are unfamiliar to the people operating them. So if I understand the true issue, I may not, the fix will require a contract modification requiring permanently mounted aircraft FM radios not just getting by with a set on the floor, plug in radio package. I will check with the Regional Avionics Inspector for feedback and advice. This SAFECOM will remain open so I can post future developments.

**SAFECOM 10-562:** During pre-flight/maintenance inspection it was discovered that a 5 inch by 5 inch area of paint was missing from the radome. Closer examination revealed a delaminated section of radome honey-comb. According to the radome and airframe manufactures specifications there is no damage tolerance allowed and any deterioration of radome structural integrity is considered “not airworthy”. **CORECTIVE ACTION:** Working with the aircraft contractor to correct problem prior to returning to contract availability.

**SAFECOM 10-564:** While the helicopter manager was relaying the fire size up to dispatch from the helicopter, the pilot noticed smoke coming from the FM 1 radio that I was using. He isolated the problem and immediately shut down power to the avionics. He also reached back for the fire extinguisher and the crewmember behind him handed the extinguisher forward. The extinguisher was not used. The pilot informed the crew we needed to land and quickly assessed a precautionary landing area and landed the aircraft. Upon landing the crew exited the aircraft and communicated to dispatch the situation on a hand-
held radio. The pilot shut down the aircraft and continued to evaluate the problem. The pilot’s assessment led him to the conclusion that the problem was isolated to the FM1 radio. The manager and crew made the decision to hike out to the location of a responding engine and the pilot flew the A/C to the same location. The mechanic for the A/C arrived shortly after with the crew chase truck. The mechanic confirmed the problem was the TDFM 136 A, radio. The pilot and mechanic flew to the company hangar, 20 minutes away. Through discussion with the manager a plan was developed for the mechanic to replace the radio at the hangar, return the A/C to service, contact AMD maintenance, and have the maintenance inspector return the ship to availability. The COR was informed of the plan through dispatch. All went well as planned and little A/C availability was lost. **CORECTIVE ACTION:** Crew resource management was very good. Pilot identified the problem, responded, crewmembers assisted, assessed hazards, and the ship landed. We have had other problems with the new digital radios...RASM Remarks: Very professional response to a potentially very hazardous situation, Well Done! I’ll ensure the information is passed along to NIFC Avionics Shop. You mentioned other problems with this digital radio, I hope to not this extent...EVERYONE: please pass this information along and HEADS-UP! Brief your pilots of this potential. Lastly, everyone should also be documenting the avionics discrepancies, please ensure that NIFC Avionics shop is in the loop on the FM Radio problems. Thanks for the SAFECOM, again, GREAT CRM, Well Done!.....8-08-2010 Update, RASM Remarks: I spoke with the helicopter manager, who had spoken with the contractor. The contractor has experienced over 20 failures (various reasons) throughout his helicopter fleet of the digital radio, and had indeed witnessed another failure of the radio smoke checking. Please ensure the contractor fills out and sends in the FAA Malfunction and Defect report forms so the FAA will be in the loop too. Please keep NIFC Avionics in the loop.....8-10-2010, Additional Information, NIFC stated that there is a Service Bulletin {#} SBFM 03.1-01 dated May 17, 2010 to address this issue. The SB states it affects P/N: 091258-X-XXX and S/N’s FDA1427+ Below. FYI, RASM. NASS comments: Due to several TDFM 136A radio issues Technical Bulletin IA 2010-03 was issued.

**SAFECOM 10-567:** During weekly rappel proficiencies an “out of sequence” hand signal was given to the first stick of rappellers on the load. The events leading up to this are as follows: I opened both doors and dropped left side rope and I moved right, inadvertently bumping the ICS volume knob on the avionics communication box. Because the carter box is locked on during the rappel sequence, I immediately lost side tone and therefore knew something was wrong with my communication system. I stopped the rappel sequence and started trouble shooting the ICS system: eventually coming to the communication system box and finding the problem. When I was satisfied that my communication problem was restored I resumed the rappel sequence. I dropped the right rope then gave a “move to skid” signal to the rappellers. I realized as soon as I did this that it was not right for the rappellers did not respond to the signal. I then gave the “hook up” signal to them and the rest of the rappel sequence went without incident. While I take full responsibility for making a mistake, the reason I’m submitting this SAFECOM is to make other spotters aware of what I believe were some contributing factors leading up to this event. We as rappel spotters are trained to identify and mitigate problems as they arise in the rappel sequence. The reason we have proficiency requirements is to condition ourselves to the process so the routine becomes familiar and comfortable. **CORECTIVE ACTION:** The changes to the sequence and the language of the rappel process have found high time spotters like myself struggling with the “new” procedures! To this point it takes a conscious effort to keep the steps in order, so much so that it is a distraction to our mindfulness. The only solution I can think of for this issue is training what we already know, to the point of it becoming our “new” routine and overshadowing our previous training of the historical sequence. Regional Check Spotters Comments: Good job on behalf of the rappellers for knowing where they were at during the rappel sequence and not jumping the signal, as for the spotter change is hard. The hand signals or sequence have not changed between the old and new rappel guide, other than the rappeller sits in the seat rather than going to the floor. We all have had to change things in the past, its matter of working through it and perhaps more mock-ups/proficiency need to take place for the spotter...
to become more proficient with their verbiage. National Rappel Specialist Comments: As mentioned by
the regional check spotter only slight changes have been made to procedures, the sequence has remained
the same between the versions of the Rappel Guide. If the changes to the verbiage are still distracting
spotters throughout the sequence, additional mockups with the pilot should be performed until profi-
ciency is met. Spotters are encouraged to work with other spotters in a peer review fashion to help solidi-
ify the entire rappel sequence.

SAFECOM 10-568: Pilot: I was asked to retrieve some backhaul loads from the fire. I was flying a 205
with a 150" long line. I was to bring the cargo nets back to the Helibase 10 miles away. The first 3 of 4
trips were routine. On the 4th load I was hooked to a cargo net with a fold-a-tank attached hanging above
the load. The tank was hanging vertical and behaved well for the 1st mile. I was intentionally flying slow
with some apprehension about the tank misbehaving as I had experienced in the past. At about 1 mile
into the flight the collapsed tank started “flying” in circles from its attachment point. As I slowed even
more it started swinging fore and aft, then laterally jerking the line and helicopter. I slowed to a hover to
stop the action. It stopped swinging and I continued at about 35-40 knots to keep it stable. As I ap-
proached the helibase I let them know that it was a crazy load and I stayed clear of the other aircraft and
runway. About 300 yards from the cargo base one half of the frame of the tank fell from the load and
dropped into a pasture. I flew the rest of the load into the cargo drop zone and released it. CORECTIVE
ACTION: Notified IC and Ops, kept rigging (what was left) intact to analyze and provide a learning op-
portunity for individuals involved. HEBI (T): After the load came apart at helibase we contacted Opera-
tions and Safety to let them know what happened. The pilot did a great job of not overflying the cargo
area and other aircraft and positioned the load over an empty pasture as the load broke apart. We left the
load rigged and contacted Ops to offer the Hotshot Crew that rigged the load an opportunity to come to
helibase and see how it was rigged and how to rig the tank in the future. A 3 foot section of aluminum
bracing was missing and the liner was hanging to the frame by a single piece of velcro. We debriefed heli-
base personnel about rigging folding tanks properly. RASSM: Backhauling a fold-a-tank is different then
backhauling normal trash, etc. We need to assess if the ground crews who are doing the backhaul are
qualified and experienced to hook loads that out of the norm. The pilot did an excellent job of prevent-
ing a possible bad outcome and kudos to the helibase for making this a learning opportunity for the crew.

SAFECOM 10-569: Helicopter XXX incurred a main rotor strike while landing at an unimproved helis-
pot during initial attack. After high-level reconnaissance of a series of landing areas the pilot and man-
ger chose one and began an approach. Manager was watching the left side and tail of the aircraft for
clearance while the pilot watched the right side and tail. Upon landing manager looked over to the right
side to see the main rotor strike the top three inches of approximately eight foot pine. The pilot picked
up and moved four feet to the left to clear the obstacle and landed. Upon landing the pilot shut down
and inspected the main blade. It was discovered that there was only a small green rub mark found on
both blades. Contacts were immediately made: the maintenance inspector, HOS, and local UAO.
CORECTIVE ACTION: The decision was made to have the pilot fly to a local airport and have the
company mechanic inspect the main rotor blades: the FS crew remained in the helispot. The mechanic
inspected the main rotor blades referencing the inspection criteria found in the helicopters maintenance
manual: IAW Bell CR+0 Manual Chapter 62. No damage found and the resulting maintenance log en-
try was faxed to the Maintenance Inspector. The helicopter was returned to contract availability. RASM
Comment: This event was investigated by the HOS, the local UAO with input from me. Because there
was no damage to the main rotor blades this event was not reportable to the NTSB. AMI comments: all
procedures were followed as required. HOS comments: This type of rotor strike event is not uncom-
mon and seems to be the result of self imposed urgency in concert with a loss of situational awareness by both
pilot and manager. Manager acknowledges measures that could have been taken to minimize the hazard
and prevent this incident. Manager is working on a list of CRM protocols that can be used by self and
others for decision making/CRM when conducting off-site landings.
SAFECOM 10-571: During Preflight, the mechanic found a dent in the leading edge of a tail rotor blade that appeared to be caused from a Dzus fastener. There was a missing fastener on the vertical fin that was located in the arc of the tail rotor where the dent was located. A new fastener was placed in the dent and was a perfect fit for the dent. There was no dent in the blade before the helicopter had ferried home the previous day. **CORRECTIVE ACTION:** Blade was replaced, tracked and balanced to less than 0.2 IPS. A test flight was performed with no problems noted. AMI was notified, logbook pages faxed and he place the helicopter availability status. RASSM: This shows the importance of doing a thorough pre-flight. Good job, no further action required. AMI Comments: I was contacted initially and after the blade was replaced, balanced and a test flight was conducted. Returned helicopter to contract availability.

SAFECOM 10-578: Aircraft Dispatcher: I scheduled a fire recon flight for our neighboring forest with a local vendor. After seeing the airplane still on the ground on AFF and 20 minutes late of scheduled take-off time, I called the vendor. The vendor’s dispatcher told me the plane had already taken off (pilot only) about 20 minutes ago. She didn’t know why the pilot had failed to call/check-in with our dispatch office. Our neighboring dispatch called us to say the plane had landed on schedule to pick up the passenger for the recon. I documented the event and advised our FAO. **CORRECTIVE ACTION:** FAO Comments: The local aircraft dispatcher spoke with the neighboring dispatch center and asked them to ensure the pilot was clear on agency flight following requirements prior to initiating his next mission. AFF was operational, just not turned on for the first leg of the flight. Remaining missions were completed with no additional problems. I spoke with the company owner and was informed the pilot believed a company flight plan was adequate because no government personnel were on board. The vendor was reminded of agency flight following requirements and asked to ensure the information was passed on to all government carded pilots within the company. Dispatch did a good job of immediately attempting to locate the aircraft upon learning it had not checked in on take-off. The on-site correction at the receiving unit was timely and appropriate...RASM Remarks: Yes, kudos to dispatch and great follow-up with the contractor. Exactly, this IS policy. Thanks submitter for the information for everyone to learn from.

SAFECOM 10-580: Mechanic informed Helicopter Manager that NXXX was out of service. Kamen Industries informed the contractor that certain series serial numbered blades have been deemed not flight worthy. Upon this information helicopter manager put NXXX in contract unavailability statutes. Local Dispatch, FAO, National Helicopter Coordinator, Maintenance Inspector and Contracting Officer were informed of the situation. **CORRECTIVE ACTION:** Received and installed new set of blades for NXXX on August 7, 2010. Helicopter was returned to contract availability status at 2000. All the above contacts were updated of the situation.... RASM Remarks: Proper procedures in notifications were made. Update from the National Aviation Maintenance Specialist: I have talked with one contractor and they sent me a copy of an E mail they received from Kaman about replacing a single identified blade on NXXX before further flight. I also talked with Kaman directly and they are working on a Service Bulletin to address certain blades. At this time this issue only affects two companies in the world and one of the companies is in Japan and the other one is a contractor here in the US. It only affects the one helicopter and only one blade on that helicopter. This blade has a very high time in flight and Kaman has some concerns about blades with a certain amount of flight time. Kaman indicated they had another blade in the paint shop at this time to be shipped to the vendor ASAP to replace the one blade. The helicopter should be up and flying in a short time after receipt of the blade.

SAFECOM 10-584: Flight was scheduled for 1130 to try to locate a reported smoke in the wilderness. The aircraft arrived at dispatch and picked up the duty officer at approximately 1145. The pilot commented that he had to swap planes because the other plane was blowing blue smoke. The passenger was loaded and briefed, then the plane taxied out and departed the airport. As the plane departed the traffic
pattern, the passenger asked how much fuel was on board, to which the pilot responded 3 hours. The passenger checked in with dispatch, indicating pilot plus 1, 3 hours of fuel, and the destination. The passenger stowed the radio frequency card, then noticed that one fuel gauge was near empty and the other was about a quarter tank. After pointing that out to the pilot, the aircraft returned to the airport for fuel.

**CORECTIVE ACTION:** The pilot stated that when he called his company dispatch to inform them that he needed to switch aircraft, he asked them to make sure it was fueled. They told him it was ready to go and he did not check the fuel tanks before departing for the Forest Service ramp. The pilot acknowledged that he should have checked the tanks himself. After returning to the airport, the aircraft was fueled. The pilot and passenger both verified that the gauges had come up to the proper level and the mission continued with no other anomalies. Even though the passenger is very familiar with helicopter operations, he is only familiar with the basics on fixed wings. Asking the question brought the pilot’s attention to an issue that could have had bad results. The pilot was very appreciative that he did...RASM REMARKS: Awesome job of pointing out the fuel inconsistency with what the pilot stated was on board. The pilot owned-up to the failure to check the fuel quantity on the preflight (assuming someone else had). The preflight action is a serious responsibility and checking fuel quantity is never delegated, for good reason! Thanks Pilot for owning-up (lesson learned about preflight action) and kudos to the pax for catching the discrepancy and SAYING SOMETHING!...FAO REMARKS: The vendor, Regional Aviation Officer and RASM were contacted and informed of our concerns regarding this event. GREAT catch by the passenger and an excellent example of CRM!

**SAFECOM 10-585:** At approximately 1500 hours the helitanker approached its normal landing spot at the airport just to the west of pad #1. They were returning from the fire. T-XX was parked in pit #1 receiving fuel after returning from the same fire. The co-pilot for T-XX was kneeling on the wing fueling the left outboard fuel tank. As the helitanker hovered down for landing from approximately 50 feet, the co-pilot was being blown off of the wing. According to the co-pilot the fuel nozzle was down in the fuel tank and the co-pilot was able to hold on and not be blown off the wing. **CORECTIVE ACTION:** The FAO sat down with all Helitanker pilots, airtanker pilots, helitanker managers and the base manager. We concluded that as much as possible we will not park an airtanker on pit #1. If there is occasion to have an airtanker in pit #1, the Helitanker will touchdown outside of Forest Service property and have their crew drive out and hook up their snorkel and they will ground taxi to their parking spot. Previous to this incident there was not a set procedure for the Helitankers to follow when approaching their designated landing site. The new procedures will reduce the rotor wash and improve safety. Good work by all coming to an agreement on new procedures. RASSM: Risk Management is the key to prevention. Assure that all visiting aircraft know this procedure.

**SAFECOM 10-587:** While flight following with AFF the icon turned red and indicated lost contact. I then sent a text message to the aircraft in which they responded that they were ok and everything was normal. I then called the AFF helpdesk and explained the situation in which time they also had not received an update since 11:03am. I then opened the Blue Sky Network tracking site to see if the aircraft was being tracked by their web site and noticed that the aircraft has also lost contact at 11:03am. They then checked the serial number of the blue sky unit and informed me that they had had an unexpected outage and that no data had been lost and that the system was back up and operational. They began tracking again at 11:38am and seems to be operating without any incidents. **CORECTIVE ACTION:** 1) Sent text message to the aircraft and received a return message back that they were fine and also their coordinates. 2) Called AFF helpdesk and notified them of the situation. 3) Opened up the Blue Sky Network tracking web site and found the same stoppage as the AFF site. Called Blue Sky and verified that they were still receiving data from the aircraft and they notified me at the time that they had an unscheduled outage and that everything was back to normal. Acting RASM: Good follow up - Thanks for the SAFECOM.
SAFECOM 10-592: Proficiency Rappel Training at home unit: equipment related. The crew was conducting proficiency rappels. While deploying the final stick of rappellers the right side rappeller transitioned to the skid and noted that his snap-hook was slightly cross-loaded approximately one half inch off of center in the decent device after clearing his rope and returning to the ready position. The spotter gave the signal to rappel and the left side rappeller descended down the rope. The right side rappeller pointed to the snap-hook and descent device to get the spotter’s attention. The spotter inspected the snap-hook and descent device but because the rappeller was in a very vertical stance on the skid it was difficult for him to lean in and get any slack on the rope. The snap-hook and descent-device were oriented and hooked up correctly and the cross load appeared to be very slight and nowhere near the spring loaded gate of the snap-hook. The spotter made the decision to send the rappeller with the thought that the snap hook would right itself once more pressure was applied and that it was not a threat to the integrity of either the hook or the device. **CORRECTIVE ACTION:** The rappeller descended off of the skid and down the rope. The device remained cross-loaded the entire way to the ground: as a result of the device being even slightly cross-loaded: the rappeller had to feed the rope continually to the ground. Upon inspection of the descent-device there was a noticeable 1/8” notch that had been worn into the inner portion of the ring that receives the snap-hook. A debriefing was conducted with the spotter, pilot and all rappellers on the load after the mission was complete. The affected rappeller felt that communications were good in the aircraft and was comfortable with the spotter’s decision to send him. Both rappeller and spotter were surprised that the snap-hook didn’t straighten out given the slight angle that it was positioned in. Spotter notified the Base Manager and Check Spotter promptly after the incident and is currently following their guidance in handling the situation. Regional Check Spotter Comments: Thanks for sharing this information. In the future if this scenario happens again where the spotter/rappeller is unable to get the decent devise and snap hook un-bound out on the skid. My recommendation would be to bring the rappeller back inside the aircraft to release the tension on the snap hook and decent device, if this doesn’t correct the bind action then discontinue the rappel.

SAFECOM 10-599: NXXX was assisting the Fire with Long Line Cargo Missions to DP-5. The aircraft was configured with the pilot door off and the left rear slider door open and locked into position. On the second Long Line load to DP-5, the pilot heard the left rear seat belts making odd noises, looking to the back seats at that time he noticed the upper left back seat cushion missing. He completed the mission and returned to HB. The prior days missions did require removal of upper rear seat cushions and folding back the rear seats. At the end of shift the helicopter was reconfigured back to normal operating standards with the seats back down, cushions reattached with snaps, and all four seat belts secured. The entire crew and pilot were briefed after the incident, no known procedural errors were found. The snaps for the upper seat cushions have separated from the straps in the past, but have never been an issue, and had been replaced before. **CORRECTIVE ACTION:** RASM Remarks: I didn’t hear of any aircraft damage as a result of the missing cushion. Part of the preflight action is to check the security of the cushions and loose equipment in the aircraft, especially flying with doors off. Please also check the security/condition of the snaps, fabric holding the snaps, velcro, etc...If any worn items are found report it to maintenance immediately and get the repairs accomplished.

SAFECOM 10-602: The SEAT flew within the airport traffic area to perform a proficiency drop in conjunction with ground crew fire simulation. Pilot executed split drops and proceeded to land on runway 17 with an estimated cross wind of 10-15 knots. Upon touchdown roll the aircraft veered from west to east of the centerline with observed braking approximately 100ft. that resulted in the landing gear of aircraft coming 10 feet off of runway for approximately 300 feet before correcting and coming back onto runway. Incident was observed by the acting base manager, firefighters on the simulation fire and tanker base personnel. **CORRECTIVE ACTION:** Inspection revealed no damage to aircraft or the runway lighting sys-
tem. Phone calls were placed to the appropriate safety, maintenance, and program managers. Briefing with the pilot, acting Base Manager and SEAT Manager was conducted to discuss the importance of assessing cross-wind and when possible utilizing runway into the wind. An AAR was conducted with the firefighters, SEAT personnel, acting Base Manager, and the SEAT Pilot. The pilot did a good job by not overreacting to the situation and as a result transitioned the aircraft back on the runway correctly without incident. Note: Upon further inspection of the tail wheel assembly, the tail wheel lock was not locking properly. Fitting was flushed and lubed by the pilot then ground tested to satisfaction. This was a significant contributing factor to this landing. UAO Comments: I was advised of incident and planned follow up actions by Base Personnel (SEMG) immediately following. In addition to immediate pilot inspection and servicing of Tail Wheel Assembly, a company mechanic was also brought in for a post incident aircraft inspection. Wind advisories (AWOS) was being utilized, but use of a more appropriate available runway was the focal point of the AAR.

SAFECOM 10-608: Went to a dip site on the River I had used several times on this incident. I lowered the bucket into the river and watched as it tipped and submerged. Once I saw that the bucket was in the dip and filling I looked at the river bank to pick up reference points to hold my hover position then glanced at the bucket to see that it was submerged and filled. I picked up my reference points on the river bank and started to lift the bucket. I then felt a hard jolt as I was raising collective to lift the bucket there was a shudder/resonance through the airframe and then the helicopter seemed to climb as though there was no longer a load. To stop the vibration I lowered a bit of collective and pushed forward cyclic to fly out of the resonance condition. Once I felt I was clear of obstacles I checked and saw that there was damage to the bucket. I called the IC and reported that I had snagged and damaged the bucket and was told to return to the Helibase to drop off the bucket then return to pick up the crew. Conditions at the dip were light up canyon wind and the approach was made into the wind. The dip site was in the shadow of much higher terrain to the west. The dip site was a wide deep pool in the River at a point where the helicopter had sufficient rotor clearance to operate with a 100ft line. The snag was probably caused by the river pulling the bucket or cables into or under a submerged rock in the dip site. I did not jettison the bucket and line because the bucket came loose from being snagged so quickly. CORRECTIVE ACTION: When dipping in deep river pools keep the buckets from fully submerging even if that means you take smaller loads of water if there is not a dip site manager available. AMI Comments: Contacted by the manager and talked to him about the stress on the helicopter. The pilot said that there was no over torques and they looked at the data and no out of limit situation was found. Bucket replaced with spare and returned to contract availability. RASSM: I spoke with the manager, this is a dip site that is used often and has never been a problem before. There was no visible obstruction in the river and the pilot was operating in a safe manner. The pilot has been instructed if dipping out of this area again to operate with a heightened level of awareness.

SAFECOM 10-615: The contract mechanic encountered someone trying to enter the helicopter. The person had a toolbox in one hand and was using the other hand to open the pilot’s door (left hand front door). The mechanic confronted the person and told him to leave immediately. The person apologized, walked past the mechanic, up the flight of stairs and across to the parking lot. The mechanic didn’t think at the time to get a license plate number. He also didn’t think about calling 911. The person attempting the break in seemed to be familiar with the helibase and its surroundings. The contract COR was told the next morning around 0945. Forest Service Law enforcement was immediately contacted and an investigation started. The helicopter had two very thorough pre-flights. Nothing unusual was found. CORRECTIVE ACTION: Acting FAO: Contractors and helitack crew reviewed the base security plan. Contract personnel reside at the helibase. The aircraft had been left unlocked on the night of the incident. The aircraft will be properly locked at night per security plan. Procedures were reviewed for when encountering an incident of this nature. Call 911 immediately. Try to get a description of the vehicle and a license plate number if it is safe to do so. Remove yourself from the situation, if possible, if it seems unsafe, then call
911. Secure the scene to avoid destroying evidence (fingerprints especially). RASSM: After this incident a letter was sent out by the RAO requesting that all personnel review and train with their security plans.

**SAFECOM 10-616:** Aircraft took off with pilot, spotter, and spotter trainee to do some typical terrain cargo letdown training around the base. An area was selected and spotter trainee prepared cargo for letdown. The trainee did final checks on cargo, carabiners, and letdown lines, and then deployed cargo as per IHRG procedures. As the cargo left the skid, the trainee noticed that one of the carabiners on one of the boxes being deployed was cross-loaded. The cargo letdown procedure continued and the boxes were successfully deployed. Upon retrieval of the cargo on the ground, the trainee noticed that soft-loop of the letdown line had been caught and/or snagged in the gate of the carabiner. The trainee pulled the soft-loop out of the carabiner and found it to have a small cut from the carabiner gate. The letdown line was retired. **CORRECTIVE ACTION:** It was deduced that the way the carabiner was cross-loaded caused the letdown line to be pulled into the locked gate. The spotter and trainee discussed the need to provide heavy tension on the letdown line as cargo is being deployed in order to keep the carabiners correctly loaded. Regional Check Spotter Comments: Excellent lesson for the trainee spotter and good corrective action by the qualified spotter. Always keep tension on the letdown line when deploying cargo. UAO: Good use of the system within the rappel group.

**SAFECOM 10-617:** Throughout this whole year, I have been requested to fly to numerous different locations for fire, and other missions. When trying to input lat/longs into the aircraft GPS unit, it would be nice to have a standard format. The format can be easily changed on GPS units, but can be difficult to accomplish while in-flight and still deal with all the other distractions. While in the big scheme of things, this is not a major safety hazard, it is annoying having to constantly try and clarify positions. TO give an idea of how widespread the problem is, I just looked at two IAP’s for fires I have been on in the last two weeks, and here are the positions given for the SAME hospital, but on different IAP’s: Fire one: Lat/ Long 40.46.34/111.50.24. Fire two: 40°46'13" 111°50'05" Obviously Fire two’s position is in deg/min/sec but it is impossible to tell the format of Fire One’s position. There is also another format used on the same page for Fire two: 43°08.22 115°41.62. There are also major discrepancies induced by incorrectly reading the given positions. It is often difficult to determine the format given because people again do not understand how to read it over the radio. For example a firefighter will say “Position is North 43 by 41 by 3, break, West 114 by 21 by 38”. Is this degrees/minutes/seconds OR degrees/minutes/decimal minutes? Also is the latitude N 43 41 03 OR N 43 41 30. Most pilots I have spoken to would like to see a standardized format used for positions nationwide. General consensus amongst the ones I have spoken to would be to use degrees, minutes, decimal minutes. All GPS units can be set to any of the following formats in the setup menu. (1) Degrees and Decimal Minutes DDD° MM.MMM' N 32° 18.385' W 122° 36.875' This is the format most commonly used when working with electronic navigation equipment, especially aircraft. This format has an accuracy of about 6 feet. By making sure that units give the FULL three decimal places, it will make it clear that this is NOT deg/min/sec. **CORRECTIVE ACTION:** NASS: Excellent information from the submitter. This has been an issue for years and a Forest Service Information Bulletin 10-02 was distributed earlier this year on the subject. We have submitted this info to NIAC with a recommendation to use one standard format.

**SAFECOM 10-621:** While performing a routine longline mission from a Helispot to the fire, some paper cups flew out of the net upon approach. Since it was a 15 minute flight, the pilot felt that it was safer to get the load on the ground than to turn around and scatter items back to the Cargo site. **CORRECTIVE ACTION:** All personnel involved with cargo performed an AAR, and understand that all items need to be secured in order to prevent loose items from escaping from net. FAO comments: A good discussion took place with all involved. A key item that was discussed was to communicate to the folks on the ground that assembled the cargo net is “are all loose items secure in the net”. This will help in future logistical missions and possibly prompt the qualified A-219 or HECM to make sure prior to departure that
all is secure. RASSM: Training during low fire activity could prevent incidents like this from happening, therefore: when tasked to do cargo missions it is recently practiced.

**SAFECOM 10-622:** The helicopter was requested for external cargo operations on the fire. Just after dropping cargo off at the Helispot and starting his accent up the canyon to the fire a C-17 over flew the helicopter. The estimated distance between the aircraft vertically was estimated at 1000 vertical feet. The pilot did not see the aircraft until it was up canyon from his position and only because fire crews alerted him to the presence of another aircraft in the canyon. **CORECTIVE ACTION:** Air Support was notified and initiated contact with Military, dispatch and the GACC to make sure the MOA was shut down. The military utilizing that MOA had been notified earlier that day about the TFR and the fire activity. The GACC made sure de-confliction was in place. This was confirmed. RASSM: There is always a false sense of security when a TFR is in place and de-confliction has been accomplished. It is Best Practices to operate in a “See and Avoid” manner at all times.

**SAFECOM 10-624:** After take-off to the fire, the pilot of T-XX noticed a nose wheel indicator light was yellow instead of green. The pilot did a precautionary emergency extension of the nose gear. The landing went without incident. After landing, the pilot could not turn the aircraft using the tiller. The pilot was able to turn the aircraft with rudder and engine inputs only. After parking, the mechanic was called to do a more in-depth inspection of the nose gear. **CORECTIVE ACTION:** It was determined that the circuit breaker for the landing control valve system was pulled, preventing any pressure from getting to the steering system. The circuit breaker was reset and the system worked normal. A mis-stowed nose bay ladder was causing the nose wheel not to stow completely, tripping the micro switch to turn yellow. Aircraft was placed back into contract availability by the AMI. RASSM: All crews need to assure that the system/procedure that is in place to prevent incidents like this from occurring is practiced and followed.

**SAFECOM 10-633:** While approaching the airport 8/16/10, both the PIC and ATGS noted the smell of hydraulic fluid when the landing gear was lowered. Left, Right and Nose displayed all 3 green and were visually checked and locked. The PIC observed a small amount of hydraulic fluid leaking from the actuator cylinder shaft seal for the nose gear. Both the PIC and ATGS agreed that it would be okay to complete the mission on 8/17/10 as the 50-hour maintenance was scheduled at the end of shift. At approximately 1510 on 8/17/10, the PIC, ATGS and ATGS(T) all noted the smell of hydraulic fluid again when the landing gear was lowered. Left, Right and Nose displayed all 3 green and were visually checked and locked and the landing occurred without incident. The parking tender stated the plane had a major hydraulic leak from the nose area. A pool approximately 1.5 inches in diameter was observed below the nose cone. The spill was contained and cleaned up by FBO staff. **CORECTIVE ACTION:** The nose-gear activator reseal repairs were performed by the company A & P certified mechanics. The Region A Maintenance inspector was notified by the contractor director of maintenance. Test flight procedures were done in accordance with FAR AIM, USFS policies and the aircraft was returned to service with approval from the Region A Maintenance inspector. AMI comments: This aircraft was returned back to contract availability by a inspector in another region. I did not hear about this until after the fact from the FAO. For some reason FS people are NOT calling the AMI in the regions where the aircraft are operating. The AMI in the region where the aircraft is physically located needs to be notified of all maintenance issues.

**SAFECOM 10-640:** The Pilot had a difficult time finding the helispot (took excessive amount of time getting from helibase then to helispot). The pilot stated that GPS system was malfunctioning. The Pilot lowered approximately 20 foot of extra longline on ground for sling load pick-up and the load brushed the trees after pick-up. The pilot had a difficult time finding helispot when returning with back-haul. The helicopter experienced “Settling with power” when dropping off back-haul. Back-haul hit the ground with excessive force as ship appeared to be falling erratically out of the sky. The pilot corrected the ship
just below/at tree level (70-80 feet) and immediately directed it away from ground support personnel and vehicles. I called the helibase manager and informed him of the incident. **CORECTIVE ACTION:** The helibase manager called us back and said that he had spoken with the helicopter pilot and manager. They agreed that the pilot could return to flight operations, now that he was familiar with the fire area and that he needed to be deliberate and slower paced. The helicopter manager checked the GPS coordinates and felt that the units were now working properly. They were not able to replicate the problem with the non-portable GPS unit on the ground. The Pilot returned a couple of hours later on another multiple-sling mission and seemed to get more comfortable with each subsequent load-hauling mission. RASM Comment: The STAT Helicopter Inspector Pilot (HIP) talked to the helicopter pilot about this incident. It was agreed that the pilot was becoming more comfortable with sling load operations but need additional training with the GPS and other radios. The STAT HIP will return to recheck the pilot on his GPS and radio proficiency.

**SAFECOM 10-644:** During a 4 person rappel fire, 2 cargo boxes, 1 saw box, and 2 bladder bags were discussed during fire size up. During power assurance check, power was right on the on the green and yellow lines, so myself and the pilot than decided we needed to land and down load some weight. That was accomplished and the rappel sequence was resumed. During rappel operations estimated height was approximately 150 feet. During 1st cargo operation (which was going to be 1 cargo box and 1 saw) the IC decided he would like the 5 gallon cubie of drinking water. Approximate height was 130 feet. It was then decided to go back to the helispot and gather the excess gear which included the 5 gallons of drinking water, then deploy the last set of cargo equipment. During the next cargo letdown, I figure there was more than enough tape and clearance to safely hover and do a split load (1 cargo box w/water and then a saw box). During that mission I noticed the blue middle indicator section of the let-down line going over the skid and thought that could not be since the box seemed to be only 50 to75 feet from the middle marking. I did a visual inspection of the let down line left which seemed to more than enough to complete the mission. I hooked up the saw box and proceeded to lower it. I came to the end of the tape with the saw box roughly 40 feet above the ground. I alerted the Pilot of the scenario and we both felt we had more than enough room to lower the box to the ground. We proceeded to lower the A/C (checking the clearance of main and tail rotors): still hovering safely above the vegetation, I decided that we were at the limit to lower the A/C any further. The saw box was still approximately 15 feet above the ground. At that point I alerted the pilot that I was going to cut the line. The saw box free fell roughly 15 feet. Actual height was tough to judge due to no shadow contrast. It was mid morning after a rain and the sky was slightly overcast. **CORECTIVE ACTION:** Conducted an AAR with pilot on flight back to base and informed my supervisor of the scenario. Change out the blades in my raptor knife. I inspected the line in question to insure that the marking was placed in the correct position and yes it was. Things I could have done different was utilize another line (which was available) instead of trying a split load. Middle section of line was dyed in blue contrasting the red ends. Maybe if the middle sections was a florescent color I was have seen it better in the low lighted background we had. Basically I should have been better focused. HOS comments: In discussion with Check Spotters and WO Rappel Specialist, the practice of splitting cargo loads on a single letdown line shall be discontinued at this time. With the new requirement of maintaining fifty feet above obstacles for rappel operations the likelihood of doing this while maintaining the fifty feet is minimal. These opportunities are rare enough anyway and tend to increase the opportunity for error. Also see SAFECOMs 10-634, 10-616, 10-613 and 10-606.

**SAFECOM 10-645:** On approach to the sling spot with an external load (2 blivets and 1 net daisy chained) the pilot had the 1st Blivet approximately 10 feet off the ground when he experienced an updraft. This caused the helicopter to move upwards and to the left. After the upward movement was corrected the load came back down to the ground and contacted a down log puncturing the lowest blivet. The Pilot then placed the load back on the original sling sight. **CORECTIVE ACTION:** Pilot discussed situation with manager after the mission was completed. Manager notified helibase manager.
Comment: The STAT group reviewed this incident with the pilot, the helicopter manager, and the UAO. It was discovered that when the aircraft experienced an updraft this resulted in the rotation of the sling load. As the pilot stabilized the helicopter he lost sight of the load as the load swung behind the helicopter: this is when the blivet contacted a stump resulting in the puncture. Great effort by all to understand what happened and lesson learned about drop site selection given the possibility of afternoon updrafts.

SAFECOM 10-646: During the morning pre-flight process the relief mechanic discovered an issue with the incline (42-90 degree) tail rotor drive shaft. The drive shaft was found to have scoring/scratches, around its circumference. The scoring was outside of acceptable parameters requiring the replacement of the drive shaft. Upon further inspection the mechanic discovered enough slack in the upper control cables to cause the cable coupler to vibrate against the drive shaft while the aircraft was running/in flight, thus causing the damage. The regional Maintenance Inspector was notified of the problem, and the aircraft was taken out of service. **CORECTIVE ACTION:** Conduct through pre-flight inspections. Stay current with scheduled maintenance intervals. Review maintenance log entries if needed, and maintain good communication with maintenance staff. The mechanic replaced the incline tail rotor drive shaft, upper control cables and chain, made all required adjustments, and checked for proper tension. After completion of repair, a maintenance flight was conducted, with all found to be satisfactory. The regional Maintenance Inspector was notified of the repair, and talked with the mechanic. The maintenance log entries were faxed to the Maintenance Inspector as per his request, and aircraft placed back into service. RASSM: No further action required.

SAFECOM 10-647: NXXXX was landing at the helispot for an internal cargo mission. While landing, a large “dry”, water tight vinyl bag: weighing between 35-40 pounds was blown away from its staged position. There were about 15 bags staged about 50 feet from the touchdown pad which was next to the landing site. The bag was blown and rolled directly towards, under, and past the tail rotor (approximately seven feet below the rotor) and never became airborne. This bag contained overnight gear. Helitack on the ground believe there were two main contributing factors in this incident: 1-The dry bag had a substantial amount of air inside making it very large, bloated and balloon like. 2-Several crew buggies backed in adjacent to the helispot, approximately 50 feet outside the safety circle making a significant “wall” of vehicles which redirected rotor wash back towards the helispot and helicopter. **CORECTIVE ACTION:** Although the sloping of the ground dictated a landing site that was tight to the parking area, future missions will evaluate the proximity of the landing site to potential rotor wash obstructions. Additional care will be given to secure, stage, and reduce excess air inside of these “dry” bags to minimize the surface area and prevent potential FOD situations. RASM consulting the “Aviation Risk Management Workbook” we see a number of items that could have been mitigated in this instance. Under “Ground Hazards” we can look at: Personnel too close to drop site – provide training for ground personnel to emphasize hazard identification and communication methods. The congestion created by the crew buggies was avoidable and not only affected the site, but became a distraction, possibly decreasing the pilot’s situational awareness. Working in close proximity to hovering helicopter – Better site evaluation and preparation would have been appropriate. Poor site selection – don’t utilize aircraft if site can’t be improved or relocated. The corrective actions outlined are appropriate. You can find the information included in the RASM comments at: [http://www.fs.fed.us/fire/av_safety/risk_management/index.html](http://www.fs.fed.us/fire/av_safety/risk_management/index.html)

SAFECOM 10-653: While doing bucket work on the fire with 100’ of synthetic line, line caught around left heal of skid tube while in river dip site. Upon initial lift of bucket, pilot noted lateral center of gravity change and released water from bucket. Pilot was able to unhook line from skid with forward airspeed. During approach to river dip site, bucket touched down in water approximately one second before intended touchdown point. The river was flowing parallel to helicopter from tail to nose. Because of the early touchdown of the bucket, I held hover and waited for the bucket to flow with the river’s current, back in to view. During this hover the 100’ line hooked over the top of the rear of the left skid. As I ap-
plied collective to lift the now full bucket out of the river, I felt the change in lateral center of gravity. I held position with the bucket still in the water. I then checked my cargo mirror and saw the line was over the rear of the left skid. I activated the bucket release to open the bucket to release the load of water. With bucket still in water, I held the bucket release and slowly raised the bucket out of the water and visually checked to see that water was releasing. As I continued to apply collective I could tell that the lateral center of gravity was sufficient for flight. I attempted slow pedal turns to try and release the line that was over the skid, but was unsuccessful. I then flew to a nearby grass clearing and lowered bucket to the ground. I again tried to free the line but was unsuccessful. I made radio contact with the helibase that was within two miles of the dip site to tell them I was headed in with a line problem. As I neared the helibase at about 50kts airspeed, the drag from the empty bucket was sufficient to pull the line off of the skid tube and returned to the normal operating position. I could see in the cargo mirror that the line was free and correct and electrical plug was still connected. I returned to the dip site and resumed bucket operations without further incident. During the entire time the line was over the skid, I was conscious of my flight path and at no time was there any danger to persons or property on the surface. **CORECTIVE ACTION:** In an attempt to prevent a similar future occurrence I would recommend not letting the bucket leave one’s view in a moving dip site such as a river. If the bucket were to drift from the pilot’s view, I would recommend reacquiring visual reference with bucket and then checking cargo mirror to verify long line is free and correctly position prior to apply collective pitch. RASM Remarks: Excellent reconstruction of the events leading to this incident. The other major concern I have is the rotor clearance {again, not familiar with area, could have been wide open spaces}. Many pilots have gotten preoccupied with the incident and forgot about their clearance with main/tail rotor. Thankful for the outcome.

**SAFECOM 10-662:** Upon arrival at Airport A from Airport B for an Air Attack assignment the PIC could not confirm the landing gear were down and locked. He could not see three green indicator lights. He contacted Dispatch to inform them of the situation. He made a pass over the airport and confirmed three gears down. PIC had dispatch contact his company on a landline for further troubleshooting. PIC elected to return to Airport B where there are better crash rescue capabilities and a company mechanic. Flight following continued and A/C landed safely at Airport B. Upon inspection, it was discovered that the panel lights were on the lowest dim setting from a previous night flight. The low illumination level of the light did not allow the PIC to see the lights upon arrival at Airport A. **CORECTIVE ACTION:** Aircraft panel lights turned on to a higher setting. RASM comment.- Every mitigation and precaution was made for an unusual situation, this was both prudent and proper, well done. Had it been something else, the communication and divert may have made the difference between damage and injury.

**SAFECOM 10-672:** Operations on the fire decided not to utilize the assigned frequencies issued to the incident the first day of the fire due to not being able to ensure all on the hill received the changes. Air Ops wanted to go with the assigned aviation frequencies due to potential for congestion on local channels. Ops was warned of the congestion but would not to change to assigned frequencies. The South end of the Forest experienced significant IA fire activity & was utilizing aerial resources. Consequently the air freqs became overloaded and unmanageable. This impacted the clarity of aviation communications on the fire creating a potential hazard for all involved. **CORECTIVE ACTION:** ATGS could not maintain proper aerial supervision over the fire due to radio frequency congestion and made the call to shut down air operations until the assigned frequencies could be loaded into all aircraft and personnel on the fire were briefed on the freq changes and could reprogram their radios. Air operations resumed without incident within 30 minutes. Operations on the fire now realizes that it is critical to employ frequencies assigned to the incident in a timely fashion rather than having to change in the middle of an active shift… RASM Remarks: Awesome SAFECOM! Great to hear from the experience of others, unfortunately at the cost of shutting down ops. Pros/Cons of the decisions and risks were weighed, decisions were made. Ensure all communications are in place & understood by all before operations commences.
SAFECOM 10-676: A HMGB from an exclusive ship parked on an adjacent pad noticed some flame out of the left exhaust during the first start up in the morning. He walked from his pad toward the ship approaching from the rear of the ship, out of view of the pilot, while the rotors were turning. The marshaller was trying to get his attention to stop as he approached the ship. The mechanic was also out by the ship monitoring the start up. I finally got the attention of the person approaching the ship as he made his way towards the front of the ship, within the safety circle and had him progress over to the marshaller. We then went over to notify the pilot, approaching from the front of the ship. **CORECTIVE ACTION:** I talked with the adjacent HMGB after our ship lifted off and thanked him for notifying me of the flame. I asked him to not approach the ship, nor enter the safety circle from the rear, especially while the rotors are turning. I mentioned in the future come to the marshaller directly or via radio and then they can notify the pilot. The pilot and mechanic did some additional checks to make sure everything was OK before lifting off for the mission. **RASM Remarks:** Good reminder, procedures are for everyone. Never enter into the safety circle from the rear or without the permission of the marshaller. Pilot is kept aware of the actions going on around the helicopter as well when the procedures are followed.

SAFECOM 10-678: Pilot: While doing bucket work at about 7200 ft, the winds were becoming erratic, one minute up slope the next switching direction causing a down wind condition. I started crossing the ridgeline descending down slope into the wind for a drop at about 25 kts FAS, when the wind made a major shift from upslope to downwind condition. The A/C settled about 25 ft and the bucket struck a snag. I called the HB to let them know I was returning and the winds were too erratic to continue bucket work. The water bucket operations were suspended until later that day after the winds calmed down. Minor damage to bucket. **CORECTIVE ACTION:** HMGB: Let other pilots and crews know about wind conditions. Pilot returned to HB to take a break and put on a new bucket. At the helibase debrief that evening, we discussed the winds and the importance of pilots calling timeout when winds are getting too unpredictable for operations. **ASGS(T):** The IMT2 took this fire over the next day. It appears that wind conditions were still in acceptable limits at the time of incident. Spoke to pilot and we discussed water delivery techniques as it pertains to approach to drop site, elevation above terrain (trees) forward air speed, and escape routes, and terminating the mission sooner if winds are not favorable. He agreed that the winds caught him off guard and that he would be more diligent using those techniques in the future. **RASM Remarks:** Managers, please brief this incident to your crews/pilots, sometimes you don’t know how bad it really is until you put your toes in it and test the waters. Here is a good example of doing the right thing by coming home to wait it out for better conditions. Too bad the signs weren’t recognized sooner, the outcome could have been very much worse. Great lesson-learned by the pilot. Good AAR by all after the incident. Thanks for the SAFECOM so that others may learn from this.

SAFECOM 10-679: The helicopter manager flew to H2 to approve it as a new helispot. The manager helped guide the pilot to the only flat spot on the helispot: calling out distances from a 1ft high immovable rock off of the back part of the left skid. With both skids firmly on the ground, the manager walked around the helispot to evaluate it. After getting back in to the ship, the manager asked the pilot if he could see the rock by the left skid. The pilot stated that he could not see it from his angle. The manager insisted that the pilot see the rock before the ship lifted off, and asked the pilot to get out of the ship and look at it. The manager stayed in the front seat and approved the pilot to exit the A/C with the rotors turning, knowing that the IHOG allowed such allowances. The pilot locked down the controls, exited the A/C, identified the rock and then got back in to the A/C and flew off without incident. When back at the Helibase, further policy research was conducted, finding that even though the IHOG permitted the pilot to leave the ship while rotors are turning, the helicopter contract did not allow the pilot to leave the controls while at flight idle. **CORECTIVE ACTION:** AOBD, ASGS, and ASGS (T) discussed with the HMGB the importance of maintaining situational awareness and that shutting down the aircraft in this case would be the best thing to do so that a complete assessment of the hazard and the helispot can be completed. ...**RASM Remarks:** Agreed, I’m of the opinion that the appropriate risk analysis is to indeed
shut this helicopter down if the site needed to be better evaluated by the pilot.

**SAFECOM 10-682:** While working a fire, we identified official pumpkin time at the fire and landed appropriately. We were released and began the flight East to our home base over 50 miles away. Once airborne, we realized the pumpkin time at our base was five minutes earlier than at the fire, and we encountered an unexpected headwind. We realized we would be landing after official pumpkin time, discussed the hazards and made a conscious decision to continue the flight and land at the lighted airport rather than landing in an unlighted area prior to pumpkin time. We landed safely, five minutes after pumpkin time. **CORRECTIVE ACTION:** A safety discussion was held with the managers and pilot, and we discussed identifying pumpkin times at home base in addition to our current location, as well as allowing extra time for unforeseen events. UAO comments - appropriate action was taken.

**SAFECOM 10-688:** During initial attack activity aircraft went into a heavily used lake unannounced to pick up water, during this pick up two floating fishermen were blown out of their inner-tubes. Notification to lake concessionaires was not made prior to use of lake, delaying attempts to clear out the area for aircraft use. **CORRECTIVE ACTION:** FAO Comments: The cause of this incident was the lack of notification to the forest lake concessionaire that the helicopter was inbound to dip water for a local fire. These notifications were made on the previous days and the aircraft dipped without incident. The responsibility to notify the concessionaire is that of the Incident Commander, though without the proper information, the I.C. is unable to fulfill their responsibilities. The Aircraft Manager is responsible to ensure that the A/C is operating in an acceptable fashion and know the location of that A/C, with that knowledge the manager could have notified the I.C., or the communications center to have the lake cleared. The dispatch center, with the proper info could have made the notifications. And finally the pilot who has the final responsibility for the actions of the A/C should have advised anyone in the chain to get the lake cleared prior to operating at that location. All aviation users will be reminded of their responsibilities and the need to make proper notifications prior to their use in the future. RASM: Spoke with the FAO and he is clarifying with all involved their duties and responsibilities and refreshing on plans that are already in place for prevention of this type of event from happening again.

**SAFECOM 10-698:** After landing, NXXXX taxied in for fuel at the FBO. After securing the aircraft I noticed a small fluid leak on the aft portion of the right engine nacelle. I then determined the aircraft was not air-worthy. Our mechanic came and made the appropriate repairs. A phone call was placed to the aircraft maintenance inspector. **CORRECTIVE ACTION:** FAO: Pilot did a good job catching the leak during the post flight inspection. Talked to the pilot and mechanic and put the aircraft back in availability. AMI. RASM: Good job.