SAFECOM Summary
August 2013

SAFECOM’s by Aircraft Type

For the month of August there were 142 USFS SAFECOM’s submitted, which is right at the 10 year average. Of the 142 SAFECOM’s reported, 38 were airplane, 9 airtanker, 6 SEAT, 86 helicopter and 3 N/A. The chart below shows the percentage of SAFECOM’s by aircraft type.

![Pie chart showing percentage of SAFECOM's by aircraft type]

SAFECOM’s by Category

Often there are more than one category assigned to a SAFECOM, resulting in a grand total of more than the total number of SAFECOM’s. There were 17 airspace, 50 hazard, 44 incident, 67 maintenance related, 19 mishap prevention and 6 management related SAFECOM’s reported for this period. Below is the percent of SAFECOM’s in each category.

![Pie chart showing percentage of SAFECOM's by category]
SAFECOM’s by Category continued...

AIRSPACE - There were 17 airspace events reported. There was one near mid-air which is being investigated as an Incident With potential. There were 7 conflicts in which 5 of them required at least one aircraft taking evasive action and 3 of those occurred at uncontrolled airports. There were 7 intrusions into TFR’s, several were the result of various electronic devices/programs that do not update TFR’s in real time, see TFR letter from National Airspace Manager. Two were related to procedures. Communications, or a lack there of were present in most of these events.

HAZARD - There were 50 hazard reports in August. The most reported were communication issues which accounted for 15 of the reports, many of these were related to the airspace conflicts and the near mid-air. There were 12 policy deviations, ranging from breaking pumpkin time, overflying hours, flight following and flight procedures. Pilot action accounted for 8 reports: two events of buckets hitting rocks, hitting wrong switch, sleeve catching switch, not removing aileron locks, not communicating, and a couple of instances of positive pilot actions. Instructions accounted for 7 of the reports which included issues such as external load procedures, retardant loading, hot fueling and various procedural issues.

INCIDENT - There were 44 incident reports. Twenty were precautionary landings, which were mostly mechanical related and 3 forced landings, which were all mechanical related. Mission equipment accounted for 7 reports consisting of rappel equipment, external load equipment and a water bucket. There were 5 dropped loads and 2 dragged loads. There were two incidents classified as Incident With Potentials. Classified as “Other” included: hair getting caught in rappel rope, helmet falling out of jump ship on take off, rotor wash from a chinook flipped over a pumpkin with “human stakes” and a helicopter lifting off with a crew member on the skid.

MAINTENANCE - There were 67 reports submitted having issues associated with maintenance. As usual, engine were the most reported with 24 reports including 4 events with engine failure or shutdown. Some of the other most reported issues were: 9 chip light, 7 flight controls, 6 instrument and 4 electrical.

MANAGEMENT - There were six internal management reports. These ranged from management of external loads at helibase, rappel equipment, helicopter door installation, breaking pumpkin time, passengers putting non–tethered devices out of helicopter window and the filling of a pumpkin.

MISHAP PREVENTION - There were 19 SAFECOM’s in this category which included numerous instances of excellent decision making by pilots, managers and mechanics. There were a couple of rappel equipment issues detected, several concerns were brought forward with mitigations, and individuals helping each other through good communications and troubleshooting. Thanks to all for your contributions to mishap prevention.
These are samplings from the SAFECOM’s submitted for the month of July. We hope you will discuss the lessons learned in your daily briefings. Some of the SAFECOMs have been edited due to length, to read the SAFECOM in its entirety, please click on the link.

**SAFECOM 13-853:** Request came from Air Attack (AA) to “launch everything from Helibase” for Division R/Q, no other specifics given. HMGB & Pilot of H-XXX discussed pumpkin time (1931 hrs. + 30) and potential visibility issues (smoke, decreasing daylight). AA advised that due to time of day would probably only get 1 drop from the aircraft. AA replied that he still wanted all aircraft. Helicopter-XXX departed Helibase at 1856. Returned to base at 1951. Dropped 1 load of retardant. Pilot shared the events of the cycle with his manager. In summary, he had a “closer than comfortable” call between himself and a Type 2 Helicopter. In short, both helicopters were coming into the same area from opposite directions (different helibases and dip sites). H-XXX was coming into the dip (Harden Retardant Plant) & heard AA or HLCO (unsure which one) talking to the Type 2 (T2) helicopter (off of an unknown dip) into a nearby area, from an opposite direction. Having been on the fire for 12 days and being very familiar with the area, H-XXX continued to announce his route/intentions on Victor so that the T2 would hear and he was anticipating to see the T2 come through the smoke at any time. When the T2 became visible, it was “a bit closer” than either pilot expected. The T2 made a quick turn to avoid converging flight paths. CORRECTIVE ACTION: Both pilots’ situational awareness, familiarization with the fire area, and utilization of the Victor frequency was key in avoiding a bad outcome. HMGB relayed this situation to the HEB1(t) and discussed it with the RASM. At the next morning’s helibase briefing, the situation was shared with the group as well as possible tools to prevent this from happening again. In summary, the minimum information that the Helibase will now be requiring from any Aerial Supervision module requesting aircraft will be: 1) Type of mission, 2) Division/Location, 3) Contact, 4) Reporting point/check point, and 5) Other aircraft in the area. We believe that having more thorough information before launch will add to all pilots’ situational awareness and make flight routes more specific, with less potential for converging flight paths. RASM: Excellent communications, I commend the pilot who spoke up and crews that established protocols before launching aircraft to a complex and smoky environment.

**SAFECOM 13-791:** After a normal departure from the airport, approximately 15 minutes into the flight, I felt a slight vibration that was a little “different”. When leveling for cruise, I had visually checked the cowl flaps after closing them, and had verified they were closed normally (they had). At that point I saw nothing unusual. Upon looking above the left engine I noticed the oil door hatch up. I was only 20 miles from another airport, so I elected to land there. CORRECTIVE ACTION: Upon landing and inspecting the hatch, it appeared normal - so I assume that even though I was sure the hatch was completely closed - I must not have had it completely latched. I tested the hatch several times, and was satisfied it was pilot error. I will be even more vigilant in the future. RASM Comment: The hardest thing for most pilots to do is to report a personal failure. For me this signifies a true professional who has embraced a learning culture. We all make mistakes and in a learning culture the benefit comes from learning from those mistakes. Thank you for sharing.

**SAFECOM 13-813:** Helicopter was doing a troop shuttle and landed at the helispot were there were two helicopter crew members: I to unload the crew, and the other to unload the cargo from different sides of the aircraft. After the HECM unloaded the crew he closed the door and gave the pilot a “thumbs-up” and the pilot did the same back to the HECM. The pilot proceeded to lift off the helispot with the other HECM unloading the cargo standing on the right side of the ship on the skid. About six feet off the ground, the HECM looked around then jumped in the helicopter and closed the door. At that time the pilot noticed the HECM then tried to land back on the helispot. While trying to land the left skid landed on a rock that stuck up about two feet off the ground and began to tilt to the right at a pretty good angle. The pilot noticed that it was happening and pulled it off the rock without lifting up and landed kind of hard. The HECM finished unloading the cargo and gave the pilot the all clear to depart the helispot. CORRECTIVE ACTION: Submitters Comments: The two HECM’s talked about a better communication procedure on when they were both ready for the Helicopter to lift off, and then communicated that to the pilot. FAQ comments: The Incident, Forest and Regional personnel were not informed of the event until this safecom was submitted. The goal is to promote a ”Reporting Culture” so that we can continue to learn from our experiences. Due to the steep terrain on the Forest, helicopter landing zones are often precarious and helitack crews should be briefed on the importance of good CRM and situational awareness. Acting RASM Comments: Concur with FAQ comments. It is important that anytime we engage in such operations, one person is identified to be in charge and ensures everyone is clear.
SAFECOM 13-816: During bucket operations, the helicopter’s fast bucket frame became bent while dipping from a retardant heliwell. As the helicopter was bringing the bucket out of the dip loaded, one of the cables became hung up on one of the other bucket frame shackles. The lifting aircraft brought significant weight to bear upon that shackle and subsequent strap, which then broke. Once the strap broke from the bucket, the load was transferred to the upper frame of the bucket causing three of the collapsible arms to become bent. The flight crew reported the incident and returned to the helibase. CORRECTIVE ACTION: The crew added four feet of hi-vis tape to each of the suspension cables to improve visibility and stiffen the cables, in such a way, that they are less likely to hook up on other components. The shackles were also wrapped in black tape to also limit the potential for components to become hung up on each other. UAO: sounds familiar — another external scenario that could have easily ended badly, would make a good lessons learned. RASM: One thing to consider: pass feedback on the hi-vis/black tape up through the HIP community to see if it warrants incorporation into policy.

SAFECOM 13-699: A medium helicopter experienced difficulties while dipping with a bucket and long line which lead to a close call for the relief pilot. The first fuel cycle went smoothly according to the pilot, having chosen a dip site he was comfortable with. When he returned from a hot refuel, the aerial supervision platform had transitioned and specific dip sites were identified as appropriate. Upon attempting to use one of the new dip sites the aircraft “turned” due to erratic winds at which point he was able to recover. Having been shaken by the event, the pilot continued to attempt approaches at other dips but had difficulties in understanding where AA wanted him to dip. Due to the misunderstanding of directions and his unease with previous events, he made the decision to return to helibase and make himself unavailable for external load missions for the remainder of the shift. Erratic winds were present along with poor visibility creating less than ideal conditions. Other aircraft/pilots were successful with the dip sites and were more familiar with the local area and conditions. CORRECTIVE ACTION: I feel it is important to commend the pilot for returning to base when confronted with the uncomfortable situation. A orientation flight should have taken place and would have helped in the confusion and unfamiliarity of conditions with dip sites. Not all dip sites were identified on the incident aviation map given to the aviation resources due to the vast area involved. At the initial pilot briefing a forest map was reviewed along with dip sites that did not fit on the incident map. Additionally, agency check rides may not be representative of the challenging conditions that pilots may face. FAO comments: I also commend the pilot for returning safely to the helibase. The Forest is a very challenging aviation environment and it is important that all personnel communicate concerns and take action when something does not feel right. HIP Comments: I have discussed this with the reporter and the pilot involved. The long line had nothing to do with experiences encountered on this flight. Previous fuel cycle was successful using bucket and long line. Second fuel cycle was not productive due to a combination of: divert to a new location, water dip sites that could not be used, highly erratic winds making further flight dangerous, and hindered communications with air attack. New dip sites that air attack wanted pilot to use were not on pilot’s maps. Contract pilots are required by contract to turn down all flights or flight tasking that they consider dangerous. This pilot did so. Other pilots were actively discussing the dangerous conditions; this pilot took the correct action. Inspector pilots make significant effort to check pilots in typical terrain, and to check for mountain experience and skills. I see no need for additional check ride. Please contact me for any additional info, thoughts or questions. RASM comments: The pilot is to be commended for stopping the mission; this is a long time and experienced pilot who doesn’t take chances. We have been preaching to aviators “not to take chances” and that’s exactly what this pilot did.

SAFECOM 13-832: Helicopter was performing a backhaul load from firefighters back to the helibase. While the helicopter was in view, it was reported that an unidentified object fell from one of the cargo nets (there were two nets, a 300lb and 3000lb). The cargo load was dropped off successfully and helicopter returned to its pad. Upon further inspection of the backhaul, it was discovered that the loads were improperly constructed. Garbage including ziplock bags, empty cubee bladders and MREs were loosely piled into the nets. Several boxes filled with trash, MREs, hose and various fittings arrived untaped and unsecured. The pilot stated that he did not notice anything fall from the nets during flight. I called my supervisor over to visually inspect the backhaul as I felt that this was a hazard and needed to be addressed. CORRECTIVE ACTION: After notifying my supervisor, we unpacked the backhaul and relocated it to the gear staging area. All trash was disposed of properly. We also conducted an AAR with the rest of our crew on proper packaging of backhaul. All details were reported to the helibase manager as well as to air support. Regional Safety Message on cargo loads was distributed.
SAFECOM13-702: Two aircraft (Lead “A” and Air Attack “B”) were both working fires near the airport and experienced a near mid-air. There were two Initial Attack fires in close proximity: 1) Fire “AA” was less than 1 mile east of the Airport and was using 2 SEATs, 1 T2 Helicopter, 2 State DC-7’s, with Aerial Support provided by Lead “A” and Air Attack “A”. 2) The second Fire “BB” was 7 miles northwest of the Airport using 1 SEAT, 3 Heavy Air-tankers with Aerial Support provided by Lead “B” and Air Attack “B”. Each Fire Traffic Area (FTA) had a separate Air-Air VHF frequency assigned. The FTA pattern for Fire AA was exactly coincident with a left traffic pattern for runway 35 at the airport. Both Leads A and B were periodically monitoring each other’s VHF frequencies. Lead B coordinated with Lead A on how to sequence Fire BB’s SEAT aircraft into the airport traffic pattern to load retardant and return to the fire. Lead A directed a standard Left downwind entry to runway 35 at or below 4,300 feet, which was 500 feet below the flight pattern Lead A was flying on Fire AA. This was working well with the SEAT from Fire BB. At approximately 1845 Air Attack B left Fire BB for a fuel stop at the airport. He flew 10 NW to the west of the airport and turned back east to set up for landing. Air Attack B contacted Air Attack A to advise of his intentions to enter Fire AA’s FTA and land at the airport. Air Attack A acknowledged that Air Attack B was inbound for the airport to get fuel. There was no acknowledgement from Air Attack B that he had received the transmission from Air Attack A. At that time Air Attack A was sending the acknowledgement, Air Attack B was picking up the call from an inbound Medical Helicopter (Life-Link) on Unicom and was concerned for his safety as he was inbound to Fire AA’s FTA. Radio traffic was very heavy at the time. Air Attack A assumed that Air Attack B would switch to Unicom and that all aircraft were monitoring that frequency. Lead A was unaware Air Attack B was inbound for fuel because he was monitoring both FTA VHF frequencies and not Unicom. In hindsight, the communication loop was not completely closed between the two Air Attacks: however Air Attack B switched over to Unicom and announced intentions to join the airport traffic pattern. At approximately 1855 both Lead A and Air Attack B unknowingly converged and saw each other in very close proximity on a Left downwind for runway 35 at 4,700-4,800 MSL. It was the classic high wing below and low wing above pass over where both aircraft took evasive action. Both pilots in Lead A do not recall getting a separate TCAS advisory on Air Attack B. There were many aircraft actively running on the ground at the airport resulting in the TCAS screen being flooded with overlapping symbology. Air Attack B does recall receiving a separate TCAS alert and was immediately outside scanning. CORRECTIVE ACTION: The next morning a teleconference AAR took place between the players. Things that went well: Both Air Attacks coordinated an east/west exit de-confliction plan off Fires AA&BB for the Heavy Air Tankers to sequence out. Air Attack B did a great job picking up the med-evac ship, Life-Link, on Unicom when the helicopter was entering the area from the West and advising him to switch to Fire AAs FTA frequency so they could be sequenced into the hospital. After reloading, the SEATs for fire AA primarily used the FTA frequency and requested clearance to takeoff from Lead A. Lead A & B were monitoring and periodically checking in on each other’s FTA to pass on SEAT and Heavy Air Tanker data. CONTRIBUTING FACTORS: An FTA existed over an airport traffic area. Three VHF frequencies were in use at the same time: {Fire AA FTA, Fire BB FTA, and Unicom} however only 2 VHF radios are installed in the aircraft. Lead A was not monitoring Unicom 122.8 due to radio congestion on VHF Air-Air with multiple Air Tankers and the helicopters sequencing including calls from Life-Link approaching the airport. Lead B passed the modified airport traffic pattern entry altitudes to the SEATs on Fire BB, but Air Attack B had already departed for fuel and did not get the modified entry altitude. Air Attack A pilot was monitoring Unicom and Air Attack B entered Fire AA FTA without confirmed communication with Air Attack A. Air Attack A was busy on Air-to-Ground attempting coordination with multiple jurisdictions responding on Fire AA. Air Attack A was not fully aware that the Fire traffic pattern and airport traffic patterns were exactly coincident. A small 2x2 NM TFR {smaller than FTA} was put in place over Fire AA, but for legal reasons stopped short of encompassing the civilian airfield. Multiple Assumptions: Air Attack B assumed everybody in Fire AA was monitoring Unicom. Lead A assumed all aircraft in and around the airport were working on Fire AA, were on Fire AA FTA frequency, and were accounted for. Lead B assumed Air Attack B knew modified traffic pattern entry altitudes at the airport. Everyone was very focused on their own incident. POST INCIDENT RISK ANALYSIS {values at risk verses accepted complexity}: If you can follow the above sequence and complexity you must consider it in the context of the scenario, while moving at 120 -140 Knots. In hindsight it could be contended that some piece or parts should have been shut down. As one fire was in town and the other approaching town from the NW, there were multiple high values at risk. All players were in a workable rhythm within their respective working areas. Risks were being mitigated real time with many great coordination calls. As it always turns out though, nobody had exactly 100 percent Situational Awareness {SA} and the incident slipped through the proverbial Swiss cheese model. PRIMARY LESSONS LEARNED/
ROOT CAUSE: When two incidents have overlapping FTA’s prioritize early the establishment of a fence along with altitude separations between incidents {one idea was to have one fire use 1,000’s and the other 500’s,}. When working an FTA that encompasses an uncontrolled airport, treat the airport as another distinct entity {like helicopters, heavy air tankers, jumpship, etc} for purposes of “span of control”. It must be established within the FTA who “owns the airfield” for purposes of continuous monitoring of Unicom and relaying traffic inbound to the airport pattern. Most assumed that others were monitoring 122.8. If you’re unable to monitor Unicom due to congestion, advise other aerial supervisors. In a complex situation such as this, one good fix may have been delegation of continuous Unicom monitoring to the Pilot of Air Attack A. That pilot could have relayed to Air Attack B to remain clear until he was sure that aircraft on Fire AA were aware he was entering the airport pattern. UAO Comments: This was a very complex airspace situation: that happened rapidly and with obvious urgency due to a community and its people at risk. I agree with the comment that part of the operation could or should have been shut down. When the smoke is in the air and the urgency of the moment is in our face slowing things down or actually backing off until all parties are informed is difficult. Although the near mid-air was very serious, much of the success of the incident aviation operations can be attributed to some very skilled aviation professionals doing what they do best. As stated, monitoring the Unicom full time during this situation may have prevented the near mid-air. I would suggest that the air attack, lead plane/air tanker, aircraft dispatcher/coordinators and UAO communities review this SAFECOM and talk together to formulate hard strategies in the future to avoid this situation in a fire environment that will certainly happen again in the future. I applaud all parties involved for their honesty and candor in an attempt to prevent this incident in the future. RASM Comment: For me there were missed opportunities for the Region when an AAR was conducted without regional involvement. I would have like to understand where the Aerial Supervision Program broke down regionally so immediate mitigations could be established. The AAR provided some insights into why this incident happened but not all areas were explored. Additionally, this incident has National implications from an Aerial Supervision standpoint: implications that need to be investigated and understood for the benefit of the entire Aerial Supervision program. The {acting} Branch Chief for Aviation Safety is conducting an investigation to understand what happened.

SAFECOM 13-655: During initial takeoff to the response of the fire the helitanker pilot had to make a left turn out to avoid a fixed wing aircraft rolling for takeoff. The helitanker pilot indicated he had made a call out on the Unicom frequency indicating his takeoff intentions. Once the helitanker was in a hover preparing to depart, direct to the fire, the pilot noticed the fixed wing rolling for takeoff and had to divert to a left turn out. The helitanker pilot said he had not heard a response from the fixed wing after the Unicom call, however at the same time the other radios in the aircraft were active with fire radio traffic. The helitanker was able to continue to the fire without further incident. CORRECTIVE ACTION: The incident was discussed between the pilots, HMGB, and air attack after the return from the mission. A call was made to the zone FAO informing him of the issue, and the incident was further discussed during the morning briefing at the air center. FAO comments: Pilot and copilot displayed good CRM by seeing the other aircraft and modifying their departure. Uncontrolled airports are just that, and we need to continue to brief on clearly announcing intent and maintaining a high level of situational awareness. The local airport often has high tempo operations that will often tax one’s ability to gather situational awareness and respond to it. Good work by the crew and HMGB for bringing this forward. HOS comments: This is a good example of the importance of CRM training and of maintaining a sterile cockpit during take offs and landings. Excellent job with the after action review follow up. RASM Comments: Good work with see and avoid. Not sure how far the incident was from the airport but at uncontrolled airports good idea to turn the fire traffic down until out of the pattern. Two ears and four+ radios are difficult for anyone to manage.

SAFECOM 13-849: After dropping smokejumpers the right seat spotter started to crawl into the back of the twin otter aircraft to assist with paracargo operations. Part of the spotter harness hooked on the handle of the airplane yoke. Spotter was unaware of the incident at the time, and the pilot managed to unhook the harness without incident. Situation was high for potential control issues. CORRECTIVE ACTION: Procedures are that Spotter will make positive communication with pilot prior to moving to rear of aircraft. Spotter will look over his shoulder and sweep with his hand to ensure that harness is clean and clear of any potential snagging issues. FAO Comments: Excellent Situational awareness displayed by the pilot and good sharing of information. This has also been shared within the SMKJ community through another reporting system. Good display of developing a Reporting Culture.
SAFECOM 13-812: During suppression of a flare up on the fire line, a plan was formed to fill a pumpkin with a Chinook helicopter. On scene was one engine, one division supervisor and trainee. The plan was to fill a 3000 gal pumpkin with the 2000 gal bucket on a long line under the Chinook to be used as a water supply for mop-up. The crew found some level ground and cleared the area. The pumpkin was set up and the crew was going to stake it down but did not have any stakes. 5 lines were attached to the pumpkin to hold it open and keep it in place. The lines were approximately 50 feet long and held by fire fighters. The pilot approached into the wind, and slightly over shot the pumpkin. The pilot attempted to back the helicopter up and the rotor wash caught the pumpkin and flipped it over. Fire Fighters secured the blowing pumpkin by jumping on it. The pilot aborted the mission when he saw the trouble on the ground. There were no injuries or property damage during the incident. **CORRECTIVE ACTION:** Immediately following a discussion took place about what the corrective actions should be. All personnel shall not be underneath any bucket operations. The crew was instructed of such and Division was instructed in proper filling of water sources by helicopter buckets. Crews were also instructed that any line equipment would be clear of the drop area as terrain allowed. The crews were instructed on the process of securing a pumpkin prior to filling. A discussion and a review is currently underway with the leadership of the team regarding a procedure for ordering this type of mission at future incidents. RASM: Luck was on our side considering there were no injuries. Continued discussion and development of firm procedures is encouraged. Please run all ideas through the HIP/ HOS community for changes/additions to the IHOG.

SAFECOM 13-811: While performing bucket work, I was approaching the drop zone while on a slow decent. I pulled the switch to release the water and the helicopter continued to descend. I was approaching some trees in the area so I pulled up on the collective and reached 108 percent on the torque gage for 2-3 seconds. As I left the area I could feel that the helicopter still felt heavy, when I looked down towards the bucket I noticed it was still full. As I was returning to base I pulled the switch and the water released. Next to the bucket open switch is the landing light switch, which I must have been trying to pull. When I returned to base I told my mechanic and manager what happened, we then called the D.O.M. and maintenance inspector. The maintenance manual says that no maintenance is required if 110 percent torque or less is reached. **CORRECTIVE ACTION:** After a visual check of components, the aircraft was returned to service. Maintenance inspector concurred and helicopter resumed operations. AMI Comments: Reviewed documents and talked to pilot, mechanic and manager then RTCA. Acting RASM Comments: Following up on the switchology issue. BDF/FAO Comments: Good reminder of the need to be familiar with buttons or switches as that could be what saves further damage to the machine and or pilot, just as important to be able to rapidly release the bucket from the hook should all else fail during conditions of declining control.

SAFECOM 13-803: A thunder cell moved over the fire area and while returning to the drop area with 2000 gallons of water the copter experienced severe downdrafts. The decision was made to jettison the water at 2000-AGL short of the fire area and advise air attack of the weather conditions. Due to the conditions of the downdraft, no radio communications were made when the water was released. **CORRECTIVE ACTION:** Air attack advised that he was shutting down all air operations due to weather and we were to return to base. HIP Comments: Was on the fire at this time but not at the helibase. Weather conditions deteriorated rapidly. A reminder of anticipating changing flying conditions in unstable weather conditions. AOBD: Shut down air operations and had numerous discussions regarding the weather conditions. Acting RASM: Good job on shutting down air operations. Please review the Interagency Aviation Accident Prevention Bulletin 13-04 Thunderstorms and Visibility at: [http://www.fs.fed.us/fire/av_safety/promotion/accident_prevention_bulletins](http://www.fs.fed.us/fire/av_safety/promotion/accident_prevention_bulletins)

SAFECOM 13-795: The aircraft was dropping water on a smaller 25 acre initial attack fire with a 150 foot long-line and a 1000 gal Fast bucket. As the sun was getting low and went behind the clouds, the smoke also begun to settle in over the fire. On the last bucket drop the PIC crossed a ridgeline to drop on the target and brushed a small tree with the bucket. **CORRECTIVE ACTION:** At this point the PIC conferred with the Co-pilot and decided they were going back because the light was gone and the smoke made it hard to see the obstacles. As they flew away the PIC could see a tear in the bucket. After returning to the helibase they re-inspected the bucket and found an 18” long tear. The vendors removed the ripped bucket and re-attached their spare bucket to the helicopter. RASM Comment: Vertical reference long line bucket flying is difficult even when the lighting is good. Trying to work a bucket in low light situations can have unintended consequences: as described above. An expensive lesson learned.
SAFECOM 13-732: T-XXX and T-YYY dispatched to fire. T-XXX Aircraft was on final downwind for drop with gate armed when a puff of smoke came from the engine. The pilot thought he may have hit the smoke but realized he had not. The pilot glanced at the gauges and saw the ITT climbing rapidly and reduced power broke off the drop and turned toward lower ground. The pilot tried various combinations of control manipulation as well as power and prop adjustment but quickly determined that the problem was not a faulty gauge. The temperatures continued to climb, and the Pilot contacted T-YYY and informed the other pilot of the problem and that he was jettisoning the load and heading to the valley to find a landing area. The Pilot then selected the nearest airstrip and headed for it. T-YYY followed T-XXX to the airstrip and provided a low pass to assist T-XXX in locating the runway as well as check to make sure it was clear. The engine (T-XXX) had deteriorated until it was no longer producing power; however, the pilot had adequate altitude to make the airstrip. The pilot landed T-XXX without further problems and the engine had enough power to allow T-XXX to taxi clear of the runway to a parking area. The Pilot then shut down T-XXX and answered his phone as the Airtanker Base was already calling to check the status. No determination has been made yet to the complete extent of the problem. CORRECTIVE ACTION: FAO Comments: considering the situation this ended as good as could be expected. The Pilot did a great job of assessing the problem, asking for assistance, finding an airstrip and getting safely on the ground. The teamwork between the SEAT aircraft was certainly a contributing factor to the successful outcome of what could have very easily been a very bad situation. The Pilot did an excellent job recognizing, deciding and acting to get out of the fire area and to the valley floor before he ran out of options. RASM Comments: Agree with FAO great job by the pilot and a special thanks to the pilot of the other SEAT for helping the other SEAT deal with the situation. Good example of both single pilot and crew resource management in action. Also a great argument for Risk Management to send SEAT aircraft in multiples. The few minutes holding for the partner SEAT to go to an incident makes this a sound practice. This situation is being looked at using the incident with potential protocols and a report will be available soon. Another good lesson from this incident is smaller aircraft should check their emergency airport GPS settings. If you are not set to small airports it would have been easy to miss the airstrip he landed at. Again excellent work by both aircrews involved in this incident and fast response by the unit to have assistance available quickly. Engine replaced and SEAT returned to contract availability by DOI. Cause of Engine failure still undetermined.

SAFECOM 13-782: We had a malfunction in the upper cargo hook causing an inadvertent release of the long line and bucket from the helicopter. Upon inspection of the cargo hook system it was found that the newly replaced and of a different style load weighing system would rub on the cargo hook emergency release cable when moved through its travel causing the attachment fitting to break with subsequent hook release. CORRECTIVE ACTION: We removed the new load weighing system with no further occurrence. Made the appropriate repairs and both tested the hook manually and electronically with no further issues. HIP/HOS comments: I stopped by and chatted with the crew. The crew did a good job finding the issue and getting it fixed. Nothing the crew could have done differently to avoid this situation. Glad they found the issue and weren’t flying over any people or houses. Information needs to be disseminated to vendors. RASM Comments: We are seeing different mechanical problems pop up with the hooks this year. Whenever possible make a routine inspection of the mechanisms associated with the hooks. The amount of weight, combined with number of cycles, and vibration create very high stresses on the components. Thanks to everyone for rapid repairs and getting the aircraft back on the fire.

SAFECOM 13-678: The mission was to longline cargo to division “A” and pick up backhaul from the same location and return to helibase. After landing the helicopter, the fireguard noticed the swivel on the backhaul load was attached incorrectly. The swivel had been attached to the eyelets of the purse strings and not the pear rings (see picture). Helibase manager was notified. CORRECTIVE ACTION: Helibase manager contacted the crew that had built and hooked the load of backhaul from division “A”. When the crew captain called helibase the helibase manager had advised them that the swivel was attached incorrectly to the eyelets of the purse strings and to review with the crew and all personnel how to attach the swivel correctly to the pear rings. RASM: There have been several incidents with longline missions in the past week; the region has put out a safety message that addresses those issues. It is important that crew double check their work to ensure that the rigging is being done properly. Even though folks may be qualified by taking the A-219 course, it does translate to experience in the field. The Forest has addressed this locally and will be providing a S-219 refresher for all personnel working with external long line loads.
SAFECOM 13-847: Helicopter was ordered for a short-haul evacuation of an injured firefighter along a steep knife edge ridge on the fire. Air attack arranged for a HLCO to escort and clear us across the fire to the lat/long location of the patient. Air attack had to leave due to fuel. While en-route to medical incident we talked with HLCO on a victor frequency and made clear we intended to go straight to the lat/long first to assess short-haul need and options, and bring the patient back to the airport where a helibase was located. When we were close to the airport we contacted them on command air to ground to inform then we were flying over them directly to the patient location and confirm medical personnel were there to receive him. There was an airtanker operation in the area and the leadplane called on command air to ground and said “helicopter no factor”. When we were about one mile from the lat/long while I was in the left rear seat I saw the lead plane pass at our seven o clock at eye level about 500 to 1000 feet with a large air tanker in tow making a retardant drop. I told the pilot to dive right to avoid him, as we apparently crossed directly in front of the leadplane. We completed the short-haul mission and returned the patient to the helibase. CORRECTIVE ACTION: The next morning we had a meeting at the helibase/airport facilitated by the helibase manager that included myself, HLCO and their manager, and input from the leadplane to determine what went wrong. I had assumed the other people involved knew where we were going, but this turned out to be incorrect. The HLCO did not have the lat/long and the lead plane thought we were landing at airport. It was determined that we should have been giving heading and distance along with our location, we should have confirmed the lat/long with HLCO, and when traversing across such a large fire with so many separate air operations going on and so many different frequencies that an air attack must be up to clear and coordinate travel across the incident. FAO comments: Medical emergencies cannot get mission focused. Proper commo needs to be in place with all the players ATGS/ASM/HLCO knowing the Lat/long. And ground divisions need to know when to call in for a short haul, for example a life threatening injury is not a twisted ankle. RASM comments: Coordination needs to be established and communicated to participating aircraft. On a large fire such as this an air attack should always be over the fire until the last aircraft is on the ground to ensure critical information is being relayed.

SAFECOM 13-684: On three consecutive days, recon missions were requested, during those 3 days, passengers were extending iPhones and iPads out of the window to get pictures of fire behavior. Because of this, pilot asked the helitack crew to re-iterate the importance of not putting anything out the windows. However, each day different passengers were briefed by the crew that iPhones and iPads do not have a tether they were not to be put out the windows as it endangers the aircraft and its occupants should something become lost and enter the tail rotor. Passengers were told that if they needed to take a picture to close the window and then take their photograph. Unfortunately on each of the three days recon flights, the passengers continued to place their devices out the window to take pictures. This recurring issue was brought to the attention of the Helibase Manager. CORRECTIVE ACTION: The pilot and manager elected to safety wire the passenger side window shut to prevent occupants from opening the window while on recon missions. Briefings continue to stress the importance of not placing items out the window for any purpose, the pilot and manager have elected to continue to keep the window wired shut for recon missions. HIP comments: I called the helibase and talked with the ASGS(t). The ASGS(t) had just found out about this issue, 20 minutes before I called him. The ASGS(t) discussed this with the ASGS and AOBD and they handled the situation by talking directly to the passengers that did not follow instruction. I requested the ATGS(t) to look at the aircraft and make sure that the way they wired the windows shut, that it shouldn’t interfere with the emergency exits. My personal feeling is that if someone is not obeying the PIC wishes and endangering the aircraft and passengers, then that person should not be allowed on-board the aircraft. RASM Comments: Problems solved for this ship and this incident but I am not sure we are solving the larger problem here. Will work with WO on how to get this problem out to the user communities so they can solve it. Continue reporting this problem, I think it is a lot bigger than just one helibase but we will need some data to press the case. Will schedule session with Ops for team meetings and discuss with training center for inclusion in ops classes.

SAFECOM 13-643: Operations planned to pre-treat dozer lines with retardant in preparation for a burnout in Division Z. Although the Division Z Supervisor knew that the airtanker would be working in his division at some point during the day they were unaware of the time the pre-treatment would commence. Around 1600 hours the VLAT made a drop in support of Division Z unannounced. Three fire personnel had to hurry to get out of the way and one vehicle was hit with retardant. CORRECTIVE ACTION: Prior to his next shift the air attack was advised of the incident by the AOBD and reminded of the importance of notifying the Division prior to any drops to ensure the area is safe to drop. There have been no further occurrences. RASM comments: I spoke with the AA and he will ensure that positive communications are established before the drop occurs.
SAFECOM 13-679: A BAe-146 was ordered for load and return and in the chocks in the pit at the air tanker Base. The pilot requested fuel first. The A/C was on a slight slope aft and stopped. The FWPT chocked the front nose wheel an inch from front and rear of wheels after the engine blades stopped. The fueler connected bonding clip to the grounding point on forward bulkhead of the right main gear well. The bonding-ground cable was placed close-ly to the rear of both tires on right mains. RAMP provided oversight to the fueling operation. No retardant was being loaded during fueling. At 1540 the pilot gave RAMP thumbs up and RAMP replied with thumbs up. Pilot then released brakes and A/C rolled backwards to the front wheel chock pushing the left edge of the chock back slightly before stopping and the nose wheel turned right 45 degrees due to the right side of double-wheel not being fully chocked. The fueler completed fueling the A/C. When finished, fueler contacted RAMP and explained right main wheel rolled back onto bonding-ground cable and he could not move his fuel truck. RAMP called ATBM on radio and relayed information. ATBM came out to the ramp to discuss with pilot, ramp manager, parking tenders and the FBO fueler. CORRECTIVE ACTION: With engines stopped the pilot, RAMP, ATBM and fueler in-spected right main tire on the bonding-ground cable. The pilot recommended to the ATBM and fueler that once fueling is completed that he extend cable completely and move fuel truck to the greatest distance from right wing of A/C. The ATBM and RAMP concurred on mitigation (RAMP oversight and wing walked on departure), assessed all risks, and had no other safety concerns. Fueler moved fuel truck 35 feet (farthest distance) from right wing tip of A/C as instructed. Base personnel loaded A/C with retardant and once personnel were clear, chocks were removed and the A/C departed. ATBM and RAMP briefed FWPTs at the base on importance of proper chocking for A/ C and future fueling or retardant loading. In future left main wheels should be chocked for extra safety. FBO manager informed RAMP that they shall place binding-ground cables forward of the mains on BAe-146s in the future at a distance of 3-4 feet. RAMP conveyed chocking SOP for future fueling and FBO manager concurred and informed all their fuelers at FBO. RAMP conveyed the same information to ATBM and all base personnel. RASM Comment: Good communication within the base employees. I’ll ensure this SAFECOM goes to the other Regions with air tanker activity.

SAFECOM 13-624: I had personally fueled my aircraft earlier in the day, and only put fuel in the main tanks, leaving the aux tanks empty. Another aircraft, like mine, parked next to me and received fuel under the supervi-sion of that pilot. After that aircraft was fueled the fuel truck driver asked the other pilot if my aircraft needed fuel. I was inside the tanker base when the other pilot came inside and asked me if I needed fuel. I said “no” I’m topped off. The other pilot went back outside and gave thumbs up to the fuel truck driver and said “he’s good”. Apparently the fuel truck driver interpreted this to mean top him off. The fuel truck driver filled the aux tanks on my aircraft and turned the fuel slip into the front desk of the FBO. I received a phone call from the front desk asking how I wanted to pay for the fuel. The fuel truck driver confirmed that he had filled the aux tanks, and I had no idea this had occurred. This additional fuel put me 160 pounds over gross weight with our current load. It is probable that I would have taken off over gross weight without knowing it if I did not receive the phone call from the front desk at the FBO! CORRECTIVE ACTION: This was a simple misunderstanding that could have resulted in a bad outcome! I believe the fuel truck driver was trying to be helpful and efficient however adding fuel without pilot authorization should never be done under any circumstances. UAO Comment: This is a case where abbreviated communications went very wrong. Hand signals and short sentences sometimes don’t suffice - we need to be extremely clear with our communications - ie: “thanks, but he has already fueled”. A casual hand signal can be very easy to misinterpret. Local Tanker Base fueling procedures now requires all FBO fueling operation to be con ducted under direct supervision of the aircraft pilot or mechanic.

SAFECOM 13-650: While another crewmember and I were staffing a Helispot to receive backhaul from the fire-line, we received multiple improperly set up nets. Three nets from Div M had the purse strings situated in a way that one side was threaded through the other, causing rubbing of the purse strings as it settled and flew. One net from Div I, was hooked to the remote hook with 2 lead lines and no swivel. CORRECTIVE ACTION: Air Support Group Supervisor for the incident was notified of the issues and which crews on the Divisions they came from. RASM comments: It is essential that if crews are not sure how to properly rig a net and have them send to the crews.
SAFECOM 13-701: The module was conducting proficiency rappels. On the first load of 4 rappellers the first team of 2 descended from the aircraft to the ground with normal operations. The spotter then initiated the rappel sequence with the second team of rappellers. The left side rappeller descended to the ground normally. The right side rappeller had slowed up and stopped the descent to let the ropes clear each other, as the ropes were trying to twist. The rappeller then visually cleared the rope and the landing area and continued to descend. While continuing the descent, the rappeller's hair became entangled on the rope and then become lodged in the descent device. The rappeller was unable to descend any further down the rope. The rappeller then shouted to the left side rappeller (buddy): “My hair is caught!” The buddy then moved in under the rappeller and the aircraft. The buddy made eye contact with the spotter and began marshaling the helicopter to lower the stuck rappeller. Once the rappeller was on the ground, rope slack obtained, the buddy attempted to free the rappeller. Being unable to do so, the buddy removed their raptor knife and cut the rope above the descent device, and then again below the descent device. The rappellers were then able to move away from under the aircraft. The spotter was then able to de-rig the aircraft and depart. The aircraft landed, shut down and the proficiencies discontinued. After action review was initiated. The descent device was removed from the individuals hair with no medical attention needed. The descent device was retired-due to needing to use a pair of pliers to undue the thumb screw. During the AAR the rappeller noted mentioned putting the pony tail under her shirt prior to the rappel, but that in moving in the aircraft and then checking the rope during the descent that it may have been the cause of working it free to become entangled. The crew then did a second load of 4 proficiency that went as planned. CORRECTIVE ACTION: Rappellers hair (over shoulder length) was in a pony-tail, would it have made a difference if it were in a braid? Good situational awareness by the buddy to recognize the issue at hand and make contact with the aircraft to lower the individual to the ground. Rappellers with long hair need to ensure that it is tucked either into their flight helmet or their shirt to where it cannot make contact with the descent device. RASM: No further action required at this time. This is not a first and more than likely will generate further mitigation discussion on this topic with the HIP/HOS.

SAFECOM 13-693: While performing a water dropping mission with a FAST bucket on the fire, the aircraft experienced a bucket malfunction. When he came out of the dip site, he felt the bucket suddenly release the water and noticed that the bucket shell had separated from the frame. The pilot returned to helibase and requested a bucket replacement. After further inspection of the malfunctioning bucket, the mechanic and HMGB noted that the eight load bearing support lanyards had torn loose and were no longer looped around the connecting link. CORRECTIVE ACTION: The malfunctioning bucket was put out of service until the manufactures recommended repairs could be made. The replacement bucket is also a FAST bucket and a thorough inspection of the load bearing support lanyards was performed. A pre-flight and post-flight inspection of the load bearing support lanyards is “encouraged” by the manufacturer. The manufacturer also recommends “should any fraying be evident, the item must be replaced.” The shell and supporting lanyards “should be washed periodically with fresh water to ensure longevity and minimize corrosion.” At times, pilots can also be directed to use mobile retardant plants and salt water as dip sites further degrading the supporting lanyards. Alternative dip sites such as these, coupled with degradation from the sun may also reduce the life of the bucket and its components. The pilot, mechanic, and HMGB agreed that a thorough inspection of the bucket shell, supporting lanyards and associated components will take place during the pre-flight and post-flight process. RASM: It is important that the company inspects the bucket as prescribed in the manual to prevent deterioration and falling apart during flight. Good job on the HMGB part to understand what happened and give guidance on how to prevent this type of event from occurring again.

SAFECOM 13-777: We departed the airport at around 7:40pm with six smokejumpers that had come off a fire. About five minutes after departure, one of the jumpers got on the intercom and said that a helmet had fallen out the door. I asked if he saw where it went but he was not sure. Due to poor light conditions and duty day constraints, we continued the flight home. Because the jumper was not familiar with the transmit buttons of the dropcord he was using, part of this conversation was broadcast over the national flight following frequency. CORRECTIVE ACTION: The following morning the flight crew, the smokejumpers, and the smokejumper operations manager had a lengthy discussion of how to prevent this from happening again. Mitigations: 1) At all times personal gear will be secured while in flight, using either carabineers or being secured under seats. 2) All demobilization/retrieval flights will have a loadmaster onboard. Loadmaster will be responsible for radio communication and securing passengers and cargo. 3) The pilot will confirm that the person on the headset in the back of the plane is familiar with the operation of the headset.
**SAFECOM 13-776:** A Bell 407 was assigned to a HLCO mission to Division E of the Elk Fire. On the way to Division E the Garmin G1000 avionics package was not showing the TFR for the Elk fire on the moving map display, but was showing the TFRs for the Pony and Beaver fires that were adjacent to the Elk fire. All personnel on the aircraft had assured that the TFR was active before the mission on the FAA website. While en route, the pilot pulled up the Foreflight Aviation App on her IPhone and saw that the Elk TFR was showing active on that application. Later that afternoon the same aircraft and personnel launched again. On this flight, the HLCO platform was assigned to assist Division E with a aerial ignition operation and remained over the firing operation while ground forces continued with hand ignition. It was noted again that the Elk TFR was still not showing but the Pony TFR was showing. The pilot was concerned and notified the Helibase. At 1415 a helitanker was dispatched from McCall to the Beaver Fire. The pilots and manager sat down prior to departure to do the route planning. The Pilot in Command (PIC) got the TFR’s and updated on his phone with Wings X Pro, and the co-pilot was looking at them with his laptop. The PIC mentioned going straight to Gooding, ID for fuel, the manager told him that the Beaver Helibase Manager said most of the ships coming from the West were going down towards Boise and around to the South of the TFR’s, because of the smoke that would be to the north of the fires. The PIC said that is what they would do. On the way, the pilots saw that visibility was good and decided to go directly to Gooding for fuel. They used the TFR’s that had been downloaded onto the PIC’s smart phone, and without the Elk TFR showing, picked a route between the Pony Complex and McCann TFR’s, directly through the center of the Elk TFR. While monitoring Automated Flight Following (AFF), helibase personnel noticed an aircraft crossing the northern boundary of the Elk TFR at 1506. The AFF symbol indicated it was a helitanker, and the only helitanker attached to the Elk Fire had been on the ground for the duration of the day. Through AFF, Elk Helibase identified the helicopter as an aircraft unassigned and unknown at the incident. It was flying to the southeast at 119 knots at 8,400’ directly into the TFR, toward aircraft flying at approximately the same altitude. The ABRO contacted the HLCO on the victor frequency and informed them of the TFR intrusion, heading in their direction. All three personnel in the HLCO platform began to scan the horizon. The HLCO(T) began transmitting on Air Guard to the Helitanker, but did not receive a reply. The pilot immediately pulled the aircraft into a rapid climb and started a right bank to avoid a collision with the Crane. As this was taking place, the Cranes pilots gained a visual of the handcrews conducting firing operations and saw the HLCO ship about a mile out realizing that they were in the wrong place. Within seconds of starting the rapid climb, the HLCO Trainee and HLCO both spotted the Crane less than a mile in front of them and heading in their direction. The Crane passed approximately 200 feet lower and within ¼ mile of the HLCO platform. After the Crane was clear, the HLCO turned around to keep a visual on him and followed him thru Division E. During this time the HLCO(T) was trying to raise him on the FM radios on both AIRGUARD, NATIONAL and on both of the AM victor frequencies for the TFR as well as both Pony and Elk Fires. The HLCO pilot began scrolling through the nearest airport frequencies and quickly entered the Unicom for Smith-Prairie grass strip of 122.900 and was able to make contact with him. She advised him that he was inside the ELK TFR and asked if he was aware of that. He stated that there was no TFR on his GPS for the Elk, only the Pony TFR was showing. She then directed him out of the active fire operations area by sending him directly south to the South Fork of the Boise River then east along the southern edge of the river until he reached Anderson Ranch Dam, which he complied. **CORRECTIVE ACTION:** At the time of the incident, no other aircraft were active over the Elk Fire besides HLCO. The crew in the radio “box” did an excellent job of recognizing the hazardous situation and notifying the HLCO preventing a potentially fatal near miss, both HLCO and the HLCO(T) were also key in identifying the aircraft quickly allowing their pilot to take action. It’s important to point out that we should not rely on any devices for current TFR information as many programs are not updated in the evenings and on weekends, so information on TFR’s can and will be inaccurate. To ensure accurate reference information, the FAA website [https://www.notams.faa.gov/dinsQueryWeb/](https://www.notams.faa.gov/dinsQueryWeb/) should be used. Remember, this site is informational in nature and is designed to assist pilots and aircrews for flight planning and familiarization. Use of this website does not satisfy the requirements of 14 C.F.R. § 91.103 and is not a substitute for a NOTAM Briefing through a Flight Service Station or DUATS. Use of this website satisfies DOD requirements of AFI 11-208 and AFI 11-202V3 for NOTAM retrieval. **RASM:** Cross reference SAFECOM 13-0749 for more on this event. We are noticing a trend in lack of TFR display accuracy on various new technology avionics. See attached Aug 2013 white paper on the subject. The entire HLCO team (air and ground) did an exceptional job of backing each other up. If in doubt as to the accuracy of your systems, querying dispatch about your route of flight is a good technique. Spread the word that our fancy SA enhancing tools are not yet perfected and to double check official sources of information. **Memo from National Airspace Coordinator**
SAFECOM 13-830: Air attack informed the helibase that their helicopter landed with a caution light (intermediate gearbox oil pressure). The crew made the decision to land as soon as possible as opposed to flying back to the helibase. Subsequently ground transportation was utilized to return the aircrew to base. This resulted in them exceeding their 14 hour duty day limitation by 30 minutes, due to the remote location of the fire and time of day. CORRECTIVE ACTION: The crew adjusted the beginning of their following duty day to provide the required 10 hour rest period. The following day, a pressure switch was replaced and the aircraft returned to contract availability at 1200. Communications in this area are very limited and there was no way to verify the actual time the aircrew was considered off duty. RASM: Commendable action by the aircrew to just set down and not allow the external pressure of flying back to base come into play. Spoke to the manager and all appropriate measures were taken to compensate for the duty day.

SAFECOM 13-858: Two rappellers were delivered without any issues to the fire. When the rappellers were collecting and logging their equipment, they noticed that a descent device had a mismatched shaft and cover shaft #9 and cover #20, although no issues were encountered during the rappel. Per the 2013 National Rappel Ops Guide, identical identification numbers shall be engraved on the descent device shaft and cover, and the shaft and cover shall remain together for the life of the descent device. CORRECTIVE ACTION: After investigating rappel documentation, we determined that after a proficiency rappel a few weeks earlier in which both descent devices were used by rappel partners on the same proficiency, the cover and shaft were somehow mismatched. After further investigation, the same issue was found, with shaft #20 using cover #9. The problem was corrected and all rappellers were advised of the issue and the importance of keeping descent device covers and shafts with their unique partners. All other descent devices were inspected, no mismatches were found. HOS comments: Good inspection and quality assurance by the rappellers. Good example of transparency and a reporting culture. RASM Comments: Continue to be pleased with the Rappel community’s error trapping and reporting efforts. Thanks for reporting.

SAFECOM 13-824: While staffing the fire with 10 additional firefighters we broke pumpkin time for the day. The helicopter and manager returned to the base and landed 10 minutes after pumpkin time. The helicopter was dispatched to the fire and to do a troop shuttle of 10 pax to H-1. The helicopter had to fly in behind a storm cell to the pickup point for the crew shuttle. H-1 had been landed at by a type 2 helicopter but was unable to be used due to vegetation for a type 3. We found another site nearby. Troop shuttle loads 1 and 2 went well and the helicopter had picked up the 3rd load as was enroute to the helispot. Dispatched called at that point and reminded both the IC and the HMGB that pumpkin time was 2055. The manager realized at that point that he had mentally remembered the pumpkin time wrong for the day. Rather than add further confusion to the situation, he talked to the pilot about their options. It was decided to finish the troop shuttle and the manager and pilot would fly direct to the base. The helicopter landed, off loaded the passengers and departed the ridge top helispot at 2050. The manager made arrangements for the 2 additional helitack to be transported back to the base via vehicles. The helicopter landed at the base at 2105. CORRECTIVE ACTION: In morning briefing an After Action Review took place. Talking points were as follows: Managers need to keep in mind when actual shut down times are with the loss of daylight each day. When missions get delayed due to weather or other factors, aviation resources need to take a step back and look at if a mission is critical or if it could be postponed until the next morning. Due to local factors with smoke, shadows, and steep terrain having aviation resources on the ground at sunset rather than going into the extra 30 minutes after official sunset (Pumpkin Time) is a better and safer operation—Forest Fire Staff. The manager, crew and Pilot had a thorough discussion about the operation. Each voiced their perspectives. There was no mission driven attitude felt by anyone. The operation was done safely and thoroughly, but the time had managed to slip by. All managers and pilots have been briefed that the days are shortening and to be more aware of the shortening daylight hours. FAO: Extensive discussion took place on the local unit after this event. This was an experienced manager making a rookie mistake, a good reality check of where we are at and to remain focused. RASM: The decisions made have been adequately debriefed with local managers and the individuals involved: they will assuredly take this experience forward. The real highlight however, was once the crew was in the square corner and had weather to deal with, bottom line is they did the right thing by not rushing any further, circumnavigating storms, finding alternate sites, etc. Once you know you’re going over, then just fess up like they did and take slow measured actions to get back safely. This is a good thing.
SAFECOM 13-755: Once we arrived on scene over the complex, the pilot took a glance at the fuel gauge and noticed it showed 300 LBS and was slowly dropping. He immediately decided to return to an airport fearing a possible fuel leak. While enroute back to the tanker base, the fuel gauge returned to showing a level appropriate for the length of time we had been flying briefly then went to the off position. Maintenance was contacted while enroute to the tanker base in order to expedite the repair process. The plane landed without incident at the tanker base.

CORRECTIVE ACTION: The Director of Maintenance diagnosed the problem as a loose wire nut on the fuel sender cable on the aft pressure bulkhead wiring block. The wire nut was secured and the fuel gauge indication was ops checked as being good. AMI was contacted by the director of maintenance and the aircraft was returned to availability with minimal delay.

SAFECOM 13-818: Fifteen minutes after taking off the pilot noticed that the Amp gauge had a reading of zero. We returned to the airport and pilot who is also an A&P mechanic located the problem (broken alternator belt).

CORRECTIVE ACTION: Procured and installed the correct replacement belt and we were back in the air within the hour. He caught the problem early enough to avoid the loss of any electrical capability. Acting RASM: AMI was not notified. Pilot and employee both reminded to contact Agency Maintenance Inspector on any maintenance issue before continuing flight.

SAFECOM 13-694: Pilot’s comments: I departed the Guard Station for fires helispot (HS) with an empty remote hook on a 150’ Synthetic line. The visibility was approx. 2 to 2 1/2 miles in smoky conditions. The surrounding ridge lines were visible. With a GPS course-line to the HS showing 11.8 miles, I contacted Air Attack {AA} and informed him I was off Petersburg en-route to the fire with a longline. I began to follow terrain going through saddles as necessary to remain on course. At one point showing 9.1 miles out, I could not climb a ridge keeping my hook comfortably above the canopy to pass thru the next saddle on course, without losing my forward ground reference. At this time I am only moving forward at 20 to 40 knots airspeed. I then followed the ridge down going around the highest point to stay in the better visibility, 1 to 1 1/2 miles. At this time, I found myself in a river canyon with my destination showing 7.2 miles to my left front, beyond the ridgeline. I continued down river and I came to a split in the canyon and followed the one to the left favoring my course. At 5.8 miles from the HS I found myself in a narrow draw leading up to a saddle but the visibility was quickly deteriorating not allowing me to climb up to the saddle. At this time I chose to abort the mission and return to the Guard Station. As I retraced my path, I passed over a river gravel bar big enough to land on if it became necessary. Approx. a mile down the river, the visibility dropped to approx. 3/4 mile with neither canyon ridge line visible. I again contacted Air Attack, and advised him I was going to land and remove my longline to safely return to the Guard Station. AA asked me for my coordinates, and I waited till I was over my landing area and informed him of the GPS coordinates, and that I was landing and would call him when I was back up. I then landed on a solid gravel bar, rolled the engine to ground idle, friction-ed all controls and exited the AC to disconnect the longline and place it on the floor in the back seat. I then picked up and notified AA that I was off the ground & returning to the Guard Station with the longline onboard. I flew to the Guard Station @ approx. 200’ AGL with 1/2 to 3/4 mile visibility. I contacted my manager on the Air to Ground frequency one mile out and the Guard Station became visible at .72 miles. I landed and notified AA that I was on the ground. CORRECTIVE ACTION: For Risk Management purposes, due to deteriorating visibility after aborting the mission and attempting to return back to Petersburg, I determined for safety reasons it was prudent to land at the only known landing zone and remove the 150ft longline for the return trip due to the expected available AGL clearance. FAO Comments: This is great risk management in deteriorating conditions. My only concern is the pilot exiting the aircraft while aircraft was still running. How it is allowed in the IHOG and expected available AGL clearance. PA Comments:...