SAFECOM’s by Aircraft Type

For the month of August there were 164 USFS SAFECOM’s submitted, slightly above the 10 year average of 156. Of the 164 SAFECOM’s reported, 45 were airplane, 28 airtanker, 5 SEAT, 82 helicopter and 4 N/A. The chart below shows the 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, 44 hazard, 45 incident, 91 maintenance related, 11 mishap prevention and 2 management SAFECOM’s reported for this period. Below is the percent of SAFECOM’s in each category.
SAFECOM’s by Category continued...

AIRSPACE - There were 17 airspace events reported. Most of the airspace issues were intrusions, one was a military jet, five were GA fixed wing aircraft and two were helicopters. There were 6 conflicts and almost all of them had communication issues of some sort. There was one near mid air event that occurred between a project helicopter mission and a private fixed wing, again communications appeared to be a major factor.

HAZARD - There were 44 hazard reports in August. Communications accounted for 20 of the reported hazards, ranging from frequency congestion, frequency management, verbal, and ground radios & repeaters. Pilot action accounted for 7 reports, two instances of pilot belongings flying out of the aircraft, two instances of not following FTA procedures, dropped water on firefighters and pilot falling asleep. Some of the deviations included mission creep, exceeding flight hours, aircraft not approved for mission and not meeting contract requirements, flight following procedures and flying with a broken door handle. There were four weather related, two of which a large airtanker and SEAT declined dispatches due to weather, one fixed wing caught in a thunderstorm and having to land on the taxiway, and a helicopter caught in a strong downdraft while performing bucket drops.

INCIDENT - There were 45 incident reports, nine were precautionary landings which were all mechanical related as well as one forced landing due to an engine failure. There were 7 dragged loads and 3 dropped loads. Five aircraft damage reports ranged from dents from seatbelts not buckled, prop and rotor strikes and door damaged while loading cargo. Categorized as “Other” included damage to aircraft, vehicle and ground equipment due to rotor and prop wash, water dropped on ground personnel, starting aircraft with rotors tied down and rappeller hooking up descent device backwards.

MAINTENANCE - There were 91 reports submitted having issues associated with maintenance. Engine were the most reported with 21 reports including 4 events with engine failure or shutdown. Some of the other most reports issues were: 10 chip light, 8 hydraulic, 8 landing gear and 6 oil. Several reports mentioned excellent routine and preflight inspections where problems were identified and repaired prior to flight. Nice job, keep up the good work!

MANAGEMENT - There were two internal management reports, one was over communications regarding a runway closure and the other over communications on a local unit voicing safety concerns.

MISHAP PREVENTION - There were 11 SAFECOM’s in this category which included 2 instances of excellent pilot procedures after loss of power; pilots, mechanics, crews and vendors detecting maintenance issues and correcting or removing aircraft from availability; helispot improvements; declining dispatches due to weather; and pilot actions from TCAS alert.
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 it’s entirety, please click on the link.

**SAFECOM 12-0935:** When the pilot set down his remote hook, the lead line did not disengage with the remote hook. The pilot then tried to drag the lead line off the remote hook. The person directing the sling mission called up to the pilot and stated that a person was coming in to manually unhook the lead line, but communication was broken and not all information was conveyed to the pilot. As the person was walking in towards the remote hook, the pilot accidentally released the 150' longline. The pilot then asked if the ground personnel could re-hook the longline to the belly of the helicopter, but the electrical was not necessary. The two personnel in the sling spot tried to quickly reroute and clear the longline. The helicopter came in for the belly hook and as the helicopter lifted out of the spot, it was clear that the longline had not been properly cleared and there was some entanglement. The ground personnel quickly told the pilot to release the longline and give them some time to clear the longline properly. The pilot orbited the spot and the ground personnel took the proper amount of time to make sure that everything was routed properly. The helicopter then came in for the second belly hook the ground personnel hooked up the longline to the helicopter and the backhaul mission was completed. **CORRECTIVE ACTION:** AAR was conducted with all personnel involved. FAO comments: Lessons Learned: 1) The pilot and HELR both went beyond what policy and SOP’s allow. 2) The pilot should not have asked for a belly hook of the long line after the accidental release. 3) The HELR should not have complied with the request. 4) Both ground personnel and the pilot got mission focused and went beyond acceptable practices. 5) Fire and aviation managers need to be informed of incidents in a timely manner to ensure complete follow up and facilitate learning opportunities. RASM Comments: Will continue monitoring to insure next year’s training occurs. Good job by the FAO identifying the policy deviation and reporting it. Thanks!

**SAFECOM 12-0860:** While attempting to sling a blivet on a 100 foot longline the blivet impacted trees during approach to the helispot. Ground contact requested to abort mission yet the pilot continued lowering the load and released the load while it was approximately five feet off the ground. The remote hook impacted trees while departing the helispot. **CORRECTIVE ACTION:** After a discussion with the pilots, it was determined that the helispot would be flown in the morning to review its suitability. The following morning the helispot was improved by removing 4 additional trees. Lessons Learned: 1) Cross winds blowing across the helispot may have added to the challenge of slinging loads into this particular spot. 2) Due to the high elevation of the fire, the dip sites and sling spots were not in the performance capability of this type 2 helicopter. RASM Comment: The application of performance planning, risk management or risk assessment is necessary to determine the best aviation resource needed to safely conduct the missions on our fires.

**SAFECOM 12-0894:** Air Attack Statement: A Fixed wing (SEAT) en route to incident (cleared to enter @ 7000 AGL) and a type III rotor wing (cleared for 500 AGL and below) departing the incident returning to Lakeview helibase: passed each other @ 6500. Both aircraft were directed by Air Attack to enter and exit on the north end of the fire. Both pilots practiced see-and-avoid and adjusted their flight path, and the SEAT continued its climb to 7000. HEB-1 Statement: The HMGB reported to me that a SEAT had passed below the helicopter when they were returning from their last mission. The helicopter was at 6500 ft. The helicopter did not have to avoid SEAT and felt there was no factor, for the pilot saw the SEAT but was unaware if the SEAT saw the helicopter. **CORRECTIVE ACTION:** Know and understand the importance of maintaining assigned altitudes for vertical separation, and monitoring all necessary frequencies to a high degree of situational awareness.
SAFECOM 12-0741: A relief pilot left helibase with a 50’ longline for division B. Pilot had done a high level recon of the fire area to familiarize him with the fire layout, but was unfamiliar with low level winds. Helitack requested a trail drop. Helicopter was on short final for his initial drop when his bucket came into contact with several dead trees. Helitack notified helicopter of the contact and the aircraft pulled up and out of the drop. The line was clear of all personnel at the time. On subsequent drops the pilot improved greatly. No other instances were noted. Pilot returned to dip site to check bucket for possible damage. No obvious damage found and helicopter returned to complete cycle successfully.

CORRECTIVE ACTION: Incident was discussed with pilot. Pilot had not flown longline missions for a while. Discussed with the pilot the option of doing proficiency drops and the importance of dropping from a higher elevation initially to become more familiar with the localized winds in the area. Should be noted that the pilot DID improve greatly on his next drops. Acting FAO comments: 1) I was notified of this incident the following morning, follow up with the helibase manager revealed that he was not notified of the event until approx. 21:00 the day of the incident. 2) The concern that no additional notification was made until end of shift was discussed with the helibase manager and he also shared concern, stated that they had done a follow up conversation at the helibase and he did not have any additional concerns at that time with the pilot’s proficiency. 3) I offered the option of having the R-1 HIP come down: he stated he did not think it would be necessary. HIP comments: It seems that the winds were a little erratic and the pilot got into a slight down draft he wasn’t expecting, consequently putting his bucket into the trees after the drop. The pilot corrected by flying the rest of his bucket loads at a higher altitude, adjusting for the erratic winds. RASM Comments: Prompt reporting of incidents is important when working with the local unit so they can solve issues before they become problems. Insist on low level recon if environmental conditions are a concern.

SAFECOM 12-0733: On August 1, 2012, the pilot was preparing to lift off from helipad. Before lifting, he called on the main forest frequency used to communicate with dispatch and informed them that he was ready to lift. Dispatch acknowledged his communication and told him that they copied he was ready for lift off. Upon lifting and before the bucket was off of the ground, the pilot transmitted on frequency 122.8 that he was lifting off and gave his directional heading. When the bucket was off the ground, the pilot again transmitted on frequency 122.8 that he was approaching the threshold of the runway on the north end. As soon as he was done transmitting, he saw a jet banking off away from him on his right. The helicopter was never over the runway and the distance between the two aircraft was sufficient that they were not in immediate danger of a collision. The pilot then immediately communicated with the ground crew on their crew frequency that the jet had not been in communication with him at all, neither responding to his transmissions nor transmitting any of his own that he could hear.

CORRECTIVE ACTION: When mixing operations at uncontrolled airports take time needed to insure conflicts do not occur. This is the second incident this year of IFR traffic not communicating/monitoring CTAF. So be heads up take the time needed to Hear, See, Avoid and as always report.

SAFECOM 12-0862: During the loading of rappellers to respond to an initial attack fire the pilot observed intermittent ICS radio communications when plugging in his helmet. The issue was discussed between the pilot, spotter, and mechanic that the helicopter would have to be shut down for a half an hour in order to solder the avionics. CORRECTIVE ACTION: Through CRM between the spotter, pilot, mechanic, and helibase manger it was decided to attach the bucket and put water on the emerging incident. This allowed the immediate response of the helicopter and the avionics were fixed upon shut-down for fuel. UAO Comment: I am pleased that the crew was able to do some real time risk management and figure out what the greater good for the fire fighter would be. Water on the fire was a critical need and the helicopter was able to deliver. The avionics was something that needed to be fixed but at a different time. Thanks for taking the time to think the mission out and stand down for ultimate safety reasons. RASM Comment: I agree with the UAO: there was sound risk management applied to this decision.
SAFECOM 12-0825: A Single Engine Air Tanker (SEAT) was ordered for an IA fire. The incident commander commented several times referencing “strong outflow winds” pushing the fire. While the order for the SEAT was being processed, in the absence of a dedicated Unit Aviation Officer, the Air Base Manager notified dispatch that the weather was “very bad” and there was a large storm between the Front Range SEAT base and the fire area and advised that “he was not comfortable” with the mission. A Zone FMO was then notified about the situation at approximately 1800. The Zone FMO loaded the current FAA weather from an ADS-B receiver and noted the weather from the FAA system, there were several Pilot Reports referencing moderate to heavy turbulence at varying flight levels and other adverse factors in the area. In addition, a Significant Meteorological Report {SIGMET} had been issued for moderate to heavy turbulence and strong convection in the zone. Radar also indicated a large thunder storm with areas of very heavy rain and icing conditions at higher altitudes. The storm spanned from central Colorado to New Mexico. The FMO then called dispatch and notified them of his concerns about the mission and advised them of the meteorological conditions and recommended the SEAT order be delayed. During this time the Pilot in Command (PIC) was in the process of refusing the flight due to the above listed conditions. At some point and by parties unknown the order was canceled and the flight was delayed until the following morning. This incident is being reported to document the need for a UAO on the unit and the need to establish protocols for voicing concerns and safety issues in relation to aviation operations, as of today we have none. It should be noted that all parties involved (dispatch, air base, ZFMO, and PIC) achieved the desired end state and no incident occurred. **CORRECTIVE ACTION:** Identify a clear communication protocol for aviation related issues on the unit in the absence of a full time UAO. Fill vacant UAO position. Continue to encourage employees to voice concerns. RASM: ultimately any decision to take a mission rests with the Pilot in Command (PIC) that individual regardless of the mission must evaluate conditions and ensure safety of flight. That being said, we have barriers to mishaps (Reason`s Swiss Cheese Model) which includes EVERYONE. One key barrier is the experience and insight that a Forest Aviation Officer (FAO) can provide and in many cases be in a position to remove mission pressure that a pilot may subject himself or herself to, by removing the decision from them. Risk Management is what we promote and this is a stellar example of that ethic in action even in the absence of a full time FAO. The recommendation to fill this position is highly supported by this RASM.

SAFECOM 12-0768: While performing bucket drops with a 150 longline and bucket in a steep shad-owed drainage with multiple wire hazards, the helicopter grazed a snag with his bucket causing damage to the bucket. The helicopter had performed 9 drops previously and was asked to move up the slope for his next drop. Due to wind conditions blowing some drops off target, the pilot decided to descend his bucket closer to the ground for his next drop. While coming into the drop area pilot went from sunlight to shadow conditions and spotted a snag he had not previously seen in the shadows at which point he released the water and contacted the side of the snag. **CORRECTIVE ACTION:** Manager and pilot discussed being more cognizant about going into a new drop area with sunlight to shadow conditions and being more aware of unidentified and hard to see hazards. RASM comments: Bottom line is, we don’t need to be taking extra risk for any reason. If the wind is causing the drops to be less effective, then so be it. If conditions are such that drops are being ineffective we need to stop the mission.

SAFECOM 12-0843: The helicopter was performing bucket operations on above steep hillsides with strong winds. As they were working down hill the bucket struck the top of a tree on the fire. The bucket didn’t receive any damages and no one was hurt. They then continued to provide water drops for the remainder of there fuel cycle. **CORRECTIVE ACTION:** RASM: From the July SAFECOM summary for R3 “We are seeing human factors more frequently at this point of the season. Pilots need to keep up their bucket skills and briefing on the mission is one way to help keep focus.” Complacency opens the hazard door. Please keep it closed with mitigations.
SAFECOM 12-0861: While doing bucket work and pulling buckets from the Middle Fork of the Willamette with a 150’ longline and a 240 gal bucket cinched to 70 percent, the current pulled the bucket close to the bank. Then while pulling the bucket out of the dip the bucket brushed some overhanging limbs. This released a dead fall Maple that was being held up by the limbs. The snag fell in to the river with no danger to the highway or personnel. It would probably have been better to use a shorter long line or to have belly hooked the bucket so as to maintain better control in the current. The other alternative would have been to use a water source with less current. **CORRECTIVE ACTION:** A discussion was held between the pilot and manager that if the pilot felt that the dip site did not have adequate clearance or to swing current an alternate dip site should be used. Or, if possible use a shorter line or belly hook the bucket. Refer to Accident Prevention Bulletin 11-04 Dip Site Considerations.

SAFECOM 12-0833: During the suppression of a spot fire a bucket of water was dropped on some firefighting personnel. The fire was making a run in the sage and grass, and two Helicopters were being directed by the manager of one of the helicopters. The directions were to work the two different stands of trees with the pilots picking the priority targets to drop water since ground resources were limited and they had the best vantage. One HMGB noticed the ships were making good progress and the resources were getting a little close. One HMGB contacted the other HMGB and asked if he was still comfortable with the operations as congested as things were getting and was told to try to pick some targets that were a little farther from the ground resources. As the HMGB finished his transmission, a saw team from one of the engines said had just taken a direct bucket drop from one of the helicopters. The Pilot contacted the HMGB and said that he heard the traffic that he dropped some water on somebody and said that he could not see them due to the smoke and angle of the sun. The saw team said they were sawing and looked up and saw the ship coming in, they said “they were sure he would see them and then he dropped the water on them”. They did not try to contact the ship, and they did not try to move out of the area. Both ships were calling when they were off the dip and were enroute to do a bucket drop and were calling off the drop when they had finished dropping. HMGB talked to the county representative on scene and the IC about the personnel having the water dropped on them and it was discussed that the personnel should have been paying more attention to the radio and been more proactive about moving out of the area during the water drops, and the pilot could have made more of an effort to ensure the area was clear before dropping the water. **CORRECTIVE ACTION:** Heighten the awareness of the hazards associated with water dropping during fire suppression activities through AARs and inbriefings Ensure personnel are capable of and know that they should make contact with aircraft operating in the vicinity of ground resources if there is uncertainty regarding their location. Don’t assume an aircraft pilot or the individual directing the aircraft are aware of the location. Ensure the aviation resource tactics applied match the deployment of ground resources and that ground resources are aware of aircraft tactics. Refer to Safety Alert IASA 12-05 Helicopter Water Drops and Ground Forces.

SAFECOM 12-926: The person responsible to monitor the loading of retardant on the aircraft was distracted by conversation during the loading sequence on the 5th retardant load of the day. 250 gallons of retardant beyond the contract load was pumped on board. The monitoring person realized the error and stopped the loading process and notified the pilot and ramp manager. The offload hose was connected to the aircraft and the additional retardant was removed. The tanker then started and left for the fire. **CORRECTIVE ACTION:** The ramp manager, parking tender, and load monitor discussed the situation. The loader will not engage in any conversations during the load process and stay situationally focused on the immediate task at hand. There were no other occurrences the rest of the day. RASM Comments: Handled appropriately by the tanker base leadership. During critical phases we should maintain a sterile cockpit type mentality.
SAFECOM 12-0761: Load Calculations prepared by pilot expressed peculiar allowable payloads from one day to the next as temperatures increased on the incident. Because the incident was located at an elevation of 7500 feet, concerns about a Bell 212 (without an HP package) working in high outside air temperatures (30 degrees C) were raised. Improperly prepared load calculations combined with low-performance aircraft in a high-performance environment raised concerns among aviation managers on the incident, as the aircraft was operating near the limits of its performance. **CORRECTIVE ACTION:** Helicopter Manager sat down with the pilot and asked him to produce a high quality load calculation before any further flight time was incurred. The final load calculation was reviewed by both the helicopter and helibase managers. **HIP comments:** I talked with the aircraft manager, vendor’s operations manager, and the pilot. Manager and helibase manager asked pilot to do a load calculation for them and the pilot admitted that he had made a mistake on the previous days load calc and corrected the next days load calc to the proper numbers, after sitting down with the manager and helibase manager. Manager said it took the pilot a while to get through the load calculations, pilot said, he did take a while to get through the load calc because he thought they wanted him to give them a class on load calc and that he took his time to show them. There was concern on the helibase manager side that the aircraft’s bucket was cinched down to 80%, which was confirmed by the pilot. I believe there was confusion as to if the pilot was using a 144 gal or 324 gal bucket. The pilot was using the 144 gal bucket cinched down to 80% which is the correct thing for him to do. Also there was concerns that the pilot couldn’t hover in the afternoon to do spot drops, due to altitude and temperature. The pilot confirmed this: he tried to do a spot drop but was un-able to for those conditions in the afternoon. So pilot reverted to 30 kt. line drops, which was the correct thing to do. If feel that there was a communication breakdown between the pilot, manager and helibase manager, i.e. pilot was slow going thru load calc, but pilot thought he was teaching and managers though he was just performing normal calc not realizing he was trying to teach them. Even though the confusion, I asked the vendor’s operation manager (also a 212 pilot) to go over how to do load calcs with the pilot, and he stated that he would. What stands out to me is that everyone involved all agreed that the 212 was the wrong type of tool to use for this fire due to the altitude and temps. I agree, this aircraft is not capable of performing efficiently at those conditions. A point to learn from this is that we need to order the correct tool for the job. If we get something that isn’t suitable for the mission (safety and efficiency) them we need to re-evaluate the situation and re-order the correct tool and not try to make do with what we have. RASM Comments: Aircraft was reassigned to an incident more in line with altitude/ temp limits. Good job by the crew on noticing the discrepancy and working with all parties including the HIP to correct the problems. If something does not look right always verbalize it before continuing with operations.

**SAFECOM 12-0827:** A Single Engine Airtanker was requested to help support our operations. When the Single Engine Airtanker arrived on scene, the ATGS requested the SEAT make a dry run to show the ground resources where the drop would be. After the dry run, the ST/TF LDR was asked by the ATGS if they understood the retardant line, and whether it would work for him. A Type 6 Engine Crew retreated back to the edge of the black, but right where the start of the retardant would be. The ST/TF LDR was contacted by the ATGS and was asked to move the crew off the line and away from the proposed (and specifically explained) start of the retardant line. They moved a few feet, and stopped. The Single Engine Airtanker was asked to do another dry run. After the dry run the ATGS asked the ST/TF LDR if the “Line Was clear”. The response was that the “Line Was Clear”. The SEAT made the drop with a coverage level of 3. After the drop, the ATGS could see that the SEAT had dropped on a couple of firefighters and the Type 6 Engine. **CORRECTIVE ACTION:** The ATGS reported the incident after his shift to AOBD (T) and the AOBD. The AOBD (T) briefed OSCs/DIVs at the night OSC Debrief. The AOBD (T) emphatically re-briefed all in attendance at the morning operational briefing. The IARR was also notified of this issue.
SAFECOM 12-0793: During proficiency rappels the spotter dropped first rope bag and the rope didn’t reach the ground. The Spotter looked down the rope and saw that the rope had been knotted in the purse string of the rope bag preventing the rope bag from reaching the ground. The estimated height of the rope deployed out of the bag was about 60 feet. The Spotter relayed the situation to the pilot and made decision to de-rig decent devices and toss the rope, the helicopter proceeded to the pad and shut down. An AAR was conducted with all personnel on base and proficiency rappels resumed with no incident. CORRECTIVE ACTION: This is not the first time that the purse string of a rope bag has caught around the rope. The same event was witnessed this year at rappel Academy however; the rope was able to reach the ground. When building a rope bag it needs to be made clear to cut the extra string away from rope bags. Additional comments related to the actions taken to mitigate re-occurrence of this event: All of the rope bags in the crew’s inventory were inspected and determined to have purse strings of excessive length. Each bag’s purse strings were shortened in length so that there is no additional length of string present when bag is fully open: on average, approximately 6 inches of p-cord was cut from each bag. This quick modification will help reduce the risk of the purse string on the bags wrapping around deployed ropes.

SAFECOM 12-0781: Air Attack observed an unidentified and unannounced fixed wing aircraft within the confines of the TFR. Air Attack attempted to make contact on the assigned frequency and a helicopter attempted to make contact on 122.9 also with no success. The aircraft landed on airport which is closed. Helitack staffing the heliport met with the pilot, explained the situation and recorded his name and N number. The pilot was apologetic, conducted his business and departed the area. CORRECTIVE ACTION: Pilot had not checked NOTAM’s that show the field is closed. Will research closure markings to see if better indicators are available to indicate the runways are closed. Better markings will not insure pilots will not enter the TFR but may turn them around before landing.

SAFECOM: 12-0884: While preparing for afternoon IR mapping mission, the pilot was opening the left rear door when the handle broke. The pilot and I discussed the problem and we agreed that the ship would not be available for passenger transport. The door was still operational from the inside and could be opened from the outside with some effort, but could not be closed from the outside. As we were flying IR mapping mission with pilot and IR operator, we decided that we could continue with the mission. The contractor began the process of finding a replacement part. The following morning the helibase was visited by an ASTAT who determined that the aircraft should be made unavailable until the door handle was fixed. The contractor began looking for a replacement door handle on the afternoon of 8/18/12. The aircraft was made unavailable until repairs could be made. CORRECTIVE ACTION: Call a maintenance inspector for any mechanical issues even those that you think are not “significant”, let them make the call! RASM Comment: Part of the issue here was, even though the helicopter is on a contract to the Forest Service the helicopter vendor must still operate the helicopter under their Par 135 FAA Certificate. A broken door handle is not acceptable under Part 135 or is it acceptable under our contract language.

SAFECOM 12-911: On return from a sling load backhaul mission (125′ longline) the pilot was directed to drop the backhaul net close to his landing pad and set down to configure for bucket operations. The landing area had been moved from the previous day due to the amount of dust at the original landing site. A Helitack crew truck was parked at the Helispot and set up for radio operations. The truck was equipped with a canvas awning (approx. 5′X4′) that attached to the side of the vehicle to provide shade. This awning was set in place when the helicopter set the cargo net down. As the rotor wash from the aircraft impacted the awning it was lifted in the air and broke loose from the anchor points attached to the truck. The awning was thrown up and over the cab of the truck. It impacted the front windshield on the passenger side of the truck resulting in a 22″ crack. At no time was the awning in close proximity to the helicopter. CORRECTIVE ACTION: In the future, every time the awning is in use it will be staked down and secured.
SAFECOM 12-953: Tanker XX was assigned a dispatch to the Elevation Mountain Fire. I called in early at approximately 20 miles after hearing tanker YY check in to let other aircraft know our location. I was cleared in to 8000 feet into the Fire Traffic area by AA. We initiated a decent at approximately 18 miles out. At approximately 8500 ft and 15 miles during the decent and scanning instruments and TCAS because of reduced visibility a target suddenly popped up on the TCAS. This aircraft appeared within 1 mile and not previously visible on the TCAS as the target approached our aircraft. The initial alert was a TA alert that was within 100 feet of our altitude. We arrested our descent which was followed by a RA which directed us to Climb. We initiated a climb and at 9100 feet resolved the conflict. Tanker XX continued the mission and advised AA of the incident. I also advised AA upon request for a load and return that we would hold until the enroute visibility improved. The Elevation Fire had a TFR of a 5 Nautical Mile Radius per FDC 2/0642. This incident occurred outside of the published TFR. CORRECTIVE ACTION: RASM Comments: Excellent use of available technology. Also good risk management to hold until conditions improved. AC did not see the other target but was able to successfully avoid it. This shows the power of TCAS technology. Another good comment by the pilot indicated a join up at a higher altitude above the smoke can increase effectiveness and safety of the drop operations.

SAFECOM 12-930: T-XXX was taxing out of the pits. Upon making the right turn out of the pits the main brake was partially grabbing. The pilot had to increase the thrust to maneuver out of the middle of the ramp. Upon increasing the thrust, the main brake released and T-XXX returned to the pit. The mechanics for T-XXX performed the proper safety checks and T-XXX left the pit and flew to fire. During the time of increasing the thrust 2 awnings on a trailer were damaged and a couple of windshields on vehicles were chipped. CORRECTIVE ACTION: Use minimal thrust when leaving the pits. If there is an issue with the main brake grabbing, stop and clear the area prior to increasing the thrust. RASM: The vehicles have now been restricted to any area away from the ramp, pilots understand the importance of assuring the area is clear before taking action. Fortunately nobody was hurt and lessons learned for all involved.

SAFECOM 12-0870: The Air Attack ship was at 7500' in a standard right-hand pattern, observing the helicopter supporting ground crews and communicating with the Incident Commander on fire conditions. At approximately 1345, I felt the aircraft descending at a rapid rate and asked the pilot what he was doing. I did not get a response from the pilot. At that time I looked at the pilot and yelled the pilot’s name. I looked at the altitude indicator and determined that the aircraft had descended 500 feet before the pilot gained control of the aircraft. I asked the pilot what he was doing and the pilot’s response was that he was distracted. I asked the pilot what distracted him enough to rapidly lose 500 feet of altitude. The pilot’s response was “it was his eyes”. I directly asked the pilot if he had fallen asleep and he said that, yes, he had fallen asleep. I informed the pilot that we will discuss the events of the flight when we return to the airport. It is my belief that if I had not noticed the rapid rate of decent and took action to wake the pilot, the aircraft would have made contact with the rapidly approaching terrain. CORRECTIVE ACTION: After discussion with the company it was decided it would be appropriate to relieve the pilot from his duties and a replacement pilot was provided. The event was discussed on region’s ATGS call-in and with region’s aviation MAC Representative, RASM and Light Fixed Wing Program Manager. Discussed watching for pilot fatigue, ensuring good opportunities for rest and generally looking out for each other, so this type of incident doesn’t occur again. LFW Program Manager: I talked to the ATGS and concur with removing the pilot from duty. ATGS conference call discussed fatigue, mitigations, crew rest, and prioritization of duties and activities during standby times. There are indications this pilot has had some health problems in the past - we need to keep an eye out on things like this and make sure that they are not kept silent. While we had a very experienced ATGS on board, the situation might have been much worse with someone inexperienced in the seat.
SAFECOM 12-981: After working several buckets with Division A, I was told that Div. B would like some water bucket drops. I was unable to contact Div. B on A/G so I went back to Div. A. On my last drop I decided to drop on a prominent smoke in Div. B, still no contact with anyone on the ground. I felt I had cleared the area that I dropped on. On climb out an Engine Crew raised Air Attack on A/G and told Air Attack that a helicopter had dropped on the crew. CORRECTIVE ACTION: Air Attack copied and told them that the helicopter pilot had tried contacting the folks on A/G. I told Air Attack that I did not see anybody on the ground where I dropped. Yesterday, it was freelance dropping with no A/G communication while I worked the Div. B with nobody on the ground. UAO: The pilot upon return from the mission reported this incident immediately and engaged with the Helibase Management and the Air Operations Team to improve communication and share this incident so all could learn from it. Fire personnel on the ground should insure they have the correct Air to Ground frequencies and utilize them when Aircraft are working in their area: if no contact is made clear the area and attempt communication. Pilots should not drop anywhere on the fire without ground communication and assured clearance of personnel. RASM Comment: I agree with the UAO, the pilot has the responsibility to ensure the area is clear before dropping water. With that said, sometimes it becomes hard to ensure the area is clear even when there is communication. For us pilot types: no communication no drop! September 06, 2012: I have learned that the pilot had ground communication and was told the area was clear. As I said above “sometimes it becomes hard to ensure the area is clear even when there is communication”. Refer to Safety Alert IASA 12-05 Helicopter Water Drops and Ground Forces.

SAFECOM 12-978: Pilot exceeded the 8 hour flight time limit by 9 minutes. Based on recent trips to and from the reload base and the Fire, the PIC calculated that he had 20-30 minutes to spare in making his last trip to/from the fire. While on the fire, a severe thunderstorm developed between the fire and the reload base. Enroute back the PIC informed dispatch of his decision to divert and navigate around the thunderstorm to avoid the adverse weather. On reaching the reload base, a solo student pilot was doing take off and landings in a piper tomahawk. The student was established in the air traffic pattern and entered a large, slow and extended traffic pattern. The SEAT pilot then entered the traffic pattern behind the student when there was sufficient spacing. The student pilot landed, and stopped at the end of the runway, after a short delay the student announced he would back taxi down the runway to the ramp. The SEAT pilot extended his downwind and base to adjust for the students back taxi. Once clear the SEAT pilot landed without further delays. CORRECTIVE ACTION: With safety in mind the SEAT pilot avoided the adverse weather and advised dispatch of his intentions to do so. The SEAT pilot gave way to the student pilot aircraft that was established in the airport traffic pattern area per the FAR’s. The SEAT pilot gave sufficient airspace and time to maneuver his aircraft to a safe landing within the student pilots abilities and skill level. The PIC accepted the mission with a reasonable margin of flight time to return to the reload base however extenuating circumstances prevailed. RASM: Thanks for the submission. Obviously policy deviations are frowned upon, but risk management is not.

SAFECOM 12-970: During aerial ignition operations, (PSD machine) I, the PLDO noticed that the seatbelt on the left rear seat was unfastened, so I refastened and resumed aerial ignition operations. I had been using the seat to stage the sphere bag for refilling the hopper. I assume that I’d unfastened the seatbelt inadvertently when handling the bag. Both aft cabin doors were off due to pilot input during the morning safety briefing that the flight profile would be better with both doors off. After landing at the helibase, the pilot and I noticed some damage to the aft left exterior cargo door, (paint chips and two 1/8 inch diameter holes). CORRECTIVE ACTION: The contractor Mechanic, HMGB and Regional Aviation Maintenance Inspector were notified and all agreed that the damage was not sufficient enough to put the helicopter out of availability. LESSONS LEARNED: I discussed the situation with the pilot and HMGB and agreed that it would have been better to have left the aft offside door on as I was sitting in the aft rear right seat and had little chance to maintain control of what was happening on the left side of the cabin. I need to ensure that I have control of maintaining security of the equipment in the aft cabin.
SAFECOM 12-977: Portable fuel containment berms at the helibase were deployed as requested by the district resource advisor. The portable berm was approximately 15’ x 60’. Type III helicopter returned to helibase before berm was completely set-up. Berm was not staked or weighted down and fuel truck had not yet moved to park on the berm. Due to wind shift the helicopter preferred approach path to landing took it near the berm. Based on size and weight of the berm the crew working with the berm did not anticipate that the berm would be affected by the T-III rotor-wash. Wind from the rotor-wash got under the edge of the berm and rolled/flipped the berm about 30’ off the edge of the airstrip into brush. No personnel were in the area and the berm did not contact any equipment, aircraft, or personnel. **CORRECTIVE ACTION:** Regardless of how heavy the berm is, the surface area is sufficient for rotor wash, no matter helicopter size, to affect and move portable berms under the right conditions related to flare & landing. It must be secured with stakes, weight, or the fuel truck itself as soon as possible after deployment. In this case the berm was too large for a T-III helicopter fuel truck. After the incident the berm was rolled-up and removed from the helibase. A smaller berm appropriate for the fuel truck size was ordered and safely deployed and secured and is now in use. The risk vs. benefit of portable berms for these kinds of light helicopter operations must be considered by helibase managers & resource advisors.

SAFECOM 12-964: The mission was an external load operation for resource trail maintenance work. Prior to the flight the HMGB, pilot, and project supervisor performed an operational briefing at the vendor base. The plan was for the pilot and project supervisor to recon each of the sling sites and then drop off the project supervisor at the top of ridgeline to receive the loads, while the manager went to the bottom to hook loads. Prior to departing for this recon flight, the pilot checked in with Flight services and declared he would be “conducting sling operations in the Carlanna Lake and Silvis lake area”. The pilot’s message got “walked on several times”, as there was a lot of radio traffic. Flight service acknowledged “conducting sling operations in Carlanna area”, and the pilot tried to correct/complete the message of “Carlanna and Silvis area” with Flight services, but kept being cut off. When the helicopter departed the Carlanna area, across a ridge line to the “Silvis area”, approaching the area where the sling load was to be delivered, and both pilot and passenger were concentrating on navigating and finding the location for the sling load. The pilot and passenger looked up at the same time and saw an Otter, approximately 100 - 200 yards straight ahead of them, at the same elevation. The helicopter pilot made a right hand turn and the floatplane appeared to maintain heading. The helicopter pilot and passenger agreed to continue with the recon and then deliver the passenger to the sling site. The pilot then landed at the landing zone for the sling operation and discussed the event and the team mutually decided to continue with the external load operations. Once the mission was completed the pilot, project supervisor, and helicopter manager discussed and documented the sequence of events and tried to determine how to prevent this from happening again. It was a “nice day” in Ketchikan, AK which means there is always a lot of aviation activity. The project area was close to controlled airspace but just outside of it. All aviation users “should be” on 123.6 while operating in this area. Neither pilot nor passenger heard the Otter’s “check-in” or designated route. Both pilot and passenger stated they were alert and looking for other air traffic, but were also focusing down at the ground “looking for the sling site”. **CORRECTIVE ACTION:** RASL Comments: Good job by the crew avoiding a near miss situation, as always with VFR flights, having your head on a swivel, outside the cockpit, searching for other aircraft, birds, hazards, to “see and avoid”, is great. Knowing the local habits, flight routes, environment and that a good weather day brings much more traffic, prepares you for the possibility of more chance encounters. Persistence in getting the clear concise message of where your operations are occurring to others in the area may not always happen but awareness it didn’t lets you be wary. Placing a NOTAM in the system for slingload operations may also assist others knowing your whereabouts.
SAFECOM 12-962: On the second stick of rappel proficiencies, while rappellers were on the skids the spotter trainee, (on the right side of the aircraft), looked across to check the left side rappeller was in the ready position. At that time the pilot’s hat had moved from its stowed position behind the pilot’s seat and flew outside the left aircraft door. The spotter trainee informed the pilot that his hat just flew out the door. The spotter trainee then waited a few seconds and looked outside the right side door to see the hat falling to the ground with no damage on the hat. The spotter trainee then resumed the rappel operation with no incident. **CORRECTIVE ACTION:** As in all open door operations on Helicopters clearing the cabin of loose items is imperative. Any loose item exiting the helicopter is a serious risk to flight operations. In discussions with a number of Rappel Spotters who work in Medium Helicopters it is not a standard practice to look on the floor behind the aft facing seat to make sure everything that could shift and fly out an open door, cannot. Adding this task to a Rappel Operations Pre Flight checklist can and will prevent the next flying hat (or any loose item) episode. Please share with all Rappel Crews as well as anyone performing open door flight operations. RASM Comment: Sometimes it is the small things like cabin security that can get you. Thanks for sharing this event.

SAFECOM 12-0880: As pilot approached H-3 on the fire during longline operations, he misjudged the altitude of the load with the 150 ft. longline. H-3 was on a pinnacle and he allowed the load to drag on the slope prior to release at the actual spot. The pilot felt the light was bad due to time of day which affected his ability to judge the altitude due to shadows. He brought the load to the helispot and was slow to release it as he was preoccupied with having just dragged the load. **CORRECTIVE ACTION:** The pilot is a relief pilot who is carded for 150 ft. longline operations. HIP visited to helibase and talked to helibase manager and aircraft manager. Pilot was a relief pilot and was not on the incident any longer. HIP arranged to have the pilot get a re-eval checkride for long line operations. According to the company’s operation person, the pilot had 500 total hrs. of long line time but not much in Astar. Pilot says that looking back: he should have declined the mission. Some learning points: 1) Pilots need to remember that if they don’t feel comfortable with a mission, they can turn it down. 2) Helitack crews need to call load heights for the pilot, unless the pilot asks them not to. 3) Companies need to give pilots the proper training before the pilots come to work on contract. I called this company and explained this to their operations personnel and they agreed to get better training on their pilots before they send them out on contract. 4) Pilots need to remember that if they haven’t flown in a while there is a clause in the contract to allow them to get a 1 hr. of longline training as a refresher.

SAFECOM 12-0878: Took off for a recon and shortly into to the flight due to heavy smoke and thunderstorm activity we needed to abort the mission. The heavy smoke engulfing the area made it almost impossible to identify the cells that were rapidly developing. We were experiencing numerous up and down drafts (at one point we experienced a 1000 foot per minute updraft). We headed north to avoid the turbulence and to head back to Lakeview. Conditions were deteriorating rapidly and we overheard the Air Attack assigned to the Barry Point Incident shut down air operations. Upon approaching the airport the winds were out of the East at 21-26 knots, pilot attempted to land but upon partial touch-down it was obvious that conditions were not conducive to a safe landing. The pilot got the aircraft back into the air, we circled for about 20 minutes hoping weather conditions would improve. When it became obvious that the weather would not allow a safe landing on the primary runway, it was decided to land on the taxi way. With the help of numerous personnel (SEAT Manager, Helitack Personnel, etc.) and airport personnel the taxi way was made ready for the landing. Crash rescue was on scene and standing by. A safe landing was accomplished in an exemplary manner. **CORRECTIVE ACTION:** Pilots and personnel briefed on flying conditions during heavy periods of thunderstorm activity and limited visibility due to smoke. Pilot and aircraft manager did a good job in attempts to make it back to base as soon as possible, given the deteriorating weather conditions. Ground personnel did an excellent job in recognizing the situation and preparing the landing area. All in all a positive outcome due to efforts of all involved.