

SAFECOM Summary July 2011

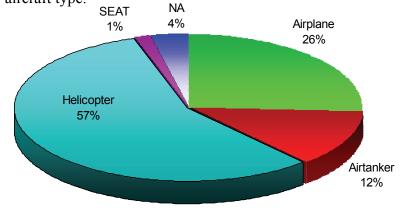


EXECUTE: FOREST SERVICE AVIATION RISK MANAGEMENT



SAFECOMs by Aircraft Type

For the month of July there were 81 USFS SAFECOMs submitted, well below the 10 year average of 151. Of the 81 SAFECOMs reported, 21 were airplane, 10 airtanker, 1 SEAT, 46 helicopter and 3 N/A. The chart below shows the percentage of SAFECOMs by aircraft type.





SAFECOMs by Category

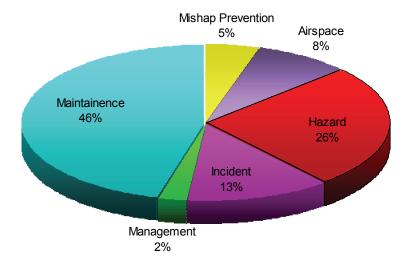
Often there are more than one category assigned to a SAFECOM, resulting in a grand total of more than the total number of SAFECOMs. There were 7 airspace, 22 hazard, 11 incident, 39 maintenance related, 4 mishap prevention and 2 management SAFE-COMs reported for this period. Below is the percent of SAFECOMS in each category.





SAFECOM 2 category info

SAFECOM's 3-12











SAFECOM's by Category continued...

ACCIDENT - The best thing that happened in July is what didn't happen! We had **NO ACCIDENTS** © Great news! We did have one Incident With Potential in Alaska with a Bell 407 that had a tail rotor strike.

AIRSPACE - There were 7 airspace events reported, of which 5 occurred on the Los Conchas fire. Three reports were conflicts and two dealt with congestion. SAFECOM's 11-631 and 11-616 involved conflicts between helicopters performing bucket work and leadplanes. On an IA fire in California, 4 light fixed-wing aircraft transitioned though the FTA during operations. In Idaho, there was a near-mid air where a helicopter was coming out of a dip site and a general aviation airplane flew within a 100 feet of the helicopter.

HAZARD - There were 22 hazard reports in July. Subcategories were evenly represented with 1–3 SAFECOM's reported for each. Two of the hazards reported involved the failure to remove aircraft tie downs prior to start up. Communications accounted for five of the reported hazards, most of them concerning a lack of communications with the ground, aircraft or dispatch.

INCIDENT - The most reported in this category were "Other" which included a 4,800 gal pumpkin collapsing while a helicopter was filling his bucket. There was also an injury that involved a tanker co-pilot injuring his ankle while departing the aircraft. There were three dropped loads and one dragged load reported which are generally the most reported in this category.

MAINTENANCE - Forty-six percent of the reports submitted had maintenance associated issues. Engine and fuel issues were the most reported in this category. Two fuel leaks were reported from aircraft and one leak from a fuel truck. Of the twelve reported engine SAFECOM's, two occurred in-flight. The other 10 reported engine problems were found during preflight, startup, ramp checks or maintenance run ups. Kudos to our mechanics in the field. Keep up the good work and preventative maintenance. Instrument and hydraulics each had 4 reports.

MANAGEMENT - There were two management reports, both internal. One was written by an air attack pilot recognizing an ATGS and Trainee for creating a positive work experience with their professionalism and competence.

MISHAP PREVENTION - There were four reports involving mishap prevention. One reported the good communication of an ATGS on a fire with no TFR as he helped aircraft committed to the fire to be aware of other non-fire air traffic in the area. Another report described how a dispatch center was able to initiate its back up plan when the power was lost and all communications were down. The dispatch center was up and running in 20 minutes at an alternative site.

SAFECOM's

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 11-683: The pilot made note of the ``play`` between the thimble of the synthetic line at the ``bottom`` of the long line. After completing one back haul mission the manager confirmed the ``play`` and removed the line from service. CORRECTIVE ACTION: Maintenance Inspector was notified and concurred. A new long line was sent by the contractor the next day. RASM comments: The AMI provided this input "This was good communication by the pilot to the crew. The swedges had come loose allowing the thimble in the long line to rotate freely which could cause the line to fail thru abnormal wear. Great job by the pilot!" Thanks for giving us an experience to keep in mind as we work with synthetic lines.



SAFECOM 11-567: At approximately 1730, the helicopter landed at the helispot in preparation to continue a crew shuttle. The HESM and the

HECM trainees were not assigned to this particular helicopter, but received a standard briefing specific to this aircraft. Once the HESM received visual confirmation from the pilot that the ship was safe to load, the HESM and two HECM trainees started the helicopter loading sequence. The hand crew members were loaded on the right side of the helicopter. The packs and other supplies were loaded on both sides of the helicopter. The HECM trainees loaded and secured the equipment on the left side, closed the left door, then departed from the area. The pilot was distracted and did not realize that the right door was still open and that the loading sequence was not completed. The HESM was securing the cargo on the right side when he heard the helicopter engine rpm increase. The helicopter lifted with the right door open, and the HESM on the skid. The helicopter lifted 1-2 feet before the HESM stepped off of the skid. The helicopter proceeded to fly away from the helispot. Radio communications were immediately established between HESM and the pilot. The HESM explained that the door was open and that the ship needed to return to the helispot. The pilot confirmed that he understood, and safely landed back at the helispot. The HESM returned to the ship, secured the cargo and the door. He then proceeded back to the parking tender position, established communication with the pilot, and the helicopter resumed the mission. There was no damage to the aircraft, and no injuries were received during this incident. Both the HESM and the pilot felt that the problem was mitigated and that the mission could be safely continued. After the ship departed, the issue was identified and discussed between the HESM, the Division, and the Safety Officer at the helispot. Upon returning to the helibase, the incident was discussed between the HMGB's of helicopter crews, the HESM, and the pilot. They all agreed on what transpired during the operation and the incident. **CORRECTIVE ACTION:** The incident was discussed between the North AOBD, the HEB1 {t}, both HMGB's, the HESM, and the pilot. It was agreed that the pilot needs to follow all of his safety procedures before lifting off of a helispot, and that there needs to be visual communications {a thumbs up}, or radio communications between the HESP/Parking Tender before the helicopter departs any helispot. It was also identified that in addition to the standard helicopter briefing given to all, there needs to be a briefing on any potential operations, and how those operations are handled specific to the aircraft that will be used. RASM comments: Two things came up in the follow up discussions. First, the pilot had other things on his mind while loading was occurring. Human focus wanders and we need to constantly force ourselves to focus on the task at hand. Also, a parking tender was not being used. Communication was all done by radio. A parking tender would have given the pilot a visual check to help him focus.

SAFECOM 11-555: Aircraft took off and on climb out, the Tanker Base made a radio call and said the nose gear was still down. Pilot checked mains, they were up and locked, the PIC could see {using the #1 prop spinner} that the nose gear was down. The ATGS was told of problem and plane went to nearest airport to have it checked. The Airport was notified. Plane made a low level pass with gear down, plane showed 3 green lights, ground said the gear looked down and locked. Pilot made the landing on the runway and came to a stop. Gear was checked on runway and was cleared to taxi to hangar. Plane was jacked up and found a broken bolt on the steering cylinder. The Regional Aviation Maintenance Inspector (RAMI) was notified. CORRECTIVE ACTION: Bolt was replaced, a nose gear check was done on the jacks numerous times and a test flight was performed. Problem was corrected and RAMI was notified and returned the aircraft back to availability. Acting RASM: Good situational awareness and KUDOS to the tanker base, the problem was identified and immediately communicated to the pilot. This allowed the PIC to confirm the issue with the nose gear and make a quick decision on the best course of action. Proper notifications were made to the RAMI, aircraft was returned to availability, no further action.

SAFECOM 11-680: The aircraft was assisting the neighboring forest with initial attack late in the afternoon. Aircraft with crew responded to fire and dropped crew to assist with suppression. The crew rigged aircraft for bucket operations and pilot departed to previously determined dip site. Aircraft was dipping in the valley bottom approximately 1000 feet below and one mile away to the west. Pilot was monitoring VHF frequency given by dispatch at time of dispatch {Air to Air}. At approximately 1935 hrs, and mid way thru fuel cycle the pilot informed HMGB over A/G frequency that as he was coming out of the dip site a fixed wing aircraft {blue and white Cessna} flew within 100 ft. of the helicopter. Pilot and HMGB discussed briefly the option of alternate sites but felt it was an isolated event. Once fuel cycle was finished aircraft came in and picked up HMGB and in route to HSP for fuel Pilot showed HMGB where event took place. Aircraft was aprox. 350 ft. above ground level and making a left 90 degree gradual turn while gaining elevation when the other aircraft flew 100 ft. off his nose. So, the fixed wing flying low came up on the helicopter from the rear as he was coming out of the dip. Pilot tried but was unable to get a tail number off the other aircraft. **CORRECTIVE ACTION:** Continue to have a heightened awareness of the possibility there may be other aircraft in the area. Whenever possible monitor backcountry 122.9. RASM Comments: Continued inquiry as to the identity of the Fixed Wing aircraft in question.

SAFECOM 11-609: Mechanic was doing a daily blade inspection and found a void. It was found on top of the blade 57.5 inches out from lag pin center and 1 inch from leading edge. Mechanic notified HEMG and aircraft was placed in contract non-availability status at 1300 hrs. on 07/11/2011. Helibase and Maintenance Inspector were both notified immediately. CORRECTIVE ACTION: notified Kaman Industries and received a repair scheme. Repair carried out the night of 07/11/2011. Repair included resin worked into de-bond, sandbag used to distribute pressure over the repair during cure and sealant used for a moisture barrier. Flew a 0.1, non-revenue maintenance flight. Inspection was made on repairs. Maintenance Inspector was notified and aircraft returned to contract availability at 1200 hrs. on 07/12/2011. RASM comments: Great catch on the part of the mechanic. Good communication with AMI and no further action is required.

<u>SAFECOM 11- 694</u>: This is my first active fire season as an Air Attack Platform pilot. This complimentary Safecom is dedicated to the ATGS and the Trainee who made my job incredibly pleasant and much easier. It was effortless to communicate and work as a great team with these fellows who were quick to help me, appreciate what they needed to do and the best way to do it. I look forward to seeing and working with these gentlemen anywhere and anytime. Sincerely, Air Attack Platform Pilot. **CORRECTIVE ACTION:** RASM The air attack trainee also sent an email expressing the positive experience they had working with this pilot.

SAFECOM 11-718: A load of nets {approx. 125lbs} fell off the remote hook about two minutes into flight. The load of nets left the cargo area still attached, two minutes later the pilot was notified that his load fell. The load fell into a grass field and no damages or injuries occurred. **CORRECTIVE ACTION:** The crew and pilot were educated on how lighter loads used with certian remote hooks can possibly become disconnected. The swivel can twist and turn its way through gate keeper and become disconnected. RASM comments: Spoke with FAO and he is talking with the crew to assure all know the hazards associated with lighter loads and mitigations.

SAFECOM 11-592: A helicopter was supporting a small fire with blivets from its base. Just prior to the helicopter coming in for another blivet and swivel, a request was made to add a net, lead line and swivel for backhaul. A net, lead line and swivel were quickly located and attached to the load just as the helicopter was coming in to pick up the load. On arrival however, the lead line was present but not the swivel or net. On inspection, it was found that the lead line's keeper gate was bent and completely open. The flight out to the fire from the base was approximately 20 minutes, and the pilot did not encounter any difficulties and was not aware when the net and swivel departed the load. The old style lead lines are slowly being replaced with the yellow locking hooks. As the base was also being used to provide logistical support for the Las Conchas Fire, we believe that it is possible that the lead line did not originate at the base, but was likely from one of the many Helicopter Support Kits provided to the fire. **CORREC-**TIVE ACTION: An After Action Review was held with the crew and we went over the inspection criteria for the lead lines and the preference that, whenever possible, the newer hooks be utilized instead of the older hooks with the keeper gates. The Net and swivel have not as vet been located. RASM comments: The spring loaded keeper gates



have long been identified as a weak link. We have mitigated this risk by using keeper-less swivels and are phasing keeper-less lead lines into our system. Great awareness report for others. When possible, do not use the lines with keepers. Glad no one was hurt when the net departed the load. Thanks for the discussion item.

SAFECOM 11-585: On July 4th 2011 Forest Recon X was diverted to a cooperative assist with a search and rescue mission. The mission involved high altitude recon attempting to locate a party that had activated a Spot Emergency PLB. The operation involved flight at varied altitudes above 10,000ft MSL. CORRECTIVE ACTION: The issue of supplemental oxygen has been addressed with the Pilot, AOBS, and will be covered in future AOBS training. FAO comments: AAR occurred with observers and crew to discuss addressing the issues of assist operations with SAR operations and when to engage in the discussion of requirements/limitations for flight over 10,000 ft. Issues will also be addressed in the forest aviation plan and briefing package, with a recommendation to also address the issues more specifically in the regional aviation plan. RASM 7/6/2011 A review of the R2 Aviation Management and Safety Plan will take place tomorrow to ensure the proper oxygen requirement references are in place but contractually and through the FAA Federal Aviation Regulations {FAR} See Safecom 11-585 for entire description of Part 91 GENERAL OPERATING AND FLIGHT RULES: Subpart C~Equipment, Instrument, and Certificate Requirements Supplemental oxygen.

SAFECOM 11-608: A severe thunderstorm moved through the municipal area causing the power to fail in the dispatch center. The backup UPS system failed within two hours and radios, phones and computers failed. During this time an airplane was transitioning from ABQ to SVC, and had no communication with dispatch. CORRECTIVE ACTION: At the time of the power loss, field units were advised of dispatch's inability to contact anyone via radio or phones. Aviation tracking was taken over by a different dispatch Aircraft desk and radio contact was initiated by the Tanker Base until the ship landed at the tanker base. Dispatch Continuity of Operations plans were utilized and dispatch moved to the County Sheriff dispatch office, within 20 minutes the backup plan was implemented and field units were relaying radio traffic through the lookout towers and a temporary dispatch center was functional. RASM comments: Having a good solid plan sure helped in this case. Excellent effort to make sure the airplane was being flight followed just in case emergency response was needed.

SAFECOM 11-616: There was an airspace conflict situation involving a type 1 helicopter and a lead plane and air tanker. The situation occurred mid afternoon between 1300-1400hrs, after a transition of air attack platforms followed by a short haul medivac operation. The type 1 helicopter was performing bucket work for line support and was returning to the work area from the dip. A lead plane had contacted the helicopter that they had to divert while on a live run because the helicopter and lead plane had intersecting flight paths. Afterwards the helicopter and lead plane through communications on victor found out that both aircraft were not informed on each others operation from the air attack platform. The helicopter returned to helibase at the end of the mission and informed the manager. The pilot expressed that the Air attack may have been overwhelmed and lost reference on where assigned aircraft were and what they were doing. The manager brought this issue to the helibase manager trainee and the air ops organization. An Aviation safety team visited the helibase the following day and gathered information concerning the incident. Observation was made that there was another air space conflict issue the same day. The other close call occurred between 1045-1100 involving different air craft and a different air attack platform. The HMGB observed that there was not a formal or informal meeting between the helicopter pilot, air attack platform, and lead plane pilot and have a discussion to help understand what happened at the end of shift. Additionally, there was resistance to help file a safecom from multiple personnel involved in the situation. **CORRECTIVE ACTION:** The HMGB met with the helicopter pilot and through discussion briefed the pilot that if they did not have clear assignment and the information needed, or felt uncomfortable, to disengage the mission and return to helibase. To help provide solutions the, HMGB made every effort to ensure good mission briefings and information were given to the pilot. In our learning culture, it is important to continue to create a positive leadership climate to communicate issues and create positive solutions. There is continuing to be an observed concern from pilots and vendor crews, {Both Exclusive use and call when needed} that filing SAFECOM's is a negative action and can lead to negative performance evaluations, interfere with long and short term contract award and pilot carding. We currently have policy prohibiting the use of SAFECOM's for evaluation and contract award. RASM comments: The submitter brings up two issues. The airspace conflict is one. We have had quite a few issues with airspace this season. Aircraft must know what other aircraft is doing and where they are doing it to avoid conflicts. Several reasons show up as why this doesn't always occur, but positive communication especially in a highly active area is critical. The second issue is the reluctance for some to use SAFEECOM as a learning tool to prevent accidents. We need to get past the negative connotation and start embracing SAFECOM as a positive enhancement to aviation safety. The submitter is right we have policy against using it punitively. We have accountability for managers who do use it punitively. Folks need to make the jump and embrace it as a good thing: not just the field, but management and leadership too. Thanks for the good word from the field.

<u>SAFECOM 11-611</u>: I was approached by the pilot who requested additional pre-flight inspection time to do a maintenance run-up. About an hour later, the pilot requested the managers come down to the aircraft. The pilot explained that they had discovered a crack in an exterior weld on the combustion cham-

ber case. Upon run-up, at flight idle power, high pressure, hot air was detected leaking from this location. Notably, the pilot and mechanic{s} had been keeping a close eye on this location during daily inspections due to the ``sloppy`` nature of the welds {see attached photos}. However, prior to 7/12/11, there were no cracks or leaks. This is a newly installed overhauled engine with only 10 hours of flight time on it. Although the A/C will be unavailable until the engine is replaced, I gave genuine ``thank-you`s`` to the contractor personnel for their diligence and attention to detail. **CORRECTIVE ACTION:** Both Regional and home region

maintenance inspectors were notified of the issue and unavailability. The vendor is seeking a replacement engine, and upon installation, required documentation will be submitted prior to returning the A/C to availability status. RASM comments: Another great catch on the part of our vendors. Nothing beats a good thorough pre-flight inspection. Kudos for the attention to detail. The engine was replaced and the aircraft returned to contract availability.



SAFECOM 11-607: A crew shuttle was completed and the helicopter shut down at helibase. We started configuring the helicopter for a longline mission to deliver a 72 gallon blivet {1st load}, and a second load that is daisy chained. At around 1020 hours I attached a 100'longline and remote hook to the aircraft and per-formed the standard 1,2,3 checks to make sure everything was working properly, which it did. I did not remove the door since the contractors typically do this when we configure while the aircraft is shut down. I then went to staff crash rescue. At 1038 when the aircraft started to lift I noticed the Pilot side door open, and over the radio I asked if he would like to set down so I can remove the door. His reply was I'm good with it, if you are." Knowing that it is pilots' discretion to leave the door on, I figured it was alright. I made no other radio contact with the pilot regarding the issue. At the same time the HMGB and HMGB {T} saw the door on but open and the HMGB {T} made radio contact with the pilot and told him that he would set down at the Helibase after delivery of the first load and we would remove the door before he brought out the second load. **CORRECTIVE ACTION:** After a discussion with the Helicopter Inspector Pilot, it was determined that the pilot door can be left on and remain closed, or taken off with the slider door slid back and locked. The pilot was informed of this and will comply in the future. RASM 7/11/2011 thank goodness we can put mitigations in place to avoid a mishap that could be a result of losing control of the door in flight. Saw something, said something.

SAFECOM 11-594: During refueling at a new Airport for the Pilot. The airport fueler was asked to top off the plane with 100 LL. The pilot and ATGS reviewed pilot card and air plane card. The pilot continued to finish up some paper work when he looked up and noticed the fuel truck said Jet-A and stopped the fueler. 20 gallons had been put in the tank. **CORRECTIVE ACTION:** The pilot notified the company and they called the Region Aviation Maintenance inspector. The fuel was completely drained and the tank flushed with 30 gallons of the correct fuel and then filled with the correct fuel. Per the Aviation maintenance inspector the pilot then performed a 30 min. test flight and everything checked out ok. The company and the ATGS then checked with the maintenance inspector and the plane was then put back in contract availability. the pilot to stop the fueling and take appropriate mitigation measures. Vigilance is important in all aspects of aviation. Thanks for giving us a reminder to be head's up during fueling.

SAFECOM 11-641: NARRATIVE: {Helitack} "Helicopter was coming in for his last bucket before going back to helibase due to weather. As he was lowering his bucket into the 4800 gallon pumpkin, he brought his bucket from the downhill side to the uphill side. As he was pulling up, the pumpkin started to cave in from the fitting, tearing the pumpkin from the fitting on up. He immediately set his bucket on the ground to have helitack personnel see if there was any debris left in his bucket. The helitack found the fitting from the pumpkin inside. Due to fast turnarounds in Division Tango, the crews and pumps were having trouble keeping up with the helicopter. There seemed to be some slop in the pumpkin at the time of the incident'. {Pilot} "It looked like there was multiple hoses used to fill the pumpkin. The hoses were in the top of the pumpkin. It looked like there were clamps on the hoses. I was making quick turns, about 2 minutes, using a 600 gallon fast bucket. Ground personnel could only keep up one pumpkin full {previously they were using 2 pumpkins and only dipping out of the one not being filled}. On 1 dip the bucket got hung up on something. While trying to free the bucket, the bucket bumped into the side of the pumpkin and split pumpkin. I was not applying power to lift at the time." The pilot was clear that he did not feel that using the pumpkins was a safety issue. He viewed this as a creative solution to a problem that operationally didn't work out. He didn't think it was a significant issue, so he didn't report the incident to the helibase or helicopter manager. **CORRECTIVE ACTION:** Immediate corrective action – Do Not have hoses or anything else hanging over the top of the pumpkin while helicopter is using it. Although this did not contribute to the incident, it did appear in the review, and was dealt with. Additionally, helitack reported that the pumpkins were drained earlier in the day. When questioning the strike team leader, they were told that the dip site pumpkins would not be used that day. This led to a rush to fill the pumpkins and keep them full. Immediate corrective action for this was to give dip sites a "headsup" prior to sending helicopters to them. RASM comments: We have seen issues with buckets and snorkels catching on various items in a water source {logs, buckles, fittings etc}. The submitter presents some immediate ideas- not going over the top while operational, providing enough time to fill and maintain the water load of the pumpkin. General awareness of the potential for catching fittings and briefing on the issue are also mitigations.









SAFECOM 11-688: During water dropping mission pilot noticed a churning of water around the snorkel while filling at a dip site. The pilot thought he had a stuck tank door he then released the load and had water in his tank. The pilot then lifted from dip site to view his snorkel and noticed the pump head was no longer attached to suction hose but was connected by the electrical wiring harness and cable tether. The pilot immediately notified the air attack of the situation and landed at nearest safe location and shut down. The pilot inspected the pump head and reattached pump unit to suction hose and ensured the pump unit was secure. The pilot then lifted and proceeded to test the snorkel and tank. Snorkel and tank functioned properly, pilot then contacted air-attack advised and returned to incident helibase.

CORRECTIVE ACTION: After pilot returned to base and shut-down, manager was notified of the incident and mechanic proceeded to inspect snorkel/pump unit. Manager notified the HELB and RAM

dent and mechanic proceeded to inspect snorkel/pump unit. Manager notified the HELB and RAM. Contract Mechanic inspected and repaired to manufacture specifications. Mechanic spoke with RAMI and a witness stripe was added to snorkel and pump unit, the mounting hardware was all replaced and extra lock nuts were added to snorkel pump mounting hardware.

SAFECOM 11-580: At approximately 1200 on July 4th, 2011, a helicopter received a dispatch to respond to an initial attack. Information of the initial attack was minimal. The helicopter was only given coordinates to the new start which was inside of the TFR approximately 9 miles from the helibase. Additional information was requested to include frequencies but helibase indicated they hadn't been given any and the helicopter needed to get going as it was an initial attack. The helicopter departed towards the new incident with a bucket and long line and contacted the FIRE A Air attack to find out additional information. Air attack indicated which frequency the FIRE B Air Attack would be on. Upon arrival to the incident the helicopter contacted Santa Fe tower as the fire was inside of Santa Fe's airspace. Tower advised that he was clear to operate and would keep additional traffic out of the fire area. The helicopter then contacted FIRE B air attack and started performing bucket operations. FIRE B Air attack advised that he had ordered 2 tankers, a lead, additional helicopters, a Fixed Wing Victor and would be doing a transition with an incoming air attack. Turn arounds for water were approximately 10 minute turns and the helicopter was getting water from the Lake located adjacent to the Helibase. As the helicopter came back into the area near the Helibase, it advised helibase of the frequencies, air contact, location of the fire, and activity. Two additional mediums with Long Lines were launched from the Helibase, one type 1 helicopter with Long line launched from Santa Fe, and two medium helicopters from Santa Fe with Helitack on board. FIRE B Air attack completed his transition and departed the area. As the fire progressed all aircraft were on the fire at the same time. As tanker drops commenced there was talk between air attack and lead on who was controlling the helicopters. Air attack advised lead to tell the helicopters when to hold out but it was never 100% accurate on when the helicopters should talk to whom. All of the communication was taking place on 1 victor frequency and was a little congested. As lead began his runs he advised that there be silence on the radio for the tanker drop. This made it difficult for the helicopters to confirm passing traffic and who was going in or coming out of the canyon dip site. First tanker dropped and the helicopter advised air attack that an additional FM frequency was needed. Air attack responded by agreeing and said that he had made the request over an hour prior but had been given no additional frequencies. Helicopters managed and eventually the tankers finished and departed. The type two helicopters with crews on board landed and unloaded their crews. Their crews had been given one frequency as a tac channel which was actually the air to ground channel so a lot of chatter was taking place. Eventually local ground crews showed up and gave the helitack crews the right frequency. Upon completion of the incident and at helibase debriefing, the helicopter pilot brought up to the group that 8 days prior a safety alert for near misses had been issued and the majority of the items indicated on the safety alert were still happening. The next morning a more thorough brief happened with all pilots and the south zone team. **CORRECTIVE ACTION:** 1. Helibase confirmed that aircraft would not be launched without full information on initial attacks 2. A back up victor frequency was made available for helicopters to utilize if needed. 3. Team advised that they would talk with local dispatch on procedures RASM comments: There was initial confusion as to whether or not the IA was inside of a different fire's TFR, and which ATGS would be responding. Communication was hampered by the delay in getting an additional frequency. Good efforts by H-XXX to pass along the information that was available and good follow through by the incident and the local forest. The event was briefed by both the incident and the local forest to identify what could be done better with future IAs. As mitigation, they ordered an additional air-toair frequency to have on hand. Several people said they were on the verge of shutting down due to the issues in the dynamic situation. Continue making good risk decisions, even if it means stopping the operation. Thanks for the discussion item.

SAFECOM 11-665: Following a previous mishap involving a lead line hook/ safety gate failure, we undertook an inspection of all lead lines and swivels at the EU Helibase. As the EU helibase was utilized by both zones of the fire and multiple crews, we had collected a wide variety of lead lines and swivels, most of which originated from the cache system and ordered up for this incident. One of the new lead lines, utilizing the older hook/safety gate system had different markings than we are used to. Having worked on a program that maintained records of all its equipment, I was familiar with the markings and requirements of the rigging. From Google: Safe working load {SWL} is the load that a lifting



device such as a crane, a cherry picker, or a lifting arrangement can safely lift, suspend or lower.[1] Other synonyms include working load limit {WLL}, which is the maximum working load designed by the manufacturer.[1] The load represents a mass or force that is much less than that required to make the lifting equipment fail or yield. The SWL is calculated using a given safety factor {SF} which for lifting slings could be given for example 5:1. The failing load is also known as minimum breaking load {MBL}. The attached picture shows a pear ring with a Working Load Limit {WLL} of 2900 lbs. This is the maximum load rating that this pear ring can safely hold. However the tag on the lead line shows the Safe Working Load {SWL} as 3000 lbs. This would be incorrect, as the SWL would have a built in safety factor. Several of the other new Lead Line/Pear Rings {new as in never used, not date of manufacture} do not show a limit at all, just the size {1/2 inch} and country of manufacture {Korea}. As an agency we used to buy steel made in the USA, as their production controls and materials were of higher quality. However foreign produced steel does not have these quality controls and oftentimes will use larger and heavier steel to compensate for their weakness in strength and Quality Assurance. Many of the other Lead Line Pear Rings inspected were 5/8 inch instead of 1/2 inch and made in China and Korea. While it is extremely rare that we will reach the 3,000 lbs limit, shock loading or swing could possibly reach that limit and exceed the Working Load Limit of this Lead Line. **CORRECTIVE ACTION:** We will return this lead line to the cache and perhaps they can determine if this is a one-of-a kind lead line or if an entire production run utilized the incorrect pear ring. We will contact our HOS for the proper procedure. We would encourage all crews to look over their steel rigging to insure that they do not have this same combination and return it through the Cache system. We will continue to utilize our American Made rigging whenever possible and recommend to the cache that we purchase only rigging made in the USA. While it may prove slightly more expensive, it is typically of much higher quality and strength. We will also begin tracking of all of our steel rigging to formalize our current inspection procedures. RASM comments: Great reminder to inspect cargo equipment and understand limitations. Good follow through on the part of the submitter to ensure we are using equipment that meet our needs to operate with the lowest risk. Thanks for sharing your experience and helping others to prevent an accident.

SAFECOM 11-721: The flight mission was to fly from a boat to transport field crew to a forest inventory and analysis plot on Amook Island within the Kodiak Island archipelago. There were five crewmembers, including the helicopter manager and the pilot in the helicopter at the time of the incident. The helicopter manger was in the left rear forward facing passenger seat. Upon arriving within the general area of the plot, a high level recon was performed to assess possible landing zones {LZ}. An LZ approximately 36 ft by 46 ft in size was selected near the plot location on a knoll with significant 4' salmonberry shrub cover surrounded by taller alder and a few small birch trees down slope. The crew agreed on the selected LZ on top of the knoll and the pilot then began the landing approach from the south {i.e., heading north. As the tail boom swung from a 6 o' clock position to a 3 o' clock position, the tail rotor made contact with the top of a tree on the pilot side of the helicopter. Due to the swiftness of the maneuver and the counterclockwise nature of the turn, the helicopter manager was only able to see the obstruction as the rotor strike occurred and immediately notified the pilot. The pilot immediately pulled up and gained elevation from the LZ. The crew proceeded to look for an alternate LZ and another was found approximately 700 feet away and utilized shortly after. Upon landing at the alternate LZ, the helicopter manager discussed with the pilot that the tail rotor had been hit and a crewmember suggested that the helicopter be shut down and the tail rotor examined. The pilot did not feel the LZ was good for shutting the helicopter down in and decided it would be examined back at the boat and not on-site. After all 5

crew members exited and unloaded the helicopter, the pilot slowly took off up the slope and said there was an even better LZ up the slope for pick up. The pilot did not land and continued to depart. The helicopter manager made contact with the pilot via hand held radio, emphasized there had been a rotor strike and stated that the rotor needed to be examined. **CORRECTIVE ACTION:** After the helicopter departed, the manager contacted the boat via satellite phone and the supervisor was informed of the rotor strike incident. Subsequently, the necessary steps to address the situation were conducted by the supervisor and crew involved in the incident. The helicopter was taken off of availability and the RAMI was notified. The helicopter was examined on the boat by the pilot and color was observed on the tail rotor blades but no apparent damage to the blade surfaces. The crews were picked up at the end of the day with an alternate helicopter since the tail rotor had not been inspected by a certified mechanic. At the end of the day the field crew hiked to the site of the incident. The birch tree that came into contact with the tail rotor had about 1 foot of the top portion clipped off. No other damage to the tree was noted. RASM Comment: The helicopter was repaired at a maintenance facility in Kodiak, Alaska. This incident was classified as an Incident With Potential {IWP} and an investigation team was sent to Kodiak. The investigation is ongoing and additional information is forthcoming.





SAFECOM 11-697: During the incident at approximately 1736 the incident commander contacted dispatch with an order for a sling load to include 1 blivet, and 10 fedcos. At 1806 dispatched assigned an engine to report to the airport to fill the order, the engine arrived approximately at 1845. The aircraft was ready to lift with supplies by 1930. The aircraft arrived on scene of the incident at 1950 and contacted the helicopter crewmember at the sling site when he was 1 mile out. The crewmember at the sling site conveyed his position in relation to the aircraft was at eleven o'clock high, winds were calm, and that this would be the location of the sling site. The PIC had visual of the site which was located in a saddle. The PIC started to reduce speed for an approach into the sling site. Before the aircraft speed decreased below translational lift, the aircraft began to yaw left and felt as if it was sinking and looked as such from the ground. At that point the lowest net on the long line clipped a tree, just short of the true saddle were the load came to a stop. Once everything came to a stop, the aircraft stabilized, power was observed as adequate and then the PIC moved the cargo 100' to the designated sling site. The crewmember had radioed to the PIC during the incident advising him of the load being drug, and to gain altitude. After the sling mission was complete the helicopter flew to the helispot where two crewmembers disconnected the longline and returned to the airport to fuel and return to base. The aircraft arrived at its home base 1 to 2 minutes prior to pumpkin time, 2051. Due to the holdup in requesting resources to accomplish the mission the aircraft was delayed which resulted in it lifting at 1930 {1 hour and 21 minutes till pumpkin}. The PIC had flown the fire earlier that day doing buckets and was familiar with the sling site approach. The saddle was located on an east west ridge with the high ridge/peak being off to the 10:00 position when the events started to unfold and the high point was at a greater altitude than the aircraft for the final approach. CORRECTIVE ACTION: Manager should maintain closer communication with dispatch when coordinating logistical needs for IA fires. When response times are delayed due to the availability of fire resources, alternatives should be assessed to avoid added pressure from time constraints. PIC noted that it may be prudent to establish HOGE farther from terrain to provide more options to disengage. For future missions where there is potential for winds to be variable, such as in this case where the site was located in a saddle, PIC should consider requesting a 15 minute wind trend from personnel at the site. RASM 08/02/2011 good synopsis and lesson learned.