SAFECOM’s by Aircraft Type

For the month of September there were only 41 USFS SAFECOM’s submitted, the 10-year average is 79. Of the 41 SAFECOM’s reported, 8 were airplane, 8 airtanker, 1 SEAT, 22 helicopter and 2 N/A. The chart below shows the percentage of SAFECOM’s by aircraft type.

SAFECOM’s by Category

There are often more than one category assigned to a SAFECOM, resulting in a grand total greater than the total number of SAFECOM’s. There were 5 airspace, 8 hazard, 13 incident, 23 maintenance related and 1 mishap prevention SAFECOM’s reported in September. Below is the percent of SAFECOM’s for each category.
SAFECOM’s by Category continued...

AIRSPACE - There were 5 airspace events reported, of which 4 were intrusions and 1 was procedures. Intrusions into TFR’s are typically the most reported in this category. Please see SAFETY ALERT FS 02-01 on the recommended method for aerial supervision to deal with intruding aircraft into TFR’s.

HAZARD - There were 9 reports that had hazards associated and as usual, communications were the most reported and showed up in 6 of those reports. One was related to radio issues in the aircraft and another was problems with ground radios and repeaters. Two were involved with retardant loading and the other two were verbal communication issues between aircraft. Pilot action and policy deviation each had two reports; flight equipment, fuel, preflight action and instructions each had one report.

INCIDENT - There were 13 incidents reported; 5 were precautionary landings, 4 dropped loads, 3 aircraft damage and 1 categorized as other. Three of the 5 precautionary landings were helicopters (fuel, vibration, broken mount) and 2 were airtankers (landing gear would not retract and jet stuck open). Aircraft damage consisted of 2 incidents of loading retardant in airtankers, and tire/wheel damage on landing.

MAINTENANCE - There were 23 reports that were maintenance related. The most reported were 6 various engine problems, 4 electrical, 3 main and 1 tail rotor, 2 airframe, 2 chip light and 2 landing gear.

MISHAP PREVENTION - There was one mishap prevention report noted on an event between an ASM and helicopter, SAFECOM is included in this report.

This was a significant year in USFS aviation accident history, in that we did NOT have a helicopter accident. The last year that happened was in 1995. In a review of our accident records back to 1974; this year and 1995 are the only 2 years we went without a helicopter accident.

Everyone involved in helicopter operations and management including our vendors deserve a pat on the back for this accomplishment. NICE JOB ~ Congratulations and Thanks!
SAFECOM’s

These are samplings from the SAFECOM’s submitted for the month of September. We hope you will select a couple of them a day to discuss and use the lessons learned in your daily briefing.

SAFECOM 10-767: At approx 1850 crew chief approached the manager and advised that one of the pilots had called from his cell phone and that NXXX had made a precautionary landing near dip site because they felt a vibration in the main rotor system. Manager called Helibase on the radio and advised them that NXXX was on the ground on the fire and needed information about the exact location so the mechanics could determine the problem. Helibase called air attack and requested a lat/long of the location of NXXX. Manager was given lat/long from air attack and from AFF. There was discussion of moving NXXX to dipsite due to the remote location of where the aircraft was on the ground. It was determined between the managers, helibase manager, crew chief and RAMI that the crew chief needed to take a look at the aircraft before it was moved. Helibase recommended that one of the light helicopters retrieve the pilots due to the late time of day and the driving distance. It was determined that there was not enough daylight to achieve retrieval of pilots. Air attack/helibase and manager coordinated the walking of the pilots a short distance to where the dipsite manager picked them up. Crew chief found the helicopter that evening and rebonded pocket separation on one of the main rotor blades. Crew chief called manager and it was agreed that they would all go back out to the aircraft first thing in the morning. 10/1/2010 NXXX crew and manager went to location of NXXX. Mechanic and pilot noted that the problem was fixed. Manager notified RAMI and Helibase manager and NXXX was brought back to contract availability. CORRECTIVE ACTION: Proper authorities were notified. Pilots were retrieved. NXXX made precautionary landing rather than risking further damage to aircraft. Acting RASM Remarks: Good decision to leave the aircraft where it was, good coordination... FAO reviewed.

SAFECOM 10-762: The helicopter was long lining {150’} guzzlers, water troughs, and post-poles for a range/wildlife improvement project. The second load of the day consisted of post and poles. The helicopter was approximately 100 yards away from the Helibase flying along a pre-planned flight route when the load was dropped from the remote hook. The load fell approximately 300 feet destroying the post and poles. CORRECTIVE ACTION: The helicopter returned to the Helibase: the Helicopter Manager checked the hook, swivels, lead lines, all were in operating condition. The FAO talked with the pilot and he said he inadvertently released the hook and load. The project continued with six more loads completed successfully. FAO informed the RASM, HOS, RAO, Helicopter Program Manager, and Forest Fire Management Officer...Acting RASM Remarks: Thanks to the Pilot for owning-up, not easy to do, we all make mistakes and the important part is that no one was hurt. No one was hurt because measures were put in place for just such an occurrence whether accidental or on purpose, the plan had designated a specific flight route while carry the load. Thanks for the SAFECOM, good lesson for all when carrying loads, always consider the flight route. No further action.

SAFECOM 10-759: While supporting initial attack operations, the incident commander placed an order for one blivet and two fedcos. The blivet and fedco where filled by a local engine also supporting the fire. The blivet and fedco were hooked to the swivel: however, one of the personnel noticed that a fedco was leaking and the cap was changed and an additional fedco was filled. The load was thought to be properly built and ready to fly. Once bucket operations had ceased the remote hook was attached to the longline and safety checks were completed. The remote hook was brought over to the load and attached. The helicopter picked up the load and was approximately 50 feet above the ground when one fedco and the blivet released and impacted the ground. Both the blivet and fedco were rendered unusable. COR-
RECTIVE ACTION: We took a one hour “safety stand-down” and discussed the incident and corrective measures. When more than one person is building external loads, a qualified helicopter crewmember is dedicated to overseeing the operation and conducting quality assurance. Also, regardless of the amount of time that passes between building and rigging ensure the load is double-checked prior to hooking on the long line. The incident was discussed with the FAO and Park aviation officer.

SAFECOM 10-758: Tanker XXX was dispatched to a fire, after departing the landing gear failed to retract. The Retardant was jettisoned at the designated area. Tanker XXX returned and landed after completing checklist which included pinning the nose gear and then pinning the main landing gear after landing. CORRECTIVE ACTION: Acting RASM Remarks: Air Tanker XXX did everything appropriately, did a fly-by of the tower to get another opinion that the gear was down. Maintenance technicians found wire broke loose behind gear handle causing a gear “in-transit” light: additionally the wire grounded causing the gear circuit breaker to pop. Wire was repaired and the crew flew the aircraft and performed numerous retraction checks with no further problems. Air tanker was returned to contract availability. No further action.

SAFECOM 10-754: During a ferry flight for helicopter project operations, the fuel pump indicator light came on while en route. At the time the light was discovered the helicopter was ascending above approximately 8,000 ft AGL. Upon discovering the light coming on, the pilot recycled the fuel pump switch to see if the light would come back on. The manager contacted dispatch via the radio and asked if they would inform the Regional maintenance inspector (RAMI). The pilot contacted his mechanical staff via satellite phone. It was determined to be altitude related by descending to approximately 5,000 ft AGL and the light went off, then re-ascending and the light came back on. It was decided between pilot, manager, mechanical staff, and after clearance from RAMI to continue the flight via a lower altitude alternative route. For the remainder of the flight the light was monitored, however it did not come back on. CORRECTIVE ACTION: FAO Comments: No further action pending RAMI review. RAMI Comments: spoke to the Dir. of Maint and they replaced the pressure switch. This is an indication issue. RASL Comments: None

SAFECOM 10-750: Ground Firefighters Statement: This SAFECOM references observations of a near mid air collision between ASM XX and Helitanker XXX from the ground on the fire on 9/14/2010 at approximately 1100 hours. 3 individuals witnessed the event. Myself {Division Supervisor Papa} Division P{t}, and the Assistant Superintendent for XX IHC. The Situation: Three Helitankers had been working the last piece of unlined fire edge in the Cottonwood Creek Drainage starting at around 0900 ahead of the XXX IHC. The canyon is steep, rugged and fairly narrow: less than 1/2 mile wide, and the area the Helitankers were working was at a severe bend in the canyon. The Helitankers were flying a set pattern, approaching from the east up cottonwood canyon from the dip flying over the drop area turning making their drops and departing to the east back down Cottonwood to the dip. ASM XX had been circling the area being worked, from mid to high altitude, while the cranes were working at the designated drop zone. At approx 1100 hours ASM XX reported to DivP{t} that he had detected a flare up to the west of the area the cranes were working, and was wondering if we had personnel in the area, and if we needed to move a helitanker over to that area. He stated he would fly over the flare up and let us know when he crossed the flare up. Division P{t} agreed this would be Ok since we did not know the exact area the flare up was in. Several minutes later ASM XX came in over the flare up low level and tipped his right wing asking if we could see him. We did see him from the ridge we were on. He was west of our location proceeding down Cottonwood Creek, approximately 1/3 of a mile up drainage. At the same time HT XXX was approaching the drop area he had been working from the east up Cottonwood Creek. The three of us who witnessed the event, were standing on a cliff edge directly above the drop zone. The Helitankers were working eye level with us, as they worked the drop zone throughout the morning. It became apparent that if ASM held the current course he would make contact with HT XXX. HT XXX took
no evasive action - and it was not observed whether he slowed or not, ASM XX did bank hard to the
north {left} up a side drainage out of the path of HT XXX. Both aircraft were operating at what I would
consider the same altitude prior the bank of ASM XX. All three of us estimated that the distance of hori-
zontal separation between the two aircraft was in the area of 300 feet.

ASM Pilot Statement: “After returning from the fire from an ASM mission we in ASM XX had learned
that there were reports from the ground that we were involved in a near mid-air with a HT XXX. This
was the third day of flying on the fire and during this day we had a total of 4 heli-tankers 1 type 2 helicop-
ter and 1 media ship. The fire was winding down rapidly. Earlier in the morning we had established a
virtual fence and working areas for all helicopters and by the time the perceived near miss had happened
we had released all helicopters with the exception of HT XXX to hold them in case of need later in the
afternoon. After HT XXX’s fuel cycle was complete, he was released and a type 2 was brought out for
bucket support. After 3 days on this fire and several days on another fire and many years of other fires
together, a great working relationship with these helicopters had been established. About 1100 ASM
XX had spotted some smoke in an area that appeared to have no ground personnel. We cleared it with
the ground, on a frequency that HT XXX was monitoring, and did a low pass to bring the spot to the at-
tention of Division x-ray. After completing the pass on our exit we saw HT XXX hugging the west side
of the virtual fence established earlier that day and we were hugging the east side of said virtual fence.
Upon visual site of HT XXX we exited to the left as planned and he hovered in position. We made verbal
contact on the AM channel and stated we had each other in sight and made a normal steep exit to climb
away. 2 days later with all the commotion from the ground’s perception, the crew of HT XXX and ASM
XX had an AAR and were in agreement that it was a non-event.”

CORRECTIVE ACTION: “Further
separation could have been accomplished if 1. ASM XX would have made his normal announcement on
the AM frequency, but it was missed in this instance. 2. HT XXX’s transponder was inoperative for 2
days and fixed the following day of this event, this would have given a TCAS heads up. 3. Complacency
with going full pedal to the metal to only 1 helicopter on scene was a factor to cause an over relaxed at-
mosphere. The virtual fences established on this fire were highly effective.”

RASM 9/23/2010 this is the compilation of two SAFECOM’s {10-0739 and 10-0748}. The fact that thorough documentation of the
event is certainly a testament to the continually emerging USFS/BLM/NPS reporting ethos and peer re-
view process that are strengthening our collective safety culture. By FAA definition: Near Midair Collis-
ion {NMAC} is an incident associated with the operation of an aircraft in which the possibility of collis-
ion occurs as a result of proximity of less than 500 feet to another aircraft, or a report is received from a
pilot or flight crewmember stating that a collision hazard existed between two or more aircraft. FAA Or-
der 7210.56 paragraph 4-1-1 http://www.faa.gov/documentLibrary/media/Order/ATQ.pdf It is clear
from the After Action Review {AAR} between the flight crewmembers that a “collision hazard” did not
exist. Additionally, horizontal separation of less than 500 feet in a Fire Traffic Area {FTA} is not uncom-
mon especially when a “virtual fence” is utilized and positive communications are maintained to include
visual separation. In his book, “Managing the Risks of Organizational Accidents”, James Reason dis-
cusses the concept of “accident trajectory” which simply stated is an action passing through holes in lay-
ers of defenses, barriers and safeguards. Holes included: 1. A faulty transponder {10-0731} rendering the
ASM TCAS system useless in this instance to increase their situational awareness. 2. Non effective com-
munications to other FTA aircraft of ASM intention to go low level. 3. Not recognizing that during the
“wind down” the HT could have been utilized to recon the flare-up mitigating the need for a low level
pass. Note: the ASM crew felt that based on the fact that the HT was two drops away from a fuel cycle, it
was better to leave them on task working with the crews rather than divert for the intel. 4. Complacency,
Defenses, barriers and safeguards included: 1. Establishment of the virtual fence. 2. Strong working rela-
tionships – cohesion amongst the flight crews both between the ASM, {ATS and ATP} and the ASM
module with the helicopter crews. 3. Awareness of ground personnel and a willingness to point out based
on their perspective a situation which shouts watch out. The following excerpts from the “Aviation Risk
Management Workbook” serve as good reminders but are not necessarily mitigations ignored in this inci-
dent. They are however important to review so that our established mitigations are known and applied to
avoid “holes.” Aerial Supervision Assessment System – Flight Operations Sub – system – Fire Operations - Exposure to terrain in low level environment – ensure high and mid level recon is completed prior to commencing low level flight. ASM – ATS assists ATP with aerial/ground hazard identification and instrument monitoring. Perform only pertinent radio communications Operating in close proximity to other aircraft – conduct only pertinent communication with the ground. Maintain “eyes out” for hazards. ASM – ATS assists ATP with tracking other aircraft. Reliance on technology: TCAS/TCAD – flight crew members spending too much time looking at things inside the cockpit instead of out. Lack of situational awareness – proper rest, thorough briefing , use of TCAS/TCAD, use appropriate tactics, maintain commo with other AC/grounddisp. Utilize CRM. Sub – system – communications - FTA: Aircraft not complying with procedures – aerial supervision is trained and enforces FTA procedures. Utilize virtual fences, IP’s, quadrants, etc… Sub – system – Human Factors - Acceptance of risk as normal – validate mission, solicit feedback from others, and reevaluate risk vs. benefit. Educate personnel on the hazards of normalization of risk and complacency. Helicopter Assessment Helicopter System – Aircraft Subsystem – Maintenance Lack of thorough documentation – Develop training for HEMG’s on MEL, maintenance buzz words. Enhance awareness through training for HEMG’s on when to call MI for assistance with contractor and maintaining equipment.

SAFECOM 10-749: Contract loading crew started loading T-XX with retardant before pilots gave the OK to start loading, not allowing them to open the necessary valves to the internal tank. This action led to the pressure from the pump blowing out the internal pipes putting the aircraft out of service for the rest of the day. CORRECTIVE ACTION: Base personnel had a tailgate safety meeting to re-affirm base loading policies that are to ``get clear direction from each aircraft being loaded to confirm they are ready to be loaded``. Also discussed was that a perceived need for haste should never override following established procedures...FAO Reviewed, the parts that were damaged were 2`` PVC pipe, with glue ends in aircraft.

SAFECOM 10-747: Aircraft took off from airport for recon/detection flight at 10:00. Approximately 1 1/2 hours into flight the low fuel light came on. We landed immediately thinking we must have a leak. After shutting down and examining the helicopter and no leaks were found the pilot came to the conclusion that the helicopter had not been fueled up by the airport personnel the day before. We called for his fuel truck to come to our location. After fueling we completed our mission without incident. CORRECTIVE ACTION: Talked to the pilot about fuel management and being sure that the fueling process is monitored and confirmed. We also talked about and agreed that complacency was a contributing factor to this incident. The manager will also be committed to monitoring the gauges better. RASM note: The pre-flight process is the last chance to catch problems-it pays to use it effectively. Fueling aircraft presents the opportunity for human error. A smart pilot will learn from an error and look at this as an opportunity to make a change in behavior. Pilots should oversee the fueling of their aircraft. More than once line folks have attempted to put or have put the wrong fuel in an aircraft, or forgotten to perform fueling at all. Also, it is a great habit to get into-monitor fuel consumption by time-the old ``fuel check``, to back up the gauge-they are mechanical and can fail.

SAFECOM 10-746: Tanker XX was assigned to a fire reloading from the XYZ Tanker Base. On the seventh and final mission Tanker XX experienced a right main tire failure on landing. An emergency was declared through the Tower and the runway shut down for approximately forty minutes until Tanker XX could be removed from the active runway. CORRECTIVE ACTION: Acting RASM Remarks: I spoke with the FAO and RAMI, The maintenance crew were able to change the tire/wheel assy. within 45 minutes and get the aircraft off the runway. The AMI stated that the emergency brake line was replaced, jury strut as well as the tire/wheel assy. AMI further stated it appeared that the tire came apart perpendicular to the tread pattern. No one had an idea why the tire came apart on landing. The tire pressure according to the maintenance crew was just checked the day before with no problems.
SAFECOM 10-735: At approximately 1430 PDT while working the fire, we were forced to enter the edge of a very active column. We were working in the bottom of a canyon with steep terrain and very active fire to our left. To our right was much lower terrain, until you committed to the drop, by which time the escape route narrowed. We were daisy chaining and were the third A/C in the pattern. We were in right traffic and as we turned base to final the copilot said the route looks clear. The lead plane was through by this time and we were about a mile behind the first tanker. The tanker ahead of us called a go around because they couldn’t get down without gaining too much airspeed. We were in a better position and were descending normally. We agreed things still looked good with both the A/C profile and the escape route. As the final drop check was completed we both noticed the column begin to lay over. At this time I made the decision to continue with the drop because I didn’t think I could transition from decent to climb in time to clear the terrain and stay out of the smoke. Our planned escape route was good but we could both see things beginning to change fast. As we killed our decent and leveled for the drop we could see the column begin to bulge off of the terrain from our left and push into our flight path. I told my copilot we would make a normal drop and after release I was going to go straight ahead because I knew even if visibility went away I would clear terrain. This was no time to get fancy. He said ‘I’m on the gauges, you’re flying. We released the retardant, I confirmed wings level and went on the artificial horizon. We penetrated the smoke, got a fair jolt and were through, wings still level. CORRECTIVE ACTION: We returned to the air tanker base and took the A/C out of service for a company mandated stress inspection. RAMI: Went out to the aircraft the day after the jolt and talked to the lead mechanic. He told me that the aircraft incurred a turbulent flight and pulled a 2.33+ g load and was .33 over limits. I talked to the lead mechanic and he had further information that the aircraft didn’t exceed limits with the stress gear monitoring information collected. Nothing found in the inspection but the mechanic did tell me that some pilot gear was loose in the aft area and flew around and hit a cover for the flight control cables and messed it up. I informed the mechanic that the pilots need to secure their bags and equipment so nothing gets damaged. I also informed the contactor they must contact the appropriate AMI in accordance with where they are located. FAO {acting} comments: Discussion between ATP and myself, having been the ATS onboard the ASM, came up with some possible causes and mitigation for this type of incident. There was possibly a little too much rush to drop the tankers, due to, A} immediate structure threat. B} An exit that we felt may not be viable, if we waited too long and C} competing for `space` with Helicopters i.e. wanting to get done, so that we could clear the rotor wing back into area. A tandem drop {two tankers} was requested for the above reasons, and we discussed that because of that, the lead was that much further in front of the second AT, that the column would/could have changed, as in this case, the lead felt no turbulence. Possible mitigation: decisions to make tandem drops should be evaluated based on complexity of exit, and target. {second tanker may be 3/4 mile or further behind lead}. Remember that things can, and do change quickly in the fire environment, but that another 3-4 minute pattern to reevaluate if there are questions or concerns by any flight crew are perfectly acceptable, and should be encouraged.

SAFECOM 10-733: After departure from the airport en route to the fire pilots noticed a high frequency vibration #2 input, pilots immediately turned around and landed back at airport. Chief mechanic inspected aircraft and adjusted rotational drag torque on #1 and #2 inputs. Pilots conducted test flight, maintenance inspector notified a/c returned to service. CORRECTIVE ACTION: RAMI - I returned A/C to contract avail and followed up with a visit and looked at data and torques from the manual. All looked good. RASSM: No further action required.

SAFECOM 10-730: After dropping my second load of retardant on the fire with no complications I was returning to airport for a load and return. While in the pattern to land, I noticed that the flaps were not working. I aborted the landing to analyze the problem. All circuit breakers were fine and looking at the winds, that were 10-15kts, with a downhill runway and a down mountain approach, I elected to return to
another airport where there were no winds, with a flat runway and flat approach. **CORRECTIVE ACTION:** The airplane mechanics arrived early the next morning, changed out the switches involved and the pilot test flew the aircraft with no more problems. SEMG Comments: Called AMD and notified him of situation. Made Phone Contact with SAM/Left Message with the COR for the Contract. 09/16/2010, at 11:00AM Back in Service per Verbal phone conversation with AMD. UAO: Appears to be good decision making on the part of the pilot and proper incident follow up by SEMG with AMD/COR. RASM Comment: Good risk management decision by the pilot given the fact he was not sure what was wrong with the aircraft.

**SAFECOM 10-719:** Txx was cleared to loading pit and parked while other aircraft being loaded in second pit. Txx had been sitting in pit one waiting to be loaded. The base retardant loading crew went to pit one to commence loading. After hooking up to the aircraft the loading crew noticed retardant leaking coming from the doors and shut-down. The loading manifold on board the aircraft was not opened by the flight crew prior to loading. This was a different loading crew from the previous day. There was missing communication between the crews that lead to this mishap, the loading manifold was damaged and will need to be replaced. **CORRECTIVE ACTION:** A quick AAR was conducted with loading personnel after incident. Loading crews will confirm with the flight crew that they are cleared to load prior to pumping operations. This was an unfortunate turn of events that could have been avoided. Recommend that all crews always check prior to loading any aircraft, and that they are clear to do so. Maintain situational awareness at all times, and stay heads up! Just wanted to pass on that we all make simple mistakes. RASM: appropriate review and a good reminder for all with respect to situational awareness. Regional Maintenance Inspector notified and the aircraft was returned to contract availability.

**SAFECOM 10-718:** When entering the XYZ National Forest from the out of zone Airport to conduct a forest health survey, the pilot attempted to contact XYZ Dispatch. No contact could be made with XYZ, we had been flight following with ABC Dispatch and contacted them to call XYZ via land line to find out what was going on. ABC reported that the XYZ radio was not working properly but both dispatch centers had us positive on AFF. The decision was made to continue to flight follow with ABC since the survey area was within their radio range. **CORRECTIVE ACTION:** We completed the survey by flight following with ABC. FAO comments: After some follow up, the XYZ radio system was working properly. It is likely the aircraft was using a tone it had been given a few days earlier when it was working on the east side of the shared mountain range. This tone would not have worked on the west side. Users seem to be having difficulty figuring out how to properly use the XYZ radio system. I will be talking to the Radio tech and Center Manager to see if there is a way to make the system more `user friendly`. RASM comments: The folks inside the aircraft made a good risk decision in going back to the communication that worked {ABC dispatch}, trying to troubleshoot with the second dispatch center {XYZ} and then staying with positive radio communication {ABC}. The lesson here is for folks to ensure they understand the frequencies and tones for the area they will be operating in, especially if the aircraft crosses zone ```boundaries```. The XYZ forest has a good proactive approach to preventing the issue in the future. **SAFECOM 10-714:** With a planned skydiving rally at the Airport {host to the forest initial attack helibase}, concerns about FS initial attack operations in conjunction with skydiving operations prompted a
meeting with Forest Aviation Officer, Airport manager, and skydiving "boogie" coordinators. At the meeting it was discussed and agreed to by all that all parties would monitor ctaf, 122.8, and skydiver pilot would announce at least 1 minute to jump as well as divers off. It was also agreed to those helicopters under Forest Service control would not start if skydivers had already jumped and that skydivers would not jump if helicopter rotors were turning. During an initial attack a FS helicopter was preparing to launch, the base manager could see the skydiving aircraft climbing out and announced on ctaf that "helicopter will be turning rotors on the FS helibase". The Skydiving aircraft announced that he was still 4-5 minutes out and asked to be notified when the helicopter was clear. The base manger confirmed and gave the N # of the departing helicopter. As the helicopter began to idle up for lift off the base manager heard over the ctaf that the jump plane had jumpers at the door and then heard the helicopter pilot acknowledge and say "I guess I`ll wait until they are all down" and then idled the aircraft down. The sky divers jumped and all landed in their normal LZ with no incident. The helicopter departed to the fire, delayed by 4-5 minutes. **CORRECTIVE ACTION:** The base manager did not feel that he had any authority to try to control air traffic and did not try to stop the jumpers. He contacted the airport manager to inform him of the situation, and then talked to the skydiving event coordinator. The event coordinator claimed that the helicopter pilot gave the jumpers the OK and that it was a pilot to pilot issue. The base manager explained that in the briefing the day before it was agreed to by all that skydivers would not jump if rotors were turning and that the pilot to pilot conversation should not have been a factor, he also stressed that he had positive commo with the jump pilot and he knew the helicopter was turning rotors. The event coordinator assured that they would rebrief with the skydiving pilot and that the incident would not be repeated. Follow up with the airport manger assured that if the skydiving event conflicted with FS operations again it would be shut down. {FAO comments} Sounds somewhat similar to the SAFECOM from the same event in 2007. While concurrent helicopter and skydiver operations can occur in general aviation, Forest Service aviation operations on the forest request a more conservative approach. Follow up will occur again to try to preclude the possibility of conflict in the future.

**SAFECOM 10-713:** While performing as Air Attack on an incident, the TCAS indicated an unauthorized aircraft within the established TFR. The intruder aircraft was at an altitude of 5500 and within 2 miles of the fireline. Fortunately, no other aircraft were flying over the incident at the time of the intrusion. **CORRECTIVE ACTION:** The Air Tactical Group Supervisor announced on the TFR victor and also on Unicom the altimeter, altitude, TFR dimensions and requested acknowledgment but none was given. We were at the same altitude of 5500 ft. and flew an intercept course with the intruder aircraft: we flew just close enough to obtain 1} Aircraft type 2} Color 3} direction of flight. This intercept occurred within two miles of the edge of the TFR. After aircraft landed at airport the FBO contacted the pilot at which point he acted ignorant about the TFR and flying through it. We contacted Air Operations and FAA. Local UAO comments: Local FBO had fire information posted and available. Local County Airport Manager has been consulted about the two incidents to date and picture information has been turned over to the Airport Manager and National Airspace Coordinator has been request to follow-up. More prevention work with the airport tenants seems to be warranted by the number of intrusion occurring this year.

**SAFECOM 10-712:** This flight exceeded official sunset. Our aircraft was requested to do a medivac at 1900 hours. Shortly thereafter we departed the helibase with HMGB, one paramedic and one EMT. After the paramedic was briefed by the line med ic he and the manager discussed patient condition and best course of action. We then decided that due to the severity of the injuries the best course of action would be to take the patient via helicopter directly to Emanuel Hospital in Portland. We knew that we would be pushing official sunset but went on with the mission. We landed at Emanuel Hospital at 2007 hours approximately 4 minutes before official sunset: we had no choice but to leave the hospital because we were blocking their emergency helipad. We took off to the closest airport: landing at Airport at approximately 2030. **CORRECTIVE ACTION:** Risk mitigation: We confirmed official sunset, confirmed all fire fre-
frequencies, confirmed lat/long for helispot and hospital, and established flight following with Portland approach. The helibase confirmed that Emanuel Hospital was informed and that they had a type II helipad. The helibase relayed all mission information to incident communications. Prior to departure we called helibase and informed them of our plan to reposition the helicopter to the closest airport and communicated our intention to move to the closest airport with Portland approach. Actions taken were performed in accordance with medivac protocols. Personnel involved performed proper risk assessment and mitigation. One lessoned learned: bring an additional flight helmet in the event there are additional medical personnel on scene that need to fly with the patient. This would have enhanced the communication between the two paramedics during the flight to the hospital. RASM Comment: This was a Rappel helicopter and a Rappel crew but the medivac did not require Rappel. Great description of the risk management used during the mission.

**SAFECOM 10-711:** We were flying cargo missions consisting of wooden rails for a fence project. The rails were held together by an aircraft ratchet strap on one end of the rails. The other end was held together by a 4000 pound limit web choker that had a bull ring at the end of it and it was attached to the cargo hook by a swivel. The load consisted of 14 rails that weighed 728 pounds. The crew inspected the load numerous times to make sure that the rails were tightly contained in the ratchet strap and webbing choker. The pilot picked up the load from the cargo area and flew from the cargo area and was in route to cabin project site. The pilot was flying up the drainage opposite of the roads and trails. He was flying at 60 knots like the previous four loads. He looked down at the load and saw the center rail starting to slip from the load. He then slowed down to about 30 Knots and the center rail fell out of the load. The pilot stopped forward movement of the aircraft, to observe the load. The pilot continued flying to the cabin after he saw the load holding together. The reason the pilot continued the flight to the cabin versus flying back to the cargo was due to the fact the cabin area was uninhabited, where as the cargo area had people and vehicles at it. **CORRECTIVE ACTION:** FAO comments: In speaking with the pilot, he displayed a very logical and well thought out process for planning this flight. His flight path intentionally avoided the side of the canyon that had trails and roads. Rigging of cargo was further discussed with crew. Options to use more ratchet straps, flying the load horizontally with a tail and using a banding device were discussed as future options.

**SAFECOM 10-710:** After take-off for a water drop mission, the pilots heard a loud bang and returned to Helibase. Mechanics found that an Integrated Floor Isolation System mount had broken. **CORRECTIVE ACTION:** Mechanics ordered part and will install it when it arrives. The maintenance log was updated and the Regional Aviation Maintenance Inspector was notified. The helicopter was returned to contract availability. AMI comments: Procedures were followed as required. Local UAO comments: procedures were followed in a timely manner.

**SAFECOM 10-709:** Aircraft lifted off from airport with 4 pax en route to repeater station to drop off radio technicians. Three minutes into flight pilot noticed aircraft torque gage increasing without any collective movements. Gage continued to show torque increasing and that aircraft exceeded limits. Pilot decided to return to airport for maintenance. Pilot said this event had happened before when the transmission deck had been washed and water and moisture got into the sensors. **CORRECTIVE ACTION:** The mechanic found that moisture had been present in the torque gage sensor causing the sensor to malfunction and show aircraft exceeding torque limits. The mechanic dried out and cleaned sensors until gage functioned properly. FAO comments: returned to contract availability by Region

**SEPTEMBER 2010 PAGE**