



In Recognition of Professional Performance during a Hazardous Aviation Event or Significant Contribution to Aviation Mishap Prevention

# FY2018 Airwards

### CREW RESOURCE MANAGEMENT SUCCESS IN GEAR UP LANDING

## **SAFECOM #: 18-0784** (not yet public)

Jim Page, pilot and his passenger, Dave Robinson, ATGS were on a three-mile final for runway 30 in Lewiston, ID (LWS) after completing an aerial supervision mission, when Jim initiated the landing gear extension. The routine for Jim and Dave was to verify gear extension/retraction by visually inspecting the gear out of their respective side windows and verifying "3 green lights" on the panel indicating gear is down and locked.

However, this time, the gear did not extend and the green lights did not illuminate. Jim cycled the landing gear level and checked the circuit breaker, but the gear still did not extend. A fly-by of the LWS tower confirmed that the gear doors were open, but the gear was not extended.

Unable to resolve the issue, Jim gained altitude and requested to remain in the LWS airspace while troubleshooting the issue. Dave asked "what can I do to help... what do you need from me?" Jim handed Dave the emergency procedure checklist and asked him to locate the "landing gear fails to extend" checklist. Together they worked through the emergency process but could not fix the problem--- it was apparent that the hydraulic fluid reservoir was empty. Jim contacted the company mechanic via cell phone for additional procedures, but nothing worked.



DAVE ROBINSON, ATGS

After approximately one hour of troubleshooting the problem, Jim and Dave began the process of preparing to land without landing gear extended. Jim declared an "in-flight emergency" and the LWS tower contacted the crash rescue unit. Jim and Dave discussed various options and developed a plan for landing, including egress and opening the doors before touch down. They knew that if the fuselage was damaged, the doors may not open and could trap them inside the aircraft. They both tightened their seatbelts, and ensured all non-essential items were placed in the backseat. Jim shut down the front prop, and bumped it into a horizontal position to prevent a prop strike, and kept the rear engine running to provide power for landing. Jim executed the emergency landing and the aircraft skid to a stop on its belly on runway 30. After the aircraft came to a stop, Jim shut down the rear engine and both pilot and passenger exited the aircraft as planned, uninjured.

Teamwork played a large role in the successful outcome of this mishap. Both men utilized Aeronautical Decision Making (ADM) and Crew Resource Management (CRM) skills to share the workload as they were trouble shooting the issue in flight. Dave's focus on helping the pilot, allowed Jim to focus on flying the aircraft and to determine the best option for landing. Jim demonstrated impeccable airmanship skills resulting in the execution of a textbook belly landing. Great job guys!

### DOING THE RIGHT THING

## **SAFECOM #: 18-0730**

Jerry Rule, Type 1 Helibase Manager and Kari Hirschberger, Type 1 Helibase Manager – trainee, took the lead to stand up to the unsafe and outside policy mission requests from an Incident Management Team's Operations Section Chief and designated burn boss. While in charge of Helibase Operations, Jerry and Kari were getting pressured to push the boundaries of what they felt were safe and reasonable aviation practices. On one occasion, personnel from the IMT tried to convince a pilot to make an off-helibase landing without a qualified helicopter manager on board. The pilot refused to comply and Jerry and Kari stood with the pilot's decision.

On another occasion, they were pressured to allow a DIVS-trainee onboard a live aerial ignition flight for learning-related purposes. They knew extra passengers are a bad idea due to unnecessary exposure to people non-essential to the mission. They stood their ground and offered numerous other safer solutions, all of which were declined by the IMT personnel. The duties and responsibilities of the Air Operations Branch Director and Air Support Group Supervisor with the IMT were also being subverted throughout the assignment. The OSC consistently made statements such as "you have to remember who you work for", "you work for operations", "I've always done it this way"...etc. Jerry and Kari did not give in to the pressure.

Jerry and Kari went to work on fixing the issue. They initiated collaboration and communication to acknowledge and reaffirm the importance of the role of the AOBD and ASGS in the organizational structure of a team. They were instrumental in re-establishing SME risk management communications by facilitating multiple meetings and producing a report. Kudos to you both!



JERRY RULE, HEB1



KARI HIRSCHBERGER, HEB1 -TRAINEE

### "LAST LINE OF DEFENSE SPEAKS UP"

### **SAFECOM #: 18-0153**

Dan Kettman, Jasper Lloyd and Joe Miller were from different airtanker bases, organizations and agencies, but they came together for a common cause. They were together at the National Aerial Supervision Training Academy (NASTA) to increase their aviation safety skills and train as Fixed-Wing Parking Tenders. The standardized training told them they were the last line of defense in checking aircraft as they left the ramp.

These gentlemen took the training to heart, and gave special focus to departing aircraft. They noticed a "puff" come from under the wing of one lead plane and were decisive in communicating what they had seen to the pilot. No drama, just clear and concise communication. Unable to see the area from the cockpit, the Pilot asked Dan, Jasper and Joe to keep an eye out as she ran up the engine. The puff became a steady stream of fuel under the wing. The Parking Tenders went into action. They responded to the hazardous materials spill timely and expertly. When asked to sum up the lesson learned from this incident, Joe said, "When it comes to safety, it's important to realize that you may only have a window of a few seconds to point out a dangerous situation.

The hazards of aviation accidents offer little in the way of forgiveness, and it is crucial that we ingrain safety as our first and foremost duty." These gentlemen demonstrate the aviation safety excellence we strive for. They were observant, provided clear, concise communications, and responded to the situation well. Dan, Jasper and Joe embodied the concept of "See something, say something". They said the standardized training gave them the confidence to step up and address the situation in a highly professional manner. Great job, fellas.



#### QUICK THINKING DURING FIREFIGHTER EXTRACTION

SAFECOM #18-0830 (SAFECOM will become public upon completion of the FLA)

On the afternoon of August 15th 2018 a helitack crew and a 10 person engine crew were working on the Stone fire—a seemingly calm, lined, ½ acre lighting fire. Mike Tinervia, helicopter pilot, whose helitack crew was on the ground, was supporting the fire with bucket drops. Mike noted that the wind was shifting erratically and he was forced to reassess wind direction with each drop.

It wasn't long before the fire's activity picked up and Mike was notified by the helitack crew that they were pulling off the line and making the hike through steep terrain back to a landing zone (LZ). Mike continued bucket work as the crew was making their way to the LZ, and he noticed the fire was spotting to the north and the wind was pushing spots down canyon in the direction of the exiting crews.

Monitoring the crew frequency Mike became aware of the rapidly escalating situation and the urgency for all personnel to disengage from the fire and retreat to safer areas. Due to the fire's behavior and the threat it posed to



ACTING RASM, BRAD RICHARDS (LEFT), PRESENTING AIRWARD TO MIKE TINERVIA (RIGHT)

firefighter safety, the crew boss made the decision to extract all personnel by helicopter. Mike dropped his bucket in a safe place, completed a quick performance assessment to determine his allowable, and headed to the location of the helitack crew.

The fire was now a running crown fire that was rapidly approaching the location of the crews. He had three crews (1 helitack and 2 engine modules) to retrieve and get to safety, and not much time to prepare. The nearest potential pick up spot where he would meet the helitack crew was tight, with trees and rocks on both sides of the main rotor, and had a slope well beyond landing limits--- a full skids landing was not going to be an option. Mike elected to do a toe in landing with the right skid contacting rocks. Once stable, he gave the nod to the helitack crew to start loading. About a minute into loading the fire crested the small knoll, where the crew was sitting on its lee side. The fire was actively spotting with a 10ft diameter spot appearing under the right side of the rotor disk. Winds became very erratic as a result of thermal displacement from the approaching main fire body, requiring a great deal of skill to keep the helicopter stable.

The engine crew was still at the bottom of the hill, roughly 50 yards below the first pick-up spot. Mike changed the plan due to the fire activity he could see from the air, and instructed the engine modules to proceed down canyon where he would return for them. After dropping off the helitack at the river, Mike proceeded up canyon for the two 5 person engine modules. The fire slowed down when it reached grass, giving the modules time to advance down canyon. The chosen pick up spot was also beyond slope limits, but Mike was able to toe in both skids while maintaining clearance from a small tree just outside the right side of the rotor disk. The engine modules were loaded and delivered to the river where the helitack crew was waiting. Notifications were made to the Division that all personnel were off the fire with no injuries. The fire had continued to grow and by the next morning was over 1500 acres and growing.

Mike's awareness of changing conditions and increasing fire activity was critical to understanding the urgent need to get firefighters off the fire, helping him to organize a plan. Because the terrain was unforgiving and there were no ideal landing zones available, Mike had to get creative. His use of a mental risk assessment made him comfortable that he could safely do toe-in landings to extract the 17 firefighters in this urgent situation. His skill and experience as a pilot along with his calm, quick thinking led to the successful and safe execution of an unplanned event. Great job Mike!

# BEING ADAPTABLE AND FLEXIBLE—LEADS TO GOOD DECISION MAKING AND A GOOD OUTCOME

On July 4, 2018, Clint Coates was flying as Helicopter Coordinator (HLCO) and was nearing the end of the helicopter's fuel cycle, when a medical emergency was called into the ICP. The ongoing medical emergency added complexity to the ongoing fire operation necessitating continued aerial supervision support. A fixed wing Air Attack platform was ordered to transition with Clint's helicopter to provide the continued coverage.

Due to the nature of the injury, time of day, and terrain, a short-haul capable aircraft assigned to the fire was called to assist in the medical emergency. After communication with the Clint and the incident personnel, the short-haul helicopter landed and shut down at a designated helispot while crews on the ground cut an emergency helispot for extraction.

Shortly after transitioning with HLCO, the incoming ATGS platform experienced a mechanical issue and had to return to Cedar City. Having heard this, and after the HLCO platform landed at helibase, Clint



CLINT COATES RECEIVING HIS AIRWARD FROM R4
RASM. NIKKI SANDHOFF

quickly jumped into another helicopter and headed back to the incident to coordinate airspace and assist with the medical emergency. Upon returning to the fire, Clint resumed communications as HLCO with the short-haul helicopter. As the emergency helispot was near completion Clint relayed to the short-haul helicopter that he would have the helicopter pilot try to shoot an approach into the new helispot and if they were able to land, he could extract the patient. The HLCO platform landed at the new helispot, loaded the patient, and transported the patient to a waiting ambulance.

Clint is recognized for his willingness to go above and beyond normal duties to help the greater good, for his professionalism during the medical emergency, and for remaining calm while provided clear communication in complex airspace during an emergency. His actions turned the tide in two situations that could have had a less favorable outcome. His exceptional service to the fire community provided a safe and effective helicopter emergency extraction. Great job Clint!

#### SPECIAL RECOGNITION: REGIONAL SAFETY EXCELLENCE AWARD

Although not an Airward, the Central Montana Helicopter Short-haul program deserves a round of applause for receiving a Regional Safety Excellence Award from the Northern Region, Regional Forester for their professionalism and safety accomplishments in the short-haul program.

In 2016 the Helena-Lewis and Clark NF Central Montana Helitack Program was approved to begin development as a short-haul program. Crew members have since trained as short haul responders and EMT's, and passed a rigorous training and certification program both as responders and EMT's. The program was approved for operation in early summer 2017 and deployed throughout the busy 2017 fire season.

On August 9th, 2018, the program successfully completed its' first operational short-haul rescue on the Copper Mountain Fire; which was the second operational Short Haul in the Forest Service. Due to the crew's response, professionalism, and training the patient was delivered to ALS is a timely manner and made a successful recovery.



SPECIAL RECOGNITION AND CONGRATULATIONS GOES OUT TO JAY LINDGREN HELENA-LEWIS & CLARK FAO (NOT PICTURED), AND THE CENTRAL MONTANA SHORT-HAUL HELITACK CREW: PICTURED ABOVE: BACKROW- NICO WIJNGAARDEN (PILOT); FRONT ROW (LEFT TO RIGHT)- JOSH INGLE, BRENDAN MULLEN, RYAN HUDGINS, AUBREE HAFFEY, BETHANY KURTZ, TAYLOR DZIERZAK, RANNON PIERCE, MICHAEL GARCIA, RYAN BROKAW, SCOTT BAGOCIUS, AMBER TROMPLEY, BRIAN BUTLER, CHAD CARLSON (MECHANIC) NOT PICTURED: MIKE RYAN, EVAN HORST (PILOT), PHILLIPPE BAROSO (MECHANIC)

# EXEMPLARY CREW RESOURCE MANAGEMENT DURING AN IN-FLIGHT EMERGENCY

# **SAFECOM #: 18-0646**

On Thursday, July 26, 2018 while flying on the Grassy Ridge Fire, the Air Tactical Aircraft and flight crew experienced an in-flight emergency prompting an immediate landing at Rexburg (RXE) Airport.

The Air Tactical Group Supervisor (ATGS), Mr. Greg Burch, and Pilot, Mr. Scott Beck, started smelling an odor produced from burning wire. Greg immediately turned off the air conditioning (AC) unit, as it had a breaker trip two days earlier. His first thought was that perhaps the AC unit could be the problem. Soon after switching off the AC unit, the door indicator light came on. Scott went to reset the switch and it immediately popped off again. Then his radio and intercom went out.

The decision was made to head to the nearest airport, which was identified as RXE. The Global Positioning System (GPS) then turned off and then came back on. Scott and Greg went through the Electrical Emergency Procedures Check List and set up for a straight in landing to Runway 17, RXE. Greg notified the dispatch center and the Incident Commander (IC) of the emergency situation via radio en route to the airport.

Due to Scott's radio being out, Greg made the radio calls on the Rexburg CTAF/Unicom. Upon landing, additional aircraft items started to fail. The right "Gen Out" light illuminated and a couple circuit breakers popped. Once the plane landed, the gear down warning started to sound.

The aircraft was taxied to parking and Scott went through the shutdown procedures, however the engines would not shut down. Greg held in the door activation switch and Scott reset a couple of the breakers and then the engines shut down. Scott and Greg did a quick survey of the aircraft to ensure there was no smoke or fire. The only thing they noticed was the strong odor of burning wire. With all power turned off, the aircraft was monitored while they made calls to Dispatch, company owner and Chief Mechanic.

The quick, methodical reaction and effective Crew Resource Management (CRM) within the cockpit implemented by Mr. Greg Burch and Mr. Scott Beck led to a successful recovery of the aircraft. Great work by all involved while keeping cool heads in a very stressful situation.



FROM LEFT TO RIGHT: GREG BURCH, ATGS, AND SCOTT BECK, PILOT, RECEIVING AIRWARDS FROM KIRK ROTHWELL, BLM NATIONAL AVIATION SAFETY AND TRAINING ADVISOR

#### SAFE AVIATION ACTIONS DURING AN URGENT SITUATION

On Tuesday, December 5th, 2017, an intense Santa Ana wind event hit Ventura County. Within hours, the Thomas fire consumed over 30,000 acres and spread from Santa Paula to Ventura where it burned hundreds of homes. A number of Channel Island National Park employees who work out on the islands had mainland homes in areas that needed to be evacuated. It was of urgency and importance for park leadership to get all employees back to their families and homes as the Thomas fire evacuations were taking place. The park boats were unable to recover staff from the islands due to high winds and high seas.

A call to Mark Oberman from Channel Islands Aviation was made to see if he could assess the possibility of getting the employees off the islands. Oberman agreed, and made 3 flights to the islands that day to bring park employees back to the mainland. Flying conditions were marginal due to turbulence from the winds and poor visibility from the fires smoke. In fact, Oberman found visibility so bad going outbound on the first flight that he was going to cancel subsequent flights. However, visibility improved sufficiently on the inbound leg.

On the first outbound flight, Oberman stopped to pick up NPS personnel at the west end of Santa Cruz Island. That crew had a heavy load of gear, and Oberman had the judgement and experience to know that it would not be safe to take off from that airstrip with a heavy load in an east wind and declined the flight. After picking up personnel at two other islands, Oberman flew back over the main ranch strip on Santa Cruz and determined that he could safely land there. The personnel who had been left at the west end were directed to drive to the main ranch strip where Oberman safely picked them up on a later flight. The thing that what was exemplary about Oberman's flying that day was that he was continually evaluating the risk. He turned down any risk that he felt would be excessive. Hence, he didn't pick up either the passengers or the gear at the airstrip at the west end of Santa Cruz, but picked them up at the main ranch strip after he had determined conditions were better over there.

The measure of a pilot is not merely in flying skills, but in judgement. December 5<sup>th</sup> will be a day that will be remembered as one of the worst fires to hit Southern California in decades. Mark Oberman demonstrated not just excellent flying skills in dealing with the winds and turbulence, but excellent risk management and aviation safety judgement. He knew the limitations, how to mitigate risk, and had the experience to know how and where he could safely take off and land.

Getting park employees back to their homes and families during the emergency was of crucial importance. Mark Oberman was able to get those employees home and at the same time not be incited to take unnecessary risk due to the urgency of the situation. That level of skill and soundness of judgement are qualities we value in a pilot. Employees of Channel Island National Park are indebted to Mark Oberman and Channel Island Aviation for his safe aviation actions during the Thomas Fire December 5<sup>th</sup>, 2017. Thank you!



FROM LEFT TO RIGHT: MARK OBERMAN, PILOT, RECEIVING HIS AIRWARD FROM IAN WILLIAMS, SAFETY AND OCCUPATIONAL HEALTH SPECIALIST, NPS

# TURNING A CHAOTIC SITUATION INTO A WELL-ORGANIZED OPERATION

# **SAFECOM #: 18-0350**

On May 27<sup>th</sup>, 2018, the Horse Peak fire experienced a major fire event that forced multiple firefighters to evacuate the fire. During the evacuation, a firefighter was separated from her crew and communications could not be established with her.

Concurrent with the missing firefighter situation, there was also a fire vehicle that was trapped by the fire's progress. Along with Air Attack, Lead 28, Rick Gicla was on scene organizing the aircraft response for these incidents (Incidents within an Incident) while also continuing to work air tankers and seats in to slow the fire's progress. Rick did an outstanding job of staying calm and organized throughout the incidents.

Although air attack was making every effort possible to try to contact the missing firefighter and stay in constant communication with ground resources, none were established with the missing firefighter. With visibility low and the situation becoming urgent, Rick's experience and determination allowed him to locate the missing firefighter and direct the helicopter to extract her to safety.

Two helitack crews (Ute Mountain and Durango) were also part of this incident and did an outstanding job of staying flexible to adjust their missions from crew transport, bucket work, to Search and Rescue (SAR) in a safe but timely fashion. The pilot and lead crew for helicopter 8MC scoured the fire during the SAR with help and directions from Lead 28.



FROM LEFT TO RIGHT: DEPUTY REGIONAL FORESTER, JACQUELINE BUCHANAN, PILOT, RICK GICLA, AND REGIONAL FORESTER, BRIAN FEREBEE

The communication of the air resources was very impressive and the efforts of all of the aviation resources working together turned what could have been a disastrous situation into a great lessons learned opportunity. As a result, all firefighters made their way off of the fire safely.

Rick was able to turn a chaotic situation into a well-organized operation. Because of his efforts and skilled action, the operation ran smoothly and all firefighters made their way safely home to their crews that evening. His outstanding tactics and ability to operate under such difficult situations are worthy of a higher recognition.

# FY2017 & FY2016 Airwards – (Not previously published)

### ASSISTANCE IN SEARCH FOR DOWNED CIVILIAN AIRCRAFT

# **SAFECOM #: 17-0877**

On September 2, 2017, a Bell 407HP (helicopter) was doing bucket work on a fire near the Sulfur Creek Airstrip in Idaho, when the pilot was notified by the Central Idaho dispatch of a mission change to search and rescue.

The dispatch center had just received a call from Idaho State Communications requesting assistance in locating a downed civilian fixed wing aircraft that was reported to be approximately 5 miles southeast of Sulfur Creek Airstrip (also the helibase location). The Forest Duty Officer made all proper notifications and determined that the helicopter would be used to look for the downed aircraft.

The helibase was notified and the helicopter returned to helibase to drop off the bucket, and pick up the helicopter manager to aid in the search. After approximately 30 minutes of flying, dispatch was able to pass along the GPS coordinates from the aircraft's ELT (Emergency Locator Transmitter). The downed aircraft was then located approximately ¼ mile from the given coordinates. The helicopter pilot and manager notified dispatch of the updated coordinates and provided relayed that they saw one survivor walking near the crash site.

The helicopter orbited the crash site and then hovered to drop a first-aid kit along with a message stating, "Help is on the way, 1 hour away". Unfortunately, the helicopter was low on fuel and had to depart the area. Dispatch relayed the updated coordinates of the crash site and information about the survivor to Idaho State Communications.

The quick coordination and decision making on the part of dispatch and the helicopter crew, resulted in synchronization of efforts that were essential to a timely rescue. Providing critical information such as the



TODD DONAHUE, PILOT (LEFT), RECEIVING HIS AIRWARD FROM JOHN HARRIS, RASM (R1)



LEFT: RYAN WHITE (DISPATCHER), CHRIS GREENSTEIN (HELICOPTER MGR), MAEGAN MAUGHAN (DISPATCHER), NIKKI SANDHOFF (R4 RASM)

updated search location and coordinates, and confirmation of a survivor to Idaho State Communications in an efficient manner facilitated a successful outcome. Additionally, the delivery of the first aid kit, and note that "help was on the way" prior to the helicopter needing to depart for fuel was undoubtedly reassuring to the survivor. The helicopter pilot was also able to communicate via radio to Two Bear Air Rescue (the rescue helicopter) helping ensure all critical information was received.

As a whole, this event is a great example of how effective Crew Resource Management, from dispatch to the cockpit, supported the helicopter crew's ability to safely execute an unplanned and nonstandard mission, providing lifesaving support to the aviation community at large.

# PROBLEM IDENTIFIED BY HELITACK CAPTAIN'S ATTENTION TO DETAIL

# **SAFECOM #: 17-0763**

On August 12th, 2017, Bureau of Land Management (BLM) - Apple Valley Helicopter 554 was busy assisting the Shasta Trinity National Forest with multiple initial attack fires, supplying firefighters and equipment. After landing in Hayfork to roll up the longline and pick up the crew Helitack Captain Kyle Beinschroth decided to do one last look/walk around of the helicopter prior to departing. He immediately noticed that something was not right with the door on the tail boom of the aircraft. The pilot immediately shut down the aircraft and inspected the problem. It appeared that the skin on the door had delaminated, and, after consulting with the mechanic, it was decided that the door would need to be replaced. Kyle's aversion to complacency, aviator discipline and attention to detail helped identify a problem that had the potential for catastrophic results. Great job Kyle!



KYLE BEINSCHROTH (LEFT), RECEIVING HIS AIRWARD FROM KIRK ROTHWELL, BLM NATIONAL AVIATION SAFETY AND TRAINING ADVISOR

### **GOING THE EXTRA MILE**

Cannon Mix, Aviation Training Specialist with the Office of Aviation Services (OAS) in Boise, Idaho, is recognized for going the extra mile to provide Helicopter Transport of External Cargo training for the USGS in July 2017.

USGS field crews with the Hazards Science Center in Golden, Colorado were in need of A-219 sling load training. Due to communication and travel planning errors, they missed the first day of the bureau instructor led class in California.

The students completed the practical portion of the class on the second day, but could not receive full training and credit. Cannon investigated the situation and, on his own initiative, provided the classroom portion to the Hazards crew via WebEx. At a time of high workload, Cannon worked extra hours at his own expense to see that USGS field crews had the necessary training to safely conduct their mission.

Cannon serves as the OAS Interagency Aviation Training (IAT) lead instructor and training liaison for the USGS and other bureaus. He leads by example and lives by the guiding principles of aviation safety. He inspires students and coworkers at all levels to excel in safe working practices. Thank you Cannon for your outstanding dedication to aviation safety!



CANNON MIX, AVIATION TRAINING SPECIALIST (RIGHT) RECEIVING HIS AIRWARD FROM MARK BATHRICK, DIRECTOR, OAS

### WILLINGNESS TO SHARE EXPERIENCE: BRIAN HEAD INCIDENT

# **SAFECOM #: 17-0406**

The Brian Head fire was being managed by a Type 2 Incident Management Team under the jurisdiction of the State of Utah. Several aircraft were engaged in aerial suppression activities, including helicopters, SEATs and large airtankers, an Air Tactical platform and an Aerial Supervision Module (ASM). The operating area was affected by heavy smoke, high density altitude, strong winds, and congested radio frequencies which challenged the aviation operations.

Pilots of a Neptune P2V, Dave Dickey (PIC) and Travis Rabon (Co-Pilot) entered the Fire Traffic Area (FTA) over the Brian Head Fire and received instructions from the ASM for a retardant drop near a Boy Scout camp.



PHOTO OF FLIGHT CREW, NOT AVAILABLE

The airtanker crew completed their high orbit to get a good view of their run, gathering information including the path, target, exit and obstacles. The ASM relayed the appropriate airspeed, bank angles, and desired retardant line, the airtanker pilots accepted the run and joined the ASM to conduct the drop. While the ASM was on a long base to final, the flashing anti-collision lights of a helicopter appeared at the end of the drop zone and in the vicinity of the chosen exit path. The ASM advised the Airtanker to execute a "go-around", and the airtanker crew complied.

After the go-around, the ASM and airtanker crew re-briefed the mission and the crew was notified by the ASM that the helicopters were moving to a "safe place". On short final the airtanker crew began losing sight of the ASM, but still had the target in sight. The drop was completed, but the exit became obscured with a moderate amount of smoke that lasted about 2 seconds. A right turn was initiated and as the airtanker came out of the smoke, visibility was good enough to see a Type 2 helicopter moving slowly left to right at near the same altitude and about ¼ mile ahead.

To avoid impacting the Type 2 helicopter, the airtanker PIC immediately initiated an evasive left turn with about a 15-25 degree heading change to the left. The peripheral view from the airtanker indicated that the right turn escape was no longer an option and the left was not an option to begin with. The Co-pilot called out "rising terrain!" which was now directly in front of the airtanker, estimated to be approximately 400-500 feet above the airtanker's current altitude and approximately ¼ mile ahead. The PIC applied full take off power, aimed for the lowest point within 10 degrees left or right of the nose, leveled the wings, and smoothly but deliberately pitched up to a point just above the tree line. The airtanker cleared the tree tops by about 20-30 feet.

The quick actions taken by the airtanker crew and the PIC's ability to safely maneuver the aircraft over the trees, saved not only their lives but also the lives of the helicopter crew. These actions speak to the years and collective skill and experience which deserves special recognition.

In addition to the airtanker crew's actions in the air, the PIC stated that he would develop larger safety margins, exit strategies would be redefined, visibility requirements would increase, and he would ensure aircraft separation visually and not just verbally. As an Instructor Pilot, the PIC stated that he would impart the hard lesson they'd learned on their peers, ensuring that as attrition of experience within agency occurs, safe outcomes would continue. The skills, positive attitude, desire to share their experience with their peers and impart their lessons learned throughout the agency are excellent examples of both acts and service in support of aviation safety and accident prevention.

### PILOT PROFESSIONALY HANDLES IN-FLIGHT PROBLEM

# **SAFECOM #: 16-0052**

A Forest Service Beechcraft King air 90, piloted by Christina Colpitts was in cruise at FL210 (21,000 ft.) when she heard a loud pop and saw an instantaneous spider web cracking on the left side of the windshield.

Christina felt small flecks hit her forehead and later noticed a few small flecks resting on the glare shield. She ran the abnormal checklist for a cracked/shattered windshield and called ATC requesting a descent and divert to an airport in VMC conditions that was within 50 nm.

The forward visibility was minimal and she had to look out of a small unblemished spot in the lower left of the windshield, but was able to land safely in Wendover, UT.

Christina demonstrated solid airmanship when confronted by an in-flight emergency and calmly handled the situation. While the cause of the



PHOTO OF THE KING AIR WINDSHIELD, PILOT PHOTO NOT AVAILABLE

shattering is not known, the left panel of the windshield had a documented history of more than three years of slight delamination in the lower right corner. That spot had been periodically inspected, marked, and signed off as acceptable. Within the previous month a pilot had reported that the delamination had spread slightly beyond the markings.

As a result, a qualified maintenance person inspected, re-marked, and signed the windshield panel off as acceptable. After the incident, Christina suggested reviewing and tightening the acceptable parameters for use. Great piloting Christina!





