



Sundance Helicopters, Inc. Corporate Philosophy and Operations Post 2003

On September 20, 2003 a Sundance Helicopter was involved in a fatal accident near Grand Canyon West Airport (GCW), about 80 nautical miles west of Las Vegas, Nevada. The Eurocopter AS-350 BA was being operated on a short shuttle route between the Grand Canyon Airport and a landing site beside the Colorado River. The route from the airport to the river landing site was via a narrow canyon called Descent Canyon. On the pilot's 11th flight through Descent Canon that day, with six passengers on board, the aircraft hit a near vertical wall and was destroyed by the impact and subsequent fire. There were no survivors.

The National Transportation Safety Board (NTSB) conducted an investigation and determined that the probable cause of the accident was "the pilot's disregard for safe flying procedures and misjudgment of the helicopter's proximity to terrain". The report also cited Sundance Helicopters and the Federal Aviation Administration for inadequate surveillance of air tour operations in Descent Canyon.

The management of Sundance at the time believed that we had a strong operations team, proper operating procedures and a good safety program. The findings in the NTSB report, however, exposed shortcomings in all three areas. We committed ourselves to making our company the safest company possible for our passengers and employees while, at the same time, making the company remain a profitable organization.

We immediately set about to address those short comings with the following actions:

1. We replaced our director of operations with an experienced individual recruited from outside the company with experience in Parts 121, 125, and 135.
2. Descent Canyon was closed to helicopter operations and has not been reopened to this date.
3. Sundance's operating procedures were reviewed and significant changes made, largely in conjunction with the route change for GCW shuttle operations. (We had operating procedures in place at that time that would likely have prevented the accident if they had been followed by the pilot)
4. Surveillance was improved dramatically

A passenger survey system was implemented

A surreptitious "ride along" program employing knowledgeable aviators was implemented

A video system was installed on each aircraft and a sampling of the videos reviewed by operations supervisors. Unfortunately the storage devices for the video system are no longer available so we are developing a replacement system for the video system.

Operations supervisors were required to conduct regular surveillance of GCW operations and route compliance.



5. Sundance adopted a "ZERO TOLERANCE" safety policy. That is; any pilot caught operating outside of Sundance policy guidelines is terminated immediately.
6. Sundance's pilot selection process was revised. Background checks and references were given a high priority, and actual selection done by a committee of operations managers and supervisors.
7. A new Training Captain was hired and given the task of rewriting and implementing a new Sundance training syllabus with a strong emphasis on thoroughness and safety. (We feel that Sundance currently has the best pilot training program in the helicopter tour business.)
8. Installing scales to measure the actual weight of passengers rather than using the OpSpecs approved method of using the declared passenger weight plus 10 pounds.
9. Changing the pilot pay structure to de-emphasize making tips to earn a decent living.
10. Absolutely forbidding any type of "thrill flight" and making it well known that any indication of this type of "cowboy" flying would result in immediate termination.
11. Installing a passenger audio system that plays a recorded narration and music for the entire flight (currently 11 languages) to insure the pilot's workload is manageable.

Perhaps the most important thing we did as managers was to take on the daunting task of changing our company's culture which we had to acknowledge, needed changing. All of the above initiatives contributed to this but we had to do more; we had to "live the culture" that we intended to implement every single day. Every management decision had to be consistent with our safety criteria including enforcement of our ZERO TOLERANCE safety policy, without exception. This proved to be a tougher task than initially contemplated. For example, the company's policy has always been to "fly safely within the context of our business". Many of our pilots are perfectly capable of flying outside the bounds of specific operating policies without significant additional risk, but we can't compromise, even when it would be beneficial to allow a qualified pilot to do so. Several crewmembers were let go for not accepting nor wanting to buy in to our "new" culture.

The changes we implemented following the September, 2003 accident made us a much better company and resulted in company growth and a decent profit margin. But we understand that we can't rest on our Laurels and must constantly look for ways to improve. Examples of this are the integration of a satellite based aircraft tracking system that allows us to track each aircraft's position, speed, and altitude in near real time and the implementation of a new safety system that seeks to imagine safety issues before an accident or incident occurs. This is an extension of something we'd been doing for a long time, but the new system formalized the process.

Even though these changes made drastic improvements to our company and the safety culture we desired to have, we eventually realized that we needed outside top leadership to take us to the next level. In August of 2008 Mr. Lawrence (Larry) J. Pietropaulo became the CEO of



with the expectation that our company would become what Ownership had envisioned in all areas.

Larry analyzed the company and within a short period instituted a Quality Assurance Department in Maintenance that directly reports to the CEO, added Quality Control measures, and demanded more quality and accountability in the maintenance arena. He elevated the position of the Safety Manager to Director of Safety and made that a full time position. A complete rewrite of the GOM, creating a GMM, a rewrite of the Flight Training Program, and the creation of a usable SMS were set as priorities by Larry.

It soon became apparent that as the company had grown in size the leadership in Maintenance had not been able to grow with it. Kyle Reynolds was appointed as Director of Maintenance.

We acquired additional hangar space and moved Maintenance into that facility to increase available workspace, have a segregated Parts Department (later enhanced to become a Logistics Department), and made the Quality Assurance Department directly reportable to the CEO.

The Director of Safety designed a Safety Management System that was just not a paperwork exercise. The system was designed to be a useful tool and easily understood. The system thus far has proven to be an invaluable tool. Several areas of company operation heretofore overlooked were identified and control measures introduced. Notably the introduction of a Risk Assessment Matrix has proven highly effective in our operations.

We have grown to our current size of 22 Eurocopters (18 AS350 and 4 EC130B4) in these few short years.

Our current pilot staff of 40 line Captains is a source of pride for us. During the high point of our tour season we employ up to 50 line pilots. Our turnover rate is below the average for operators in our industry and we do not need to advertise for new personnel. Personal recommendations from our current and trusted former pilots give us a quality pool of potential new pilots.

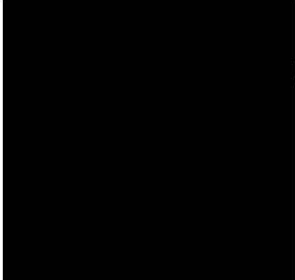
Our yearly flight hours have steadily increased since 2003 except for a burble when the economy took a down turn without sacrificing safety and quality. These flight hours are as follow:

2003	16,365.7
2004	17,881.2
2005	20,069.9
2006	23,362.2
2007	25,810.1
2008	25,623.2
2009	24,957.0



2010 28,029.4
2011 29,826.1 through November

We currently average a total of 53 tour flights and 90 GCW shuttle flights per day during the summer and 35 tour flights and 40 GCW shuttle flights during the winter. Since 1/1/2003 we have carried 618,802 tour passengers and our passenger and flight counts at the GCW facility have increased to as many as 900 passengers and 180 flights using up to 6 helicopters per day.



Sundance Helicopters

