

## **Attachment 4**

**to Organizational Factors Group Chairman's Factual Report**

**CHI04MA182**

**National Transportation Safety Board  
Office of Aviation Safety**

**CHI04MA182**

**Organizational Factors**

November 22, 2004

**Interview Summary: Director of Operations**

Location: Med-Trans Corporation (MTC)  
Tucson, AZ

Interviewers: Georgia Struhsaker NTSB NWRA, Seattle, WA  
Aaron Sauer NTSB CMRA, Denver, CO  
Robert Drake FAA AAI-100, Washington, DC

Interviewee: Mr. Bert Levesque MTC, Director of Operations

During the interview, Mr. Bert Levesque stated the following:

He started work for the Tucson PD in 1973. They had an aviation department, and he was interested in learning to fly. The PD was willing to train from within. It was hard work, as he did not have any aviation background.

He got a ground instructor rating on his own and then a private fixed wing rating on his own in 1984. He flew fixed wing for PD. He was cross-trained in helicopters by Tucson PD in an Enstrom. Southwest Helicopters (SWH) was next door at the airport, and he worked there part time as a ground instructor.

In 87-88 he got his helicopter CFI through the PD. In the early 90s, SWH got an R-22 and opened a little school. H worked full time for the city and part time for SWH. He gave 700 to 800 hours instruction in R-22s with SWH. He became the training pilot for the city in Bell 206Bs. In 93 he was eligible to retire from the PD and went to work full time for SWH. He was flying game and fish, real estate, and fire fighting missions. His wife got her CDL and they traveled around fighting fires.

SWH had two owners. They started an EMS operation. The former Chief Pilot (one of the owners) needed time for this. They needed a Chief Pilot and they talked Bert into it, although he wanted to keep flying. One year later the main owner died, and Bert took his job as DO. The widow took over the company. It was a tough situation. Bert was worried about the safety of company. There were financial problems and maintenance was slipping. He decided to get out in 1995.

The other owner of the company had left and gone to work for Exec Air in Bismarck. This was Tommy Moorehead, who was VP at Exec Air, a fancy title for marketing guy. Tommy asked Bert to talk to Dennis/Exec Air. They wanted to form Med Trans and get a certificate for Med Trans. Bert was hired as a consultant to help get the operating certificate. After the certificate was issued Bert was hired as chief pilot. After 1 ½ years, the guy they had hired as DO did not work out, and they asked Bert if he would do it. This occurred about 1998-1999. The base manager in Minot ND became the chief pilot. After a couple of years, Bert had to take disciplinary action against him. He took the chief pilot job away from him and gave it to Don.

Tommy lived in Tucson. Tommy was going to oversee Med Trans. It was meant to be a separate company in Tucson, but over the years this has been diluted. Now corporate is in Bismarck, and operations are here in Tucson.

He has a little over 7,000 hours total flight time, 1,100 hours fixed wing single engine, and 2,000 hours as an instructor all in helicopters. He has a commercial rotorcraft rating, a private fixed wing rating, and a CFI helicopter rating. He is not helicopter instrument rated. He thinks it is a good idea for him to be helicopter instrument rated. He was in the process of getting a helicopter instrument rating, had taken the written, and was about half way through training, when the first accident happened. His training got derailed by the accident, or he would have had it done by now.

Following the second accident, the Med Trans training program was put on hold. The POI pulled Bert's check airman authorization – saying, "You can't give any check rides."

Last week the FAA reviewed their new training program. They now have a CRM program. The DO and Chief Pilot will be in audit positions. They have two new check airmen - Mike Lemee and Don Rogers. Mike and Don Savage are doing instruction. He is planning to add a third instructor, and eventually he plans to move Don Savage out of instruction into strictly audit. He is trying to "get enough eyes from all directions to make sure we cover everything."

The original plan was that in March 04, they were supposed to make changes. He talked to the POI about making the chief pilot a check airman and adding an instructor. He wanted 2 check airmen and 3 instructors. At the time, he had 1 check airman (himself) and 2 instructors (Don Savage, Mark Gann). The POI was scheduled to meet Bert in Kentucky and go with Bert to all programs in the southeastern US. He was also to give Don a ride to get him authorized as a check airman. They had grown so fast, it was not very manageable by Bert anymore.

Since the accidents, the training program has been changed. They have added instrument stuff, and the check airmen do have instrument ratings.

When he first started he was instructor and check airman, he was checking himself. He told Dennis, "I'm going to dig myself a hole and not even know I'm in it." He went to Dennis and said I want to have a separate instructor. This increased cost because now two people were traveling as they do all their training at the new base.

He is concerned now, as he does not want Mike Lemee to instruct someone and then give him a checkride.

For example, regarding teaching FADEC failure procedures, at one time, the instructor in TN was training one thing and the instructor in CA was training a slightly different thing. Having a different check airman vs. having the instructor as the check airman, allowed them to catch this and learn from it.

Bert has been responsible for hiring. Don is now participating with Bert. It is getting tough to find pilots. They look at 100 resumes and throw away 50, then cut it in half again. They select interviewees by a phone interview, then meet and interview them in the city they are going to work in. The hiring is done 6 to 8 weeks before opening of a base. Both Don and Bert interview the candidates.

*Do you fly with interviewees?* It depends on flight experience. If they have a guy with minimum night time, they will fly him at night and do partial panel, inadvertent IMC at night. If they have a guy just out of the military, with most of his time in Blackhawks, they want to make sure the guy is comfortable in a light helicopter. If a guy has been flying for a competitor, they probably will not fly with him.

*What pilot qualifications do you require?* They require 2,000 hours helicopter time, 500 hours turbine, 400 hours night. There are exceptions, for example a military guy flying scout helicopters with 1,800 hours helicopter time, 300 hours night, but almost all unaided, would be considered. For C Springs, they are requiring 4,000 hours. Someone with 800 hours night but who has never been out of Florida would be no good to them, because he has no mountain experience. They would rather have someone from the area. He thought this was good practice, but Mickey Price, the pilot in the Odessa accident, was from the area. They are looking for commercial, instrument rated helicopter pilots.

A big problem the helicopter industry is suffering from is that when a helicopter pilot starts he is single pilot right off the bat and has no chance to learn from experience. When a fixed wing pilot starts, you pull him in and put him in the right seat, and he gains experience. Med Trans has no requirement for previous EMS experience. He feels a lot of EMS experience is a detriment rather than a help. A pilot works 3,500-3,600 hours a year and flies about 150 hours of that. The rest of time he is a clerk, a TV watcher, everything but a pilot. On average their pilots have about 4,000 hours. He feels they get comfortable, their flying becomes automatic, and they are not paying that much attention. EMS helicopter flying is a fairly easy job as helicopter flying jobs go. Just because a guy has a lot of EMS time, that doesn't mean much to him. He would rather have a new guy,

and he would like to rotate guys through EMS to flying utility in order to combat the problem of not paying attention.

During growth of the business, he was concerned it was going to get way from him, and he ran around to the bases in order to be comfortable to sleep at night. At 3 am, Bert will not be there, the pilot will be making the decision.

One operator wanted it to be put in the duty log when a pilot turned down a mission because of weather. The base manger called Bert, and Bert said no way, I don't want these guys to have to justify weather decisions. Dennis backed him up. It made the customer mad, but that is the way it is.

They check references with previous employers.

When rapid growth started, Bert believed in training people in area they would fly in, in aircraft they would fly in, so Bert would go to the base and give check rides. As part of opening a new base, they look at the marketing area, and go to all the facilities they will be landing at. It takes about a week to go through training, ground, day, night, after that Bert would show up and do the check rides.

Before the accidents, during initial training, his concern was that the pilot had training to recover from inadvertent IMC. This training could be done by anyone; it did not require an IFR rating.

*What schools has he been to?* He has not taken an official mountain flying course. He has been at the Bell school six times. Bell has come to them also. He has been to Astar, Twin Star, and Robinson school. He does not go to HAI or AMTC. He has told Dennis that he would like to send base managers through some of the HAI courses.

The bases in Kentucky were a headache for Bert. They were set up with a middleman. The middleman thought he could run the helicopters the way that he wanted to. They were trying to "operate our aircraft for them." The writing down weather on duty logs incident was in KY. Their marketing was to make more money. They were not aviation oriented, and Bert did not feel safe. There was pressure on the pilots; they were saying things to the pilots like "that kid is going to die." Aviation people should not be telling medical people what to do and vice versa. The guy there thought he knew about aviation and that was the problem. "I'm glad we are out of there."

In McCook Nebraska, there were no operations problems; the business deal was not working.

Bert has no role in determining where bases will be established.

He has concerns about C Springs. It is a completely different environment for the company. It is in mountains. About 2 weeks ago, Don went to a mountain-flying course

in California. The purpose was to get experience fresh in his mind. They added a new requirement for hiring, 500 hours flying into mountains, not around them.

They have made changes to the training program. Previously they did basic training to see if people had the basic skills for their rating. Now it is much more in depth. Also, they have added an instrument approach in the local area to the 120-day recurrent training. They have increased documentation of training and checking done.

The state of TN requires IFR training for EMS operators. Every 6 months Med Trans reports how much IFR training they have given.

Regarding inadvertent IMC training, the new training manual and new ops manual are much more inclusive. Previously, inadvertent IMC policies existed at the bases and training was done, but it was not in the training manual.

They were in process of rewriting both manuals for a year before both accidents. It was "just a matter of getting it done."

*What was inadvertent IMC procedure at Odessa at time of accident?* Maintain level attitude, climb, and call somebody. It was not as specific as now where procedure gives sector altitudes to use. Bert taught pilots to stay on instruments once they are on instruments, don't look at something on the ground and immediately fly to it.

Bert has never had a report of an inadvertent IMC encounter from a pilot (as required in GOM). In past, Bert was not questioning medical crews on base visits. He was talking to pilots only.

At some bases, medical crews are very involved. In TN, they are real involved in flights. Missions are short, but there are a lot of them. The crew is ready to go all the time. Director of medical people is very much involved. Dispatch is run by the hospital. Dispatchers are hospital employees. Med Trans trains them. At other places, the medical crew is more like "okay James take me there." For example in California, the helicopter strictly works for one hospital. They don't take 911 calls. It is neo-natal only, mainly transporting high-risk pregnancy mothers, and the medical people have a "take me there-take me back" attitude.

After the two accidents, one of his pilots called and said the medical crew talked to him about another pilot who worked at the base. The pilot had flown to a scene call, and medical crew felt the pilot did not orbit enough times. He did not communicate with the medical crew about his intentions. This pilot is old school and had the attitude, I'm the pilot, and you are the crew. The crewmember wanted an opportunity to interact with the pilot. The pilot did not do anything unsafe, but this was not the way the company wants to run its business. Med Trans believes the medical crew should be in the loop and should have an opportunity to the cancel mission and say I want to go home. Bert counseled the pilot, and the pilot changed his attitude. In a week, Bert talked to crew and found they were satisfied.

Bert has not been to the new CRM class yet. After the accidents, he started hearing a lot of stories, one time this, one time that. It created a feeling of uneasiness, that something is not right. It dawned on Bert that when he went to the bases, he did not get to talk to the medical crew, he just did not have time for that. He felt lack of CRM training was a big hole that we can take care of, right here, right now.

Bert had two things he wanted done after accidents. One was starting CRM training and the other was having an outside safety audit. The audit should answer the question: what are we not seeing? He had experience with the Tucson PD in having an audit of their aviation program. The auditor told them some things they knew, but they learned some things as well.

Bert is trying to identify where to have an impact in safety. Because it comes down to decision-making, it is kind of hard to figure out how to help. What are we lacking? Communications, establishing a way to talk to everybody else that watches our pilots, would this help?

Now on Bert's base visits, he will be spending most of his time on the ground talking to people, to see if he picks up on anything. On average, he visits each base twice a year. The numbers of visits will not change, but what he does will change. He will go for quality of visits, not quantity. When the company was growing, a lot of the work done was reacting to growth. He will now be running around as before, but with a plan rather than helter skelter.

*Has he considered using a risk management matrix?* "You can't tell a fireman to do that." EMS needs a different approach. Med Trans tries to pre-plan each place they are going to go to. They go many, many times a month to the same place, and the hazards are pre-identified. The whole idea of assessing the risk is to look at the mission and trim things down to have a safe path to get to the destination. Med Trans tries to do risk assessment ahead of time. For example, the pilot calculates weight and balance ahead of time. The pilot checks the weather several times during his shift. Med Trans crews go around to train and work with local law enforcement on LZ set up.

Keeping the pilots IFR current was considered, but they decided not to do it. The company thought they could get more out of spending time on doing more inadvertent IMC recoveries. In EMS ops, the pilot is taking off thinking he is going to maintain VFR; when he encounters IMC, if he executes the IMC recovery properly he will likely return to VFR and not need to shoot an approach.

At the beginning of his shift, the pilot checks weather. If it is going to be clear all day long, he calls dispatch and tells them it is green. The dispatcher knows they can take a mission. Yellow means there is some weather in the area, they may be able to go to the north, but not south or maybe the weather is changing during day. In this case, dispatch needs to call the pilot before accepting a mission. Red means the weather is bad, they are

not going at all, and dispatch should not call. If the weather code is yellow, the pilot will check the weather every hour or so.

*What is Med Trans radar altimeter procedure?* They have a new policy about radar altimeters. Before the crash in Odessa, the radar altimeters were set at zero. Bert got to asking and pilots were turning the radar altimeter off because it was going off when they landed at pads. They didn't like that; they were saying, "When I'm on final, I don't want a false emergency warning." Warnings panic people. He has changed to instructor initiating autorotations by rolling throttle off, this way you get a low rotor horn. Many pilots react to that in a screwy way, doing this gets them used to hearing horn and reacting properly to it. Previously when giving a check ride, Bert would ask the pilot how he set the radar altimeter; he wanted to see what they were thinking. In a Bell 407, the flare in autorotation starts at 75 feet. If you have the radar altimeter set to 100 feet and you hear the radar altimeter horn go off, it is time to flare. Pilots can set it higher than 100 feet, but not lower.

They have gone to a base checklist, and radar altimeter use is part of this checklist. This has been added to enhance standardization. Different people are now doing base checks so it is more important to have a list to make sure everything is checked.

*What is his opinion about NVGs?* The company has been talking about this for a couple of years. They are part of the answer, but not the answer. A lot of times they will enhance things. The POI thinks that if you give a pilot NVGs, he is likely to get deeper into a situation and be worse off than he would have been otherwise. Bert thinks they will help enhance safety. A pilot can make a bad decision with or w/o goggles on. At a couple of the programs that are in real dark places at night (like the rolling hills of TN), he has told pilots that if you turn down a mission due to dark conditions log it. He is hoping to justify the cost of NVGs by this. He would like one set of goggles for the pilot to use en route. He would not use them for landing/departing a scene, because medical crew would not have them. It still takes a long time to get through certification with the FAA. He thinks Med Trans will end up with them, but it will take a while longer.

On the duty log, pilots log flights that are turned down for weather. In 9 years, Bert has questioned one pilot who turned a mission down for weather. The only reason was the pilot did not get out of bed to recheck the weather. The weather was bad. His decision was good, but his method of making it was bad.

After the accidents, a lot of people called with suggestions, saying we should do this, we should do that. He thinks they are still confronted with a problem of decision-making. In a way, Bert thinks EMS flying is too easy; scene calls are the only excitement a pilot gets. A firefighting pilot is paying attention all the time, because he doesn't want to get his bucket in the trees.



A couple of weeks ago in Fresno, Med Trans was called and they declined the mission. The pilot turned it down, the dispatcher called someone else, and that operator took the mission, barely squeezed in and got stuck on the pad for an hour and a half.

Bert thinks helicopter pilots are likely to go when they should not. Bert felt he needed to visit the bases and know the pilots face to face to make sure they got his philosophy. The hard part is to make pilots not go fly. The problem is flying when you are not supposed to.

In April, Bert had a face to face with Bob Giard. He told Bob that the most likely thing to cause him to be involved in an accident was making a bad decision. He thought Bob was a good pilot. If you had talked to Bob Girard before takeoff, and told him, you have a highway to takeoff over or you can takeoff over trees, what are you going to do? Bob would have chosen the highway, but at the time, he was not thinking. Bob was known for turning down flights.

At one time, he wanted to have a training aircraft at each base and a utility aircraft at each base. The idea was to expose the pilots to different types of piloting. This would keep the pilots focused on flying. The pilots would cycle through different types of experience and this would make them pay attention.

*Does Med Trans have a policy for notification between operators about turn down of a flight due to weather?* In Tucson, there are two operators within 5 miles of each other, and the pilots talk to one another; they notify each other if one turns down a flight due to weather. In Greenville, the situation is different. If you are south or north of the lake, the weather can be different. Med Trans in Greenville was already red, so the Greenville pilot's dispatch never called him. The other two operators who declined the mission were on the south side of lake, both within a few blocks of each other, and the weather there was bad. The weather on the north side of lake can be very different. Med Trans Spartanburg is on north side of lake.

His biggest problem with the rapid expansion of bases in 2003/2004 was to have the infrastructure keep up with the growth. In middle of this, Don Savage finally became Chief Pilot. He wanted to have more instructors and check airmen, but he did not have time to make that happen. He and Don had to maintain a personal touch.

He called Don before the accidents and said that what really scared him was that if somebody goofs up in judgment we are going to have an accident. He feared everyone would get caught up in the growth and things going well, and people would start not paying attention. In response, Don wrote a memo in November 2003 telling everyone to keep their eye on the ball.

There was an extra effort by Bert and Don running all over the country to try and maintain the same standard of safety with 12 programs as they had with 6. They were compensating for the lack of infrastructure. "If we had not busted our tails and put in the personal time," he would say that the expansion did contribute to the accidents. He feels

the extra effort was meant to maintain safety; however, this effort was not rewarded. Bert repeated that he had personally visited with Bob Giard a few months previous to the accident.