



Leaving a small, seemingly insignificant, clamp off of a fuel injector line resulted in a crash that took four lives and severely injured three others. (See #46 DOM, October 2019 article) The accident also resulted in the company's loss of their Operating Certificate (OC) effectively shutting down the company.

The AME responsible for leaving the clamp off never touched a wrench to an aircraft again but left the town to work at a lawnmower repair shop hundreds of miles away. It is likely that the regulatory body suspended his license but I suspect that would have mattered little to him.

When interviewed he was what we called a "Dead Man Walking". He had that all too familiar haunted look in his eyes as the full realization of the small error he had made had resulted in the deaths of four people he knew. Today we would call that look PTSD but back then, having seen it too many times in the past I knew there was a high likelihood that he would be dead within two

years and that those two years would be painful for him as he subconsciously punished himself for what he had done. No human punishment could come near to what he was to endure. He likely would turn to alcohol or a drug to try to find relief but every morning on waking up, his first thought would be: "I killed four people because of my carelessness." One person described it as an 8 track in his head. For those who don't know what an 8 track is, it was a music tape player, popular in the 70s, before cassettes took over, that would play the same music endlessly until the tape broke. He could never get it out of his head. For many, without professional help, the only way to stop that tape is suicide. All too many will put the alcohol bottle to their head and pull the trigger. Looking at the small clamp accident, there were many contributing factors that I call the Dirty Dozen that contributed to him making the error.

They are what I see as the following:

Fatigue has to be number one as he worked very long hours and did not have any days off for months. This would result in chronic fatigue with many negative consequences: the big one being the gradual development of a "Don't Care" attitude. In my opinion, fatigue makes it easier for the other Dirty Dozen to occur. You need that break and the realization of just what fatigue can do to you. He had neither.

Pressure played a role as he was the only one who could keep the aircraft airworthy and flying. He took this responsibility very seriously and this self pressure would be heavily influencing his decision making.

Lack of Resources. With parts being available only on a cash basis, the lack of a small clamp played a key role in the accident. Had that resource been available the accident would not have happened.

Lack of Resources – manpower. There was a desperate need for a second licensed AME to share the workload.

Lack of Assertiveness – As DOM he had the responsibility to insist on more manpower and parts. Money was being diverted to build a second lodge that should have been used

to acquire needed parts as well as relief help. By failing to do that his lack of assertiveness contributed to the accident.

Complacency – he had done this type of work many times before and failed to realize the danger of doing what he was in the habit of doing. He failed to see the missing clamps on his run up inspection, but saw what he expected to see. He only realized it when he saw one of the missing clamps in his toolbox.

These are not making excuses for the person but to help us understand how this could happen possibly even to us given the same circumstances.

Human factors training could have given him the knowledge on how to avoid that deadly error he never intended to make.

He would be the fifth victim in the tragic accident due to Post Traumatic Stress Syndrome, better known today as PTSD. In my years as an accident investigator I saw it many times after a fatal accident. Sometimes the person may not have even been in any way responsible for the accident such as a dispatcher with tears running down her face and that haunted look who told me: “If only I hadn’t dispatched them this morning, they would still be alive.” That is not true because if she hadn’t, someone else would have and it had nothing to do with the accident. We were trained to not get emotionally entangled with any of the persons you came in contact with and were discouraged from doing any follow up after the report was released but I would hope that she and others were provided some support to understand what was happening to them. I believe that today they would.

I recall a brush with PTSD back in my New Guinea days when I went to the scene of a fatal accident that had taken the lives of seven people. Go to our website at www.system-safety.com click on “Safety Videos” and read the storyline of “The Price of a Mistake.” I was one of the first to arrive driving overland with a truck load of “boys” (natives) to help contain the fire from the burning aircraft. One of the crash victims was a baby boy who had been thrown clear in the crash and was lying in the grass. He was very dead with broken twisted limbs and bloody lacerations on his body. But he was about the same age as my son and I clearly see his body as I write this and will until the day I die. I remember that I did not want to talk about it with anyone, not even my wife. My thoughts were I could have just as easily have made that mistake. I seriously considered getting out of aviation at that time but was able to tell myself that the memory of that child will serve to remind me never to make a mistake. I was able to use his memory to guide me through life and hopefully be a better person for the experience.

People with PTSD will have experienced something dramatic in their life that they were not prepared for. They will live with that experience for the rest of their life, but they can learn to deal with it and accept that there is nothing they can do to change it. If they can be able to take the experience and use it to make them a better person the 8 track can be made to stop for ever longer periods of time.

Go to Utube and type in “Wrong Side Of Heaven” by the band Five Finger Death Punch and you will see some statistics from the veterans who have experienced the horrors of war. Way more have died from PTSD and are still dying at the rate of about one an hour than died in the war.

But you don’t have to experience war to get PTSD and it doesn’t have to end in suicide. I just finished reading the story of the Qantas pilot of an A330 that as he put it: “the computers went berserk.” The aircraft suddenly went into a violent dive throwing anyone

not strapped in into the ceiling breaking through and on coming out leaving hair and scalp behind. The pilots became “ineffective observers” and the computers had complete control. This scenario was repeated several time but they managed to land it between episodes at a small airport. As he walked through the aircraft, the scene of blood and injured crew and passengers was imprinted in his mind. He received professional help but he described the stages of his PTSD as follows: 1) mood swings, 2) Irritability, 3) Crying spells, 4) Early morning waking 2am-3am, 5) Appetite disturbance, 6) No motivation, 7) Poor concentration/memory, 8) Low libido, 9) Anxiety, 10) Self harm. When he reached the self harm thoughts he realized that PTSD doesn't just go away and gave up the thought of flying again. He felt that by leaving that behind he hoped to be able to move forward. I pray that he can and does.

Somehow the person has to talk about it and if it is to you: just be a good listener. The person will have to deal with it in their own way but they must feel valued and have a reason to live. I've always felt that, for some, a puppy that will depend on him/her to survive and in turn give him/her unconditional love can make the difference.

There's a few in the past that I wish I could have given a puppy to.

No matter what caused the PTSD, professional help has to be at the top of the list to assist the person to deal with it. Understanding from you that the person has a demon that he just can't seem to shake can help. This has been a bit difficult to write as I'm not a psychologist and certainly don't have all the answers. We humans will make errors in our lives and we will have to deal with them in our own way perhaps with a little help from our friends. Try to be that friend.