We humans are responsible for over 80% of aviation accidents but it is never our intention to make that error.

There are actually many things that influence our decision making that we know little or nothing about. Some of these things are the **cultures** that we live and work in. A culture is simply the beliefs and values of a group of people. We are going to look at four of the main cultures in order to recognize them and understand how they can affect our faulty decision making that results in a human error.

National Culture – This is the culture that you are usually born into and grow up in. This culture has developed over many centuries and is usually accepted without question by those born into it. All aspects of it are considered right by those who are part of it. For example; in the New Guinea mission I was in, the tribe that surrounded us believed that when a member of the family died their spirit would help protect those still living. Thus they would place the deceased (let's say it is grandma) out on a high platform just out of smelling range of the village where she would be picked clean to the bone in a short period of time. Her bones would then be gathered up and placed in a place of honour in the hut they lived in. As one might guess, the house would in time get rather crowded with the dead relatives. Thus the culture called for when someone became sick and died, the oldest pile of bones would be blamed and discarded which made room for the incoming bones.
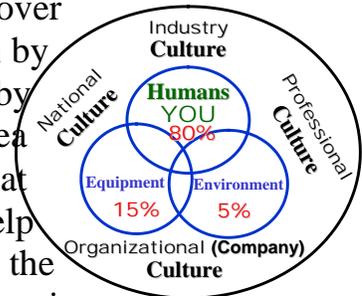
It took a culture change to convince them to bury grandma. The national culture very often has a religious aspect to it as did the above example

The national culture can be said to be made up of many subcultures.

Canada has a hockey culture and parents willingly get up at 0400 to take their children to hockey practice. The USA tends to have a gun culture with the right to own a gun written in their constitution. A few statistics regarding people killed by handguns (not sure what year they are): Britain – 8, Sweden – 21, Switzerland – 34, Germany – 42, Japan – 48, Canada – 52, Israel – 58. USA – 10,728. If you include all guns the number then raises to 29,569. Brazil tops the list at over 36,000 per year. Interesting enough, doctors are estimated to kill about 120,000 while commercial airlines only

216 in 2016. You are much less likely to die of a human error in an airplane than you are in a hospital.

Your national culture is slow to change, influences many of your decisions and is not always for the better.

Another culture that plays a role in many decisions and accidents is the **Industry Culture**. This culture is developed over time by the industry leaders and is influenced by the national culture. The military experience of its leaders also influenced it to pattern itself after many military regulations. For example: Since WW1 pilots were automatically officers while maintenance personnel were enlisted persons of a lower rank.   That perception is still alive today. The aviation industry culture was also known for its punitive culture. I've lived the era when if you made a error you were "down the road". Giselle Richardson, as the keynote speaker at a conference spelled it out when she said: *"only the Mafia with their cement boots have a harsher discipline policy."*   Just culture (see the March 2015 article or #4 under articles on our web page) thanks to the implementation of SMS is changing for the better. With the changes in this culture has come ever higher levels of Safety. We have come a long way from the days when the occasional fatality was considered, "just the price of doing business in aviation."

The **Professional Culture** is almost like "the old boy's club" and is heavily influenced by your peers. A common unwritten rule in this culture is "you do not rat on your fellow employees." I recall one of our crew came to work drunk after attending a wedding. We rolled him into the hold of a DC8 and took turns doing and signing for his work. It was just something you did for your profession. Professional culture contributed to the deaths of 24 people when a Captain deadheading on a commuter aircraft, saw snow accumulating on the aircraft wings and said nothing. He survived the crash and when asked why he didn't communicate his concerns to the flight crew, his response was "professional courtesy". Many a person has observed a person breaking the rules and said nothing in part because of professional courtesy. Lack of assertiveness (April 2015 or #5 under website articles) details many accidents due to people seeing but not speaking up and doing what they know they should do.

The most influential of the cultures for error is Organizational or **Company Culture**. Company culture can not be seen or accurately measured but you soon learn and know it when you work in it. It is heavily influenced by the management
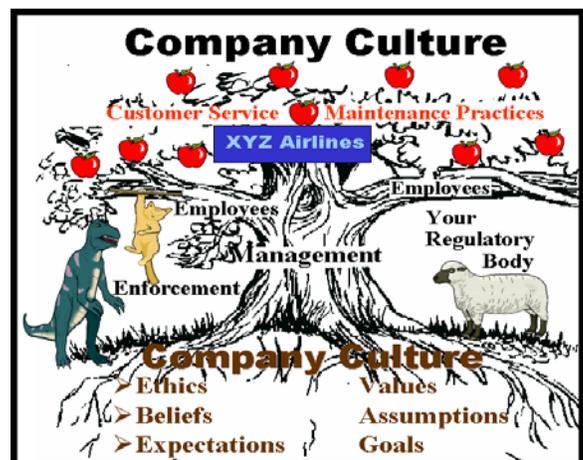
and can change quite quickly with a change in management. Company culture is simply the way management is <u>perceived</u> to want things done.

The company Culture is like a tree with the underground roots being the culture that can not be seen but from where the tree (company)gets its nourishment (direction and guidance). The trunk of the tree is management whose job it is to transfer this guidance and <u>support</u> the productive employees who are the branches and leaves that produce the fruit. (product that makes the profit) Circling the tree are the regulatory body and enforcement ever on the watch for "non-conformity".

When an error was made in the past, the guilty branch was "hung out to dry" and pruned from the tree to correct the problem.

In all too many accidents when an investigation moves past the "guilty party" in order to determine the <u>root</u> cause, it leads directly to the company culture and management. This should come as no surprise and is the main reason why the Safety Management System calls for an "accountable executive". This is the person who controls the money, has the largest influence on the company culture and is now responsible to put a system in place so that he is aware of the Safety hazards within the organization. No longer can that person (as they so often did in the past) say that they didn't know as they now have the responsibility to know.

When doing a Safety review of a company, one of the first things we look at is the company Mission Statement. We look to see if Safety is in it. This simple statement should:

tell the <u>outside</u> world who you are, what you do and (ideally) how you intend to do it;

tell the <u>inside</u> world what their organization does and (ideally) how they should be doing it.

What does this actual Mission statement tell the employee?

"To provide our customers with airworthy aircraft in a timely manner at the most economical price"

"in a timely manner" suggests that I should take whatever shortcuts I need to in order to get it out on time

"most economical price" suggests that I should not replace any worn parts unless absolutely necessary.

As long as it is airworthy when it rolls out the door we have fulfilled the mission. Would you believe, they were having a high number of comebacks with unhappy customers. Safety was not in their mission statement. Is it in yours?

A Safety policy is one of the requirements in an SMS. If done right and the management actually "walk the talk," it will go a long way to reduce errors to ALARP (As Low As reasonably Practical). The attached Safety Policy is the best I've ever seen and I hope you can see that **S**afety has a capital S as it should.

I hope that with a magnifying glass, you can read what it says. Dan, who gave us permission to use this, would take his clients to this policy and have them read it while informing them that they have a role to play in the company Safety. One day a pilot was distracted and left a baggage door unlatched. The client, possibly in light of this policy, informed him of the error.

You are part of the company culture and must use what influence you have to guide it toward a true Safety culture (Jan, Feb, Mar. 2016 or #11 &12 on the web).

The 12 (of course) attributes of a positive company culture are: **1. Purpose** – should be in the Mission statement; **2. Respect** – for all no matter what their job; **3. Trust** – this usually comes with respect; **4. Responsibility** – is given and goes with #2; **5. Accountability** - is accepted and goes with #4; **6. Integrity** – they walk the talk; **7. Engagement** – all can work as part of a team; **8. Comradely** – everyone gets along; **9. Communication** – a vital part of any successful group; **10. Fairness** – everyone is treated fairly; **11. Opportunities** – most employees want to get ahead with effort; **12. Goals** – goals are set and all work towards them. If your company has all of these you either own the company or are a lucky person