

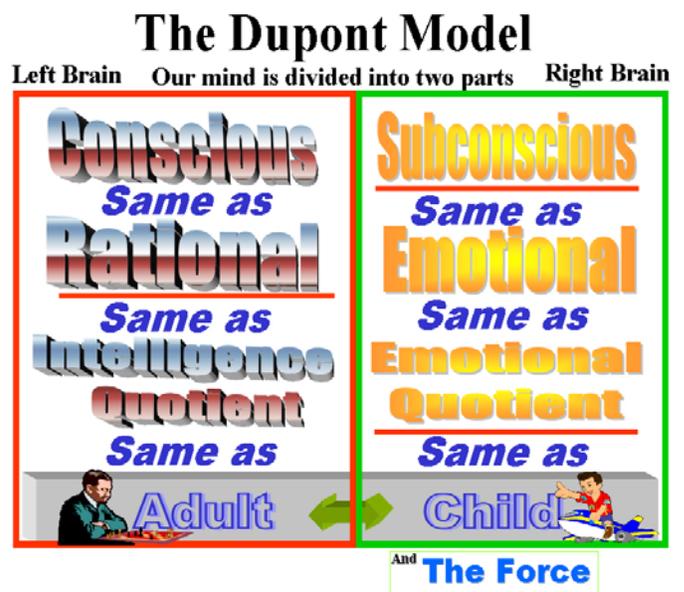
As we enter into the year 2019, I realize that this will be my fifth year of writing about human error and how to avoid making one. I would like to take the first two issues of the year to introduce you to a model that we use in our training that many have said has changed their lives.

Have you ever wondered why do we make errors when we know better? One thing I believe that we can all agree on is we never intend to make that error. At least I don't and if you do it is not an error but deliberate sabotage. Thus I'd like to introduce you to a model that I developed to help explain why we all make errors and with that understanding perhaps we can lessen the number of errors that we make. Before you dismiss this model as "psychobabble" please read it through and sleep on it before writing to say that it was pure "bull pucky." It is a simple model taken from a complex model that for thousands of AME/AMTs has enabled them to understand why they make errors or flawed decisions not only at work but in their day to day lives.

A model can be an analogy to help us understand something that cannot be directly observed. This model that we'll call the Dupont model can not be directly observed but, as we will see, it influences all of our decision making. It is a simplified version of the Transactional Analysis model that my departed friend Giselle Richardson used to assist people and companies to reduce human error. I am not a psychologist and we don't have a week so let's look at the simple version.

The Dupont model states that our mind is divided into two parts and we actually do have a left brain and a right brain that function differently. Most are aware that we have a Conscious mind and a Subconscious mind.

The model further states that the mind is divided into a rational or logical mind and an emotional mind when we make decisions. We equate the rational mind as the Adult and the emotional mind as the Child. For the



sake of our model the Conscious, Rational or Adult are the same while the Subconscious, Emotional, Child are the same. The subconscious has many names and Daniel Goleman labeled it Emotional Intelligence while Star Wars simply called it “the Force.” What ever we choose to call our subconscious, when we make a decision both the Adult and the Child are part of that decision making. The Adult mind will base its decisions of rational logic and learned actions it can remember. We are aware of what the Adult mind is thinking but usually not the Child’s. The Child on the other hand bases its decisions on emotions or feelings and not logical thinking. Let’s start simple. Our lives are full of events, some large but most small. The event right now is you, and hopefully many others are reading this article. Some of you may be thinking: what a load of crap and move on to the next article. Others reading may be thinking, this is a bit strange but I’ll read on to see where it’s going. Finally there is a third group reading the same article that are thinking now this looks interesting and I might learn something if I continue reading. Same article but three different outcomes. How is this decision made? Both the Adult (conscious mind) and the Child (subconscious) are part of the decision making. Whoever has the greatest input can determine the decision. Say the Child is in a very bad mood. The mood could be the emotion of anger or frustration or any number of other negative emotions. The decision could be very different from when it is in a good mood. (happy, joyous, etc)

How does the Child develop? When we are first born we are strictly an emotional being. We cry to get fed or have a diaper change and we go back to sleep. However it is not too long before the child thinks; “if I cry I think I can get attention even though I’m not hungry or uncomfortable.” That is the beginning of the rational/adult mind that begins to have an ever greater part of our decision making as we learn from life experiences. The Child is learning also as it tries to make sense of the adult world. Psychologist’s call this learning “Early Life Decisions” or ELDs. (refer back to Oct. 2018 Attitude for more information on ELDs) We all have these and have no recollection of them being made but they influence our adult decision making. Most of these ELDs are made between the age of one and three years old. For example: I swallowed a mouthful of pepper as a child and had no idea why I couldn’t eat anything with pepper in it as an adult until my father told me of the incident. Today I can eat and enjoy a pepper steak but will never put pepper on my food unless you pay me a lot of money. I just don’t feel comfortable doing it.

We all have ELDs that are based on emotion and influence how we make decisions as an adult.

As an adult the Adult mind that we are aware of, is making the decision but the Emotional/Child still has its input into that decision and occasionally can strongly influence the decision in a way you later regret.

Road rage is a classic example of the Child making an emotional (anger/rage) decision that has had fatal consequences over a trivial incident.

Most of us have had instances where something just won't fit the way it is suppose to so the Child takes a bigger hammer or wrench to the object and now the difficult object is destroyed. I will admit that, for a few seconds, there you feel that you won until the Adult mind regains control and you realize that now you have a lot more work to do to fix what you damaged.

If someone was to ask you who do you want working on your airplane the answer would likely be "the Adult of course." However we need both to do the best job possible as the Child in our model also controls many other attributes. Besides emotions and feelings, the Child also controls **ingenuity**; that ability to think outside the box. This is what makes some of us better trouble shooters than others. Maintenance personnel tend to have a higher than average degree of this very useful trait. You know you have it when your grandkids bring all their broken toys for you to fix. The Child also controls ones **imagination**. Young children have great imaginations that once an adult has resulted in many advances in aviation. It ties in with ingenuity when you put the imagination into action. **Artistic** ability is controlled by the Child. No matter how much schooling I received I could never be able to draw the cartoons we use. **Creativity**, controlled by the Child, is like the artistic ability that varies greatly between persons. We maintenance tend to be quite creative. The Child controls our **conscience** which develops from our ELDs. It is a large part of the right or wrong ELD upbringing that will be making the decision. **Inspiration** is controlled by the Child. We have all heard stories of someone doing the impossible such as a mother lifting one end of a car so her child can be rescued. The Child does not know the meaning of can't but the Adult sure does. At that moment of inspiration the person will be in a highly emotional state and can perform an act that can not be repeated with the Adult in control. **Intuition**, sometimes called sixth sense but, more often called gut feeling, is the Child trying to warn the Adult about something. We have all experienced that "bad feeling" about something and often that feeling is right. I remember doing an engine change late at night and on going home I got that "bad or gut feeling." Did I install an O ring in the McCauley propeller before installing it back on the IO-520 engine? The Adult mind said not to worry as it would have leaked oil on the run-up. But the Child conscience would not let up because this engine was on a single engine Cessna 206 that in a

few hours would be flying over the jungle. I got up, went back and removed the prop. The old, slightly flatten O ring was there so I installed a new one as required, did a second run-up and finally home to bed. Never let the Adult talk you out of checking any gut-feeling you get as they may not always be right but you don't know for sure until you check. Finally the Child controls our **Habits**. The first time we do something, say such as assembling an IKEA piece of furniture; if you are like me, you might skim through the instructions and have a go at it. An hour later after having to back up and redo a few steps it is complete. The second one will be quicker and by time the 5th one is done you can do them practically with your eyes closed. As you complete each one the Child is learning a habit and after awhile you can assemble the object without even thinking; with the Adult mind that is. For more on habit refer back to article 15 in June 2016 on complacency.

In the next issue we will look at how the Child interacts with each of the Dirty Dozen and what we can do to lessen the sometimes negative influence of the child.

We will be doing a workshop entitled "Introduction to the Dirty Dozen Contributing Factors" at the Helicopter Association International's Heli-expo in Atlanta, Georgia on March 3. If you have any spare funds in your training budget I hope you'll consider joining us. See link below.

<https://www.rotor.org/home/heli-expo/education/courses/>