**Irish Senthilkumar 16342613 CT436 Assignment 2**

The commercial aviation industry is one of the largest industries on the planet, with 4.5 billion passengers flying on 45 million flights for just last year. However, dramatic change in aircraft design is a very slow process, since a lot of money and time is involved to engineer solutions to aviation problems. Therefore, the vast majority of commercial aircraft flying right now are using technology that was available at the time of their release, which is typically around 20-30 years ago.

Landing is the most difficult and dangerous part of a flight, especially manual landings during bad weather. The pilot in command will need to constantly look up and down through their flight instruments and outside the aircraft to line up the aircraft for the runway. As they glance down to look at their flight instruments, they won’t be able to see where they are going, which can be dangerous.

Simple heads up displays do exist, but only on the very latest of aircraft such as the 787 and A350. These heads-up displays are built into the cockpit, and provide basic flight instrument data such as altitude, the gyroscope and airspeed. More advanced heads up displays do exist, but only for fighter aircraft.

I propose a heads-up display which can stick onto the cockpit windows. It will have simplified views of all necessary flight instruments including the gyroscope, airspeed, altitude, and even key data such as spoiler settings and flaps settings. This will allow the pilot to look at all the important flight instruments and where they are going at the same time.

I believe that this is a WOW idea, since aftermarket cockpit equipment has never been introduced into this industry, and this heads-up display will not only help to improve the safety of landings, it will pave the way for more aftermarket cockpit equipment in the future.