

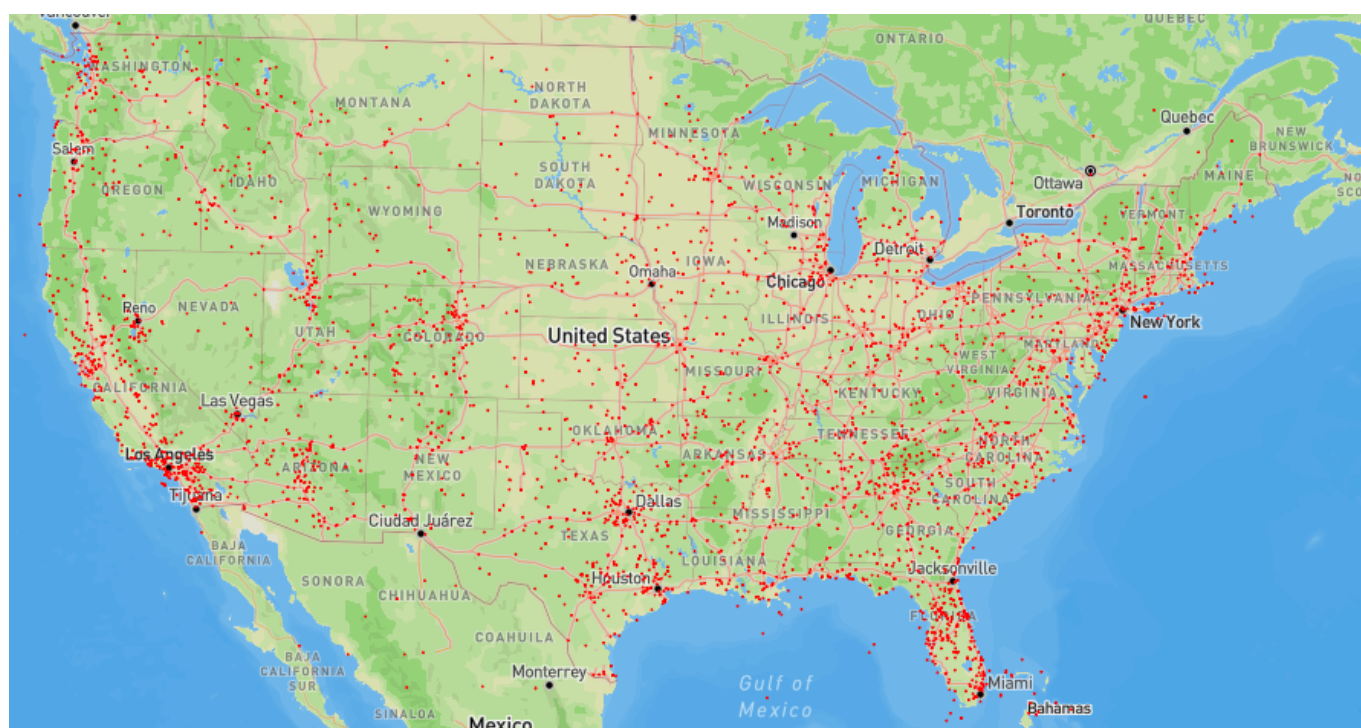
Priorities for the Laboratory

Priority #1 - Democratizing Aviation

First things first, we believe in the principle of **Aviation for All!** People have been dreaming about flying since before the dawn of history, and we have only been able to accomplish this with any reasonable expectation of not immediately dying for around 100 years or so. Additionally, airplanes are useful, fast, and a lot of fun. We don't want to get rid of airplanes or airplane pilots, in fact quite the contrary. Instead, we want to enable everyone to fly, and not just in the cabin of a large airliner with a small window and no control, but to slip the surly bonds of earth and really aviate! So, that's the number one priority here, bar none, that airplanes should be made better so that they can fly, be a useful and safe form of transportation, and be made available to everyone. In short, to democratize aviation!

Priority #2 - Aviation Safety

In order to pull off the vision of priority #2, we need safer small airplanes. Now, there is always some non-zero risk in flying in any airplane. For large commercial airplanes, the risk is very very low. Travel in large commercial airplanes is one of the safest forms of mass travel ever devised by humans. However, it's a different story for small airplanes. Small airplanes are actually way more dangerous, like 1000 times more dangerous (3 orders of magnitude) than large airplanes. Even when compared to traveling in a car, small airplanes are still more dangerous, but here only about 1 order of magnitude (10X) or so. The following figure is a map of all the fatal accidents in US aviation since 2008 shown as a small red dot. Now, there is a lot of them, and the overwhelming majority of them (between 95 and 99%) are small aircraft. This is unacceptable and not going to work if we are going to realize the vision of aviation for all. But, that is the reason why we are here... to do something about that... to make small airplanes safer for all aviators, at all levels of flying prowess. If we can do this for the aviators of today, it will be a major step forward for opening up the skies to the aviators of tomorrow.



Map of US fatal airplane accidents from 2008 to the present

High Flight

BY JOHN GILLESPIE MAGEE JR.

Oh! I have slipped the surly bonds of Earth
And danced the skies on laughter-silvered wings;
Sunward I've climbed, and joined the tumbling mirth
of sun-split clouds,—and done a hundred things
You have not dreamed of—wheeled and soared and swung
High in the sunlit silence. Hov'ring there,
I've chased the shouting wind along, and flung
My eager craft through footless halls of air

Up, up the long, delirious, burning blue
I've topped the wind-swept heights with easy grace
Where never lark nor ever eagle flew—
And, while with silent lifting mind I've trod
The high untrespassed sanctity of space,
Put out my hand, and touched the face of God.