1. **Valerian Abakovsky (1895 – 1921)**

The first inductee to our Hall of Fame is the Latvian inventor, Valerian Abakovsky, whose claim to fame was developing a propeller driven railway car.

A key prerequisite of an inventor is the ability to think outside of the box. In the second decade of the twentieth century the railway was a well-established means of transportation. The problem, though, before the harnessing of diesel and/or electricity as the principal means of power was that the speed of the train was constrained by the amount of power that could be generated by shovelling coal into the engine's boiler. However, aeronautics was now an established science and the engines required to provide the aircraft with the thrust necessary to get off the ground and travel at speed were both more compact and more powerful than the rather antiquated means of locomotion that trains were reliant upon. If you were wanting to develop a high-speed train, why not marry the two technologies?

This was probably the train of thought that our hero followed in the periods that he was hanging around waiting for the Soviet dignitaries to finish doing whatever they were doing and get back into his car. Unlike many a would-be inventor the Latvian chauffeur actually lobbied to be allowed to put his brain wave into practice, doubtless using the close contact with officialdom that his day job afforded him. You know the sort – the course of least resistance is to give into someone who is always banging on about their pet theory.

Anyway, Abakowsky was allowed to get on with it and produced a prototype which looks like an enclosed boat-like wagon with a dirty great propeller on the front. It was unveiled in July 1921 and initial trials went well. The idea was that it would be used to convey the Soviet top brass at speed to and from Moscow. On July 24 1921 a high-powered delegation, led by the revolutionary and close friend of Joseph Stalin, Fyodor Sergeyev, and our intrepid inventor clambered aboard to travel at speed from Tula to Moscow. The trip passed off without incident and the party was encouraged to repeat the experience in order to get back to Tula.

Unfortunately - and we come to expect an unexpected turn of events and a tragic outcome with our inductees – the Aerowagon, as it was dubbed, derailed at high-speed, killing everyone on board. Still, on the plus side the idea of train powered by an aircraft engine had been firmly established and the six martyrs to the cause of progress were buried in the Kremlin War Necropolis which since 1917 had been the final resting place of the heroes of the October Revolution.

Our hero's legacy lived on. Franz Kruckenberg developed the Schienenzeppelin which was built as a prototype in 1930 and in trials in 1931 this train powered by an aircraft propeller reached speeds of up to 200 kilometres an hour. Alas, the build up to World War 2 consigned it to the scrapheap.

Closer to home the Scottish engineer, George Bennie, built a prototype track and railcar for his Bennie Railplane at Milngavie. Typically, whilst everyone thought it was a brilliant idea, no one came up with the dosh to turn into reality.

Valerian, for your ingenuity and self-sacrifice, you are a worthy inductee.

2. Abu Nasr Isma'il ibn Hammad al-Jawari

Our second inductee is al-Jawari, the noted lexicographer who died around 1002 or 1008 CE. Hailing from what is now Kazakhstan, Al-Jawari's main claim to fame, although not why he receives this nomination, is his compilation of al-Sihah, a lexicon which contains some 40,000 entries.

His light-bulb moment was to put the entries into an alphabetical order in which the last letter of a word's root is the main criterion by which the order is established. Although it was incomplete at the time of his death – it is said that a student completed the magnum opus – it stood the test of time, becoming one of the main Arabic dictionaries in the medieval era. Many of its entries becoming the basis for an Arabian to Turkish dictionary which was the first book to be published in the Ottoman empire on a printing press (in 1729).

The urge to fly must have been a primeval instinct amongst man. After all, the birds are so free and can travel great distances unhindered by the obstacles we find on land. The legend of Daedalus and Icarus testifies to the antiquity of the desire and, indeed, of its perils. We tend to think – or at least Occidentals do – that experimentation with flight is a fairly recent phenomenon.

Think again and consider the derring-do of Abbas ibn Firnas (810 – 887CE), a polymath based in Cordoba. Writing some seven centuries later, a Moroccan historian, al-Maqqari, comments that among Firnas' curious experiments, was one where he covered his body with feathers, attached a couple of wings to his body, climber up high and launched himself into the air. According to what al-Maqqari considers to be trustworthy writers, he flew a considerable distance but "*in alighting again at the place whence he started, his back was very much hurt*" because he had forgotten to provide himself with a tail.

And then closer to home we have Eilmer, a Benedictine monk at Malmesbury Abbey at the turn of the 12th century. In Gesta Regum Anglorum, written by a fellow monk, William of Malmesbury around 1125, we learn that Eilmer fixed wings to his hands and feet and launched himself off the tower of Malmesbury Abbey. Remarkably, if William is to be believed, he flew more than a furlong before landing proved his undoing. "*Agitated by the violence of the wind and the swirling of the air, as well as by awareness of his rash attempt, he fell, broke both his legs and was lame ever after*". Eilmer, too, attributed his failure to forgetting about giving himself a tail.

Still, Firnas and Eilmer should count their blessings or give thanks to their respective Gods that they only suffered debilitating injuries as a result of their attempt to follow in the flapping wings of Daedalus and Icarus. As you might expect, what earns al-Jawari his place in our Hall of Fame over and above the strong claims of the other two is that his folly brought about his demise.

It is thought in an attempt to emulate Firnas and, presumably, to add a bit of spice to his otherwise dull but laudable work as a lexicographer, al-Jawari climbed on to the roof of a mosque in Nishapur wearing the obligatory wings – as for a tail my researches have failed me. Inevitably, too, after launching himself into the air, he plunged to the ground, killing himself in the process.

Al-Jawari, as the representative of the aviators of the first millennium you are a worthy inductee to our Hall of Fame.