

DENNIS MUILENBURG AIMS TO HAVE PROTOTYPE FLYING VEHICLES IN THE AIR THIS YEAR. HE'LL NEED THE POWER OF GEOSPATIAL ARTIFICIAL INTELLIGENCE TO MAKE THAT HAPPEN, SAYS **ALISTAIR MACLENAN**

Whilst Elon Musk's achievements, ambition and Tweets have brought him to the notice of almost everyone on the planet, there are many other people working equally feverishly, albeit more quietly, on the geospatial applications in space exploration and autonomous transport.

Dennis Muilenburg, for example. Now, without resorting to Google, can you tell me who Mr Muilenburg works for? Clues are: his Chicago-based company is more than 100 years old, employs around 140,000 people and generated U\$25bn during just three months of 2018. something called the GeekWire Summit in Seattle. That was in October 2018, so some time this autumn, look up and you may see the underside of a passing automobile.

This development within 'urban mobility – the eleventh goal of the UN's list of 17 that will use geospatial approaches to transform the world is to 'make cities inclusive, safe, resilient and sustainable' – comes under the remit of a new group called Boeing NeXt.

Although I can only wonder how expensive that capital X was, Boeing NeXt will merge the capabilities of recently

FLYING CARS WILL NEED A THREE-DIMENSIONAL CONTROL SYSTEM TO AVOID LANDING PREMATURELY AND EXTREMELY HEAVILY

Boeing is, by any measure, a titan of a company and Dennis Muilenburg is its chairman, president and CEO – which means they save some of those billons by having a slightly smaller boardroom table.

For all of Musk's outrageous claims about his future developments in solving geospatialbased challenges (for the record, I hugely admire the man and his achievements), he has never claimed, when questioned about autonomous flying cars, that: "We are building prototype vehicles today, we expect to be flying those vehicles within the coming year."

Well, that's exactly what our thriceemployed Mr Muilenburg replied when questioned by Bloomberg's Emily Chang at purchased Aurora Flight Sciences, a specialist in unmanned autonomous flight software, with Boeing's existing engineering expertise to develop both flying taxis and delivery vehicles and create the 'ecosystem' needed to control them. That control is key. Imagine getting

That control is key. Imagine getting in your car and setting off to your destination in a straight line, ignoring whatever may be in front of you. That would be the situation if everyone took to the skies with no-one (or more accurately, no-thing) directing traffic.

Flying cars will need a threedimensional control system to avoid landing prematurely and extremely heavily. For all my irreverence, this is not pie-inthe-sky stuff, as it is literally pie-in-the-sky stuff: Boeing aims to develop vehicles and an environment that will make moped riders around the world redundant, by creating machines that autonomously deliver your food through your window.

HorizonX – well, if you paid for an uppercase letter, you should use it more than once – is Boeing's internal venture capital organisation, which recently bought into Texas-based, artificial intelligence (AI) software firm, SparkCognition. I'm not sure where geospatial AI currently is on its 'hype cycle' but a company doesn't attract more than US\$60m in investment, as SparkCognition has, for no reason.

Geospatial data is big and everyday it gets bigger. There seems little argument amongst those who know that the implementation of AI will be the only way to use this vast amount of data and control the ridiculous number of variables within, for example, a city where everyone flies. Boeing is putting its considerable

Boeing is putting its considerable money where its AI mouth would be if it had one. It is combining what it already knows with the geospatial and AI expertise of others, to launch a population above today's congested urban streets.

And you thought Musk and some wild ideas!

Alistair Maclenan is founder of the geospatial B2B marketing agency Quarry One Eleven (www.quarry-one-eleven.com)