

Travelling to the

Manx firm plans to boldly go where no man has gone before

By Paul Speller

'The fortunes of the next generation are going to be built in space.'

So says the founder of the Manx firm at the forefront of an industry that could take the Island's economy to a level that is out of this world.

Space law expert, Art Dula, is a man with a very big vision. And the result is Excalibur Almaz, a firm with a registered office in Douglas and a hangar in Jurby that has two space stations and three launch and return vehicles inside it.

The company, which also has a USA registered office in Houston, Texas, an altogether more likely setting for a space exploration firm, hit the national headlines in June after it announced its space exploration plans, although here in the Isle of Man such talk has been on the agenda since 2009, when Excalibur Almaz first put one of the space craft on display here.

Many UK newspapers misinterpreted the planned missions of lunar orbit for commercial travellers, available at a mere £100m, as meaning the firm planned to put man back on the Moon.

That's not the idea. At least, not yet.

The destination of the proposed travel is Earth Moon Libration Point 2, on the far side of the moon.

It is one of five libration points where the combined gravitational pull of the Moon and the Earth balances each other out, meaning space craft can effectively 'park' there.



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Interestingly, a NASA memo earlier this year earmarked the same destination as a target in the first step along the long road to putting a man on an asteroid,

It seems that Excalibur Almaz hopes to get to EML2 first, in the bid to take humans further into space than ever before.

Mr Dula, 65, from Virginia, USA, told Money Media: 'People will differ about whether we can do it, because it requires us to raise the money, but there has not been any disagreement that the equipment is capable of doing the trip.'

That equipment, mainly from the Soviet Union's Almaz space programme, includes three re-usable re-entry vehicles and two partially completed space stations which are capable of space travel.

The space stations, one of which has been in orbit before, can hold up to six people who

would be shuttled up from the Earth in the RRVs, which can hold up to three people at a time.

One of the two 20-ton space stations will be put into 'halo orbit' around the EML2 point and used for the missions; equipped with a common docking system and the equipment to support human life and also to allow extensive research of the Moon and deep space environments.

With a habitable area of 90 square metres in each the space station does not look that big when you take a look inside, but that's nothing compared with the RRVs. Close inspection of those leaves you with the impression that fitting in a trio of space explorers would not be that different from trying to squeeze three people into a tumble dryer.

But the vessels are less complicated than the space shuttles that were used by NASA, and have all faced tests that appear to show they



Dark Side of the Moon

will be up to the task of deep space travel.

'It is impossible to look at those spacecraft and know their history without knowing it is possible,' said Mr Dula.

'We are going into an era that is going to be a wonderful time for new beginnings. There is no doubt at all that some of the great industries of the next century will be built in space.'

When Mr Dula compares commercial space travel with the voyages of Columbus, you are inclined to feel some alarm at the hyperbole; but, think about it, there could be something out there to discover that will be a lot more beneficial to the world than America.

Mr Dula, along with Excalibur Almaz USA's chief executive officer J. Buckner Hightower and cosmonaut Colonel Valery Tokarev, were in the island to host a private event for Isle of Man space industry leaders.

Mr Hightower matches Mr Dula for his cast iron belief in the project:

'We can send someone further than, humanly, anyone has ever gone before,' he said.

The funding for the scheme will come from the explorers – Excalibur Almaz is trying to distance itself from the description of such travellers as 'tourists' – so perhaps the £100m price tag is not that unreasonable. However, it could be a good reason, as with

many things, to wait until the cost drops down a little.

But once the commitment is made, Mr Hightower estimates it could be 24-30 months before the first travellers find themselves being taken up to the space station for a mission that would be likely to last about three months.

Mr Hightower sees the Isle of Man as being 'very progressive', and the perfect location for what is turning into a burgeoning space industry.

'They contacted us,' he revealed. 'There was all the existing infrastructure here supporting the space business – law firms were already doing business and ManSat and others in the space industry were here.'

'There is a financial community here that is second to none.'

'We wanted to work with the Isle of Man Government, which is inclined to remove obstacles from your path rather than place them there. They are pro-active, they are creative.'

The no tax regime for the space industry helped, but the Isle of Man is not the only jurisdiction that offers that, said

Mr Hightower; it is the overall package you can find in the Isle of Man that brought Excalibur Almaz here.

The company does not have any permanent employees in the island but, in addition to its hardware in Jurby, Cains Advocates in Douglas operates as a corporate service provider for the firm.

The space industry, mainly support services, and also some manufacturing, is starting to bring in the money. The Manx Government's business development agency recently estimated that it had earned about £35m for the Manx exchequer over the past six years.

Excalibur Almaz appears to have stolen a march on its rivals in the space exploration industry and Mr Hightower is



In short, he is a man who knows about space travel.

The equipment Excalibur Almaz has acquired is fit for the job, he said.

'It is proven in space, all the equipment, all the ideas, all the systems.'

One of the two space station components spent more than five years in space, he added.

For many, it all seems a little far-fetched. But Mr Dula points out people probably thought the same when the Wright brothers started out.

So perhaps it is best left to Mr Dula to sum up the situation.



'We wanted to work with the Isle of Man Government, which is inclined to remove obstacles from your path rather than place them there'

bullish about its chances of being the first to launch a commercial mission.

With confidence, he said: 'I think we are very much positioned to do that.'

And the man who could be at the helm is Colonel Valery Ivanovich Tokarev, a cosmonaut experienced in using the craft as he was involved in the Almaz programme as a military test pilot.

He commanded the 2005-6 Soyuz mission to the International Space Station.

'It is clear that private companies can do it, our company is fortunate that we have the wonderful equipment to do it.'

'At the top of the mountain on the Isle of Man (Snaefell) they say you can see seven kingdoms and one of those kingdoms is the kingdom of Heaven'

'That kingdom has more resources, more advantages and more spiritual fulfillment than all the other kingdoms on Earth.'

'We now have the capacity to go there.'

