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# ‘You Will Have to Deal with Crime and Piracy in Space’

Crime has always followed technology. When advances in shipbuilding created the era of explorers, it also birthed pirates trying to plunder vessels carrying goods of trade. Developments in radio and broadcasting technology in the 20th century resulted in the amplification of misinformation and propaganda, not to mention intellectual property piracy. The internet, which was imagined as an open space beyond the sovereignty of any one nation and its laws, has created a new wave of transnational digital crime. So why should space be any different? That is the spark that started a journey of research and discovery for **Marc Feldman** and Hugh Taylor, authors of *Space Piracy: Preparing for a Criminal Crisis in Orbit*. On the eve of the Russia-Ukraine conflict, the former reportedly rolled out a cyberattack to blunt satellite communications in Ukraine, disrupting its ability to communicate with troops. What happens when such scenarios to disrupt space-based activity are adopted by criminals sitting on earth? Worse still, what happens if, in the future, the physical outer space becomes a domain for crime? Feldman spoke to **Nirmal John** on why it is important to prepare for a wave of future crimes up in space. Edited excerpts:

**It is a unique book. How did you stumble on this subject?**

I have been involved in space and satellites since the 1980s. I had a couple of private equity funds. One of them was deeply, deeply involved in space. There's a great deal happening in the commercialisation of space but the military is really the big dog, not just in the US but also in China and Russia. This came out of a paper I was working on for the Defense Innovation Unit, which is a consultant arm of the Pentagon. I wanted to do something about piracy and criminality of space. So I sat down and wrote an article. It turned out to be 65 pages. I showed it to Hugh, whom I have been in business with for decades. He suggested we make it a book.

The United States Space Force looks at China and Russia as its main enemies in space. Our thesis is, no, that's not going to be the whole story. You are going to have to deal with not just warfare in space, you will have to deal with crime and piracy in space. So how is that going to happen? We came up with a series of scenarios of that, be it holding space assets to ransom or taking over space stations with rockets.

**You have used the example of money laundering by drug cartels as the entry point. Why?**

I have seen what these cartels are up to, how powerful they are, how creative they are and how ruthless they are. Like all major criminal organisations, a major problem they have is laundering money. They have laundered money through several means, including through oil companies in South America. At some point they are going to discover space and they are going to launder their money in space assets. These guys have more money than anybody can ever imagine. They can get the talent because they will pay them. They are in countries that are narco states. They have experience of creatively moving narcotics around the world—through airplanes, submarines, you name it. They understand airports. They understand airplanes. They know how to kill. They have their own intelligence agencies. They have their own transporta-

tion, computer networks and marketing. Once they learn the operational aspect of space, they will become a player in space. First, it will be through money laundering. They will create shell companies and they will invest in startups, then they will take it over and use that tech. That's how cartels play.

**You have also drawn parallels to global trade and the rise of piracy.**

See, there is no national sovereignty in space as we understand it. That means it is going to be similar to the Wild West. Take mining. There is technology that exists right now to mine in space. They have to be protected because there will be criminal organisations wanting to be in on the action. There is a whole bunch of intelligence agencies out there that would use piracy and crime for plausible deniability. We believe that as technology becomes more sophisticated, these things will happen. There is no legal structure in space, just like on the open seas. A few years

back, cocaine worth a billion dollars was found in a ship owned by the largest shipping company in the world. I can be in Los Angeles, and 250 miles out there is an exclusion zone. The federal government, state, sheriffs, whatever, they can't touch them, just like in space.

**You wrote in the book, ‘Space piracy is a future problem that is starting to show itself in small-scale hacks.’ What are some of the other scenarios of the future?**

One of the things we speculated about is a spectacular takeover of a launch site, say Cape Canaveral or Elon Musk's spaceport. They can say that if you don't give us an exorbitant amount of money, we will liquidate it. Or, take commercial broadcasting. You got a Super Bowl event coming up. If they have the ability to control satellites, they can say that unless a ransom is shared, they won't release the satellite. Or, take the basic business of these cartels which is in moving drugs. Can they invest in moving drugs through space? They already used submarines to do it. They are not going to have money issues. You could have rockets built to your specifications, just like pirates, who basically went to shipbuilders to build them faster ships and pushed the envelope of shipping technology in the 1700s. Criminals could do that now as well, and could have spaceports in countries where the cartel has influence. What was Jamaica? It was a pirate colony. It is not going to be impossible if you don't have money issues. We have written the book, keeping in mind such historical context. We believe all this could happen on an analogous basis. History doesn't repeat itself, it rhymes. The reason why this could happen is because nobody thinks criminals can do this.

**What has been the impact of the book till now?**

The first thing is to realise there is a potential threat out there, and it is not going to go away, just as piracy in the high seas didn't go away. People are just becoming aware of it. The US Space Force does not recognise non-state actors as a threat. The book is having some impact because, for instance, one of the big London-based space insurance companies told us that they are re-examining their policies and may make it mandatory to have privacy and criminal insurance. That is because of the scenarios we built, where a criminal organisation hijacks a launch.

*nirmal.john1@timesofindia.com*



**Hugh Taylor**