

SPACE POLICY AND LAW COURSE 2018**SPACE LIABILITY EXERCISE**

Patrick MacMac is the owner of a start up operator (Highland Flights) offering pleasure and commercial space flights from an airport in Scotland. A twin-hulled aircraft is used to carry out the initial flight for each mission. A rocket fixed to the underside of the aircraft performs the second part of the mission that is either to carry passengers on sub-orbital experiences or to boost satellites into recognised orbital planes. Patrick is licensed by the UKSA.

Klondike Pete owns a USA based space mining company (Golden Nuggets). He uses conventional rocket technology to transport mining equipment to celestial bodies. His first mission will be to send mining equipment and a space base to the Moon. His crew includes two would be space miners 'Plum Loco' Louie and 'Boot Hill' Bob.

On 1 January 2019 Golden Nuggets successfully launched its first mission to the Moon. It set up a lunar base and began mining. After several months on the moon Louie is suffering. He leaves the lunar base with stolen equipment and sets up his own base on the Moon, declaring himself the owner of a vast plot of cratered land which he intends to mine for self-profit.

Bob continues to send the minerals that he has mined back to Earth by specially adapted cargo vessels. Louie has decided to stock pile his minerals on the Moon and sell them 'by collection only' to the highest bidders

On 1 August 2019, Patrick launches a Recovery Mission to the Moon to collect some of Louie's minerals that he has purchased. Patrick neglects to tell the UKSA that he will be collecting minerals from the Moon.

On 31 December 2019, Patrick takes his first passenger (if that is what they are correctly called) laden rocket for a pleasure flight to see amongst other things the Northern Lights. The rocket detaches from the aircraft successfully, but the aircraft suffers a problem and crashes into a Norwegian Fjord. Both pilots escape via parachute, but the aircraft is lost and the fuel dumped shortly before the crash has ruined the fishing business in the Fjord.

Whilst over the Southern coast of Norway, the passengers in the rocket are exposed to high doses of ultra violet rays causing them to suffer from severe sunburn and heat stroke. It appears that their spacesuits had insufficient protective linings.

Meanwhile, Patrick's Recovery Mission is going badly wrong. The automated spacecraft crashes into Louie's mineral storage facility and the nuclear reactor on the spacecraft renders the whole stock pile unfit for any Earth bound purposes.

Meanwhile, Bob has dispatched a cargo of his minerals back to Earth, using established licensed and credible technology in the form of Moonshine One, an automated hybrid cargo vessel. Whilst flying back to Earth (in the USA) Moonshine One crashes into the Northern Territories of Canada. The damage done is not severe, A few broken trees and a bit of a crater, but the Canadians are furious.

Discuss the liability issues and answer the following questions:

1. What liabilities does Patrick have?
2. What liabilities does Klondike Pete have?
3. What claims does Louie have?
4. What claims does Pete have?
5. What claims do Patrick's passengers have?
6. What claims do the Norwegian fishermen have?
7. What claims do the furious Canadians have?

In each case discuss the liability regime that applies and what remedies could be pursued.