

## Passengers should not fly at their own risk but at some risk

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Space tourism is today becoming more common, with both increasing numbers of companies investing in different technologies and a gradual decline in price. Like the early days of passenger aviation, a real competitive market is being progressively shaped. However, one should not forget an important part of space tourism: it is a space activity, and therefore an inherently risky activity. A discussion of the passenger liability issue is unavoidable.

The drafters of the Outer Space Treaty did not envision the development of such activities. Although certain parts of the *corpus iuris spatialis* could be relevant, the current legal framework is not sufficient to govern space tourism, specifically liability issues.

Because space tourism relies mainly on private financing and has commercial aspects, it could be argued that international agreements are irrelevant. There is a private contract between the tourist and the company, therefore, the space tourist should fly at their own risk. However, the present paper will uphold the idea that space tourism and 'air' tourism can not be compared. Thus, the legal framework used for 'air' tourism can not be transposed to space tourism. A common solution made by proponents of space tourism is to "rely on" national legislation. This paper will show that these are necessary but not sufficient because they can lead to a real lack of uniformity, leading to "forum shopping" and a flag of convenience approach, similar to the maritime industry.

The paper will make clear that the adoption of an international text regulating space tourism will be necessary. The main objective of this article will be to discuss the different types of liability which could be used in an aerospace convention. However, the article will not advocate the total elimination of the current liability framework, but it will question its relevance. The lack of adequate legal norms will lead the paper to make proposals to improve the situation. Though there are major differences between the air and space industries, the policies in the aviation industry will be used as a foundation with which to analyze possible space tourism liability initiatives.

### 1. The status of space passengers

#### 1.1. The silence of international space law

Contrary to international air law<sup>1</sup>, international space law does not stipulate the legal status of passengers. It was drafted at a time when commercialization and privatization had not yet been developed. However, the *corpus iuris spatialis* focused on astronauts whom states are obliged to render "all possible assistance in the event of accident, distress on emergency, landing on the territory of another state party on the High Seas"<sup>2</sup>. However, it still remains vague on the exact definition of what an astronaut<sup>3</sup>, the personnel of a spacecraft<sup>4</sup>

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<sup>1</sup> Convention for the Unification of certain rules relating to international carriage by air signed at Warsaw on 12/10/1989

<sup>2</sup> art V (1) OST

<sup>3</sup> art V OST

are. Space passengers are obviously not astronauts. This category described as ‘envoy of mankind’ represents a specific category and could not be categorized. Furthermore, it involves specific training, duties and rights emphasizing the duties of being an astronaut. They are not personnel of the spacecraft<sup>5</sup> because such a qualification would require a real participation in the ‘technical life’ of the spacecraft. Space passengers could fall into the category of space flight participants.

## 1.2. A specific passenger

The concept of space flight participant could be used. It has been created in the context of flights to the ISS<sup>6</sup>. It refers to the option of welcoming a member from non-partner states to the ISS crew, and encompasses a legal framework<sup>7</sup>. This status could not really apply to passengers because they do not have an active role as the non partner state member does.

Space passengers are not astronauts, a personnel of aircraft, or a spaceflight participant. They are not random passengers. They can not have the same status of an air passenger because the main reason why they are on the spacecraft it is to enjoy the trip whereas air passengers take the plane as a means to achieve a goal. Furthermore, space tourism is obviously still developing, while the main currents of aviation liability have become clear through common usage and a series of international cases- exactly what the space industry needs to develop.

## 2. The insufficiency of the current corpus juris

The analysis of the corpus juris spatialis leads us to two conclusions: one can consider it is inadequate, or one can say that it is inapplicable. In both cases, it appears clear that the current corpus juris need some updating to reflect the realities of the space industry in the 21<sup>st</sup> century.

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<sup>4</sup> art. 2 Rescue Agreement

<sup>5</sup> COLLINS, P., YONEMOTO K., Legal and regulatory issues for passenger space travel, 41, Proc. Colloq. Of Outer Space, 1998, p. 224

<sup>6</sup> FARAND, André, Commercialization of International Space Station Utilization : the European Partner’s viewpoint, Air & Space Law 2003, p. 86

<sup>7</sup> Notably, Agreements among the Government of Canada, the Government of ESA member States, the Governments of Japan, the Russian Federation and the USA Concerning Cooperation on the Civil International Space Station, done on January 29, 1998, Memorandum of Understanding between the NASA of the United States and the ESA

## 2.1. The inapplicability of the international space law

The corpus juris spatialis draws a very clear state-oriented system of responsibility. Indeed, Article VI of the Outer Space Treaty provides that even in cases of national space activities undertaken by non governmental entities, the State is the one responsible. Contrary to sea law, the State is not only responsible for his own faults. Its liability is engaged not just from State spacecraft, but from any privately owned spacecraft registered within that State. Furthermore, the Outer Space Treaty and the Liability Convention impose liability on a “launching State” for certain specified damage caused by a space object. The option of “launching State” confirms this state-oriented system of responsibility. Indeed, Article 1 (c) of the Liability Convention defines a launching state as follows: “ (i) A state which launches or procures the launching of a space object; (ii) A State from those territory or facility a space object is launched”.

At first, the corpus juris spatialis seems to make any activity a state responsibility. However, it is not so broad concerning persons who might claim. The liability convention does not apply to damage caused by space objects of a launching State to “(a) nationals of that launching State (b) foreign nationals during such time as they are participating in the operation of the space object from the time of its launching or at any stage thereafter until its descent, or during such time as they are in the immediate vicinity of a planned launching or recovery area as the result of an invitation by that launching State”.<sup>8</sup> Passengers are participants in the operation of the space object, but it can be upheld that they do not technically participate in the operation of the vehicle. However, the convention does not mention the requirement of a technical participation of the passengers. Thus, a broad interpretation including all persons on board is not contrary to the text. According to this interpretation, it appears clear that passengers are not protected by the convention<sup>9</sup>. The solution would be to rely on national laws. Since the lex loci cannot be applied, the law of state registry could be applied<sup>10</sup>. Relying on national laws without an international text regulating clearly the activity, however, will create many problems, not all of which can be solved by the standard methods of international litigation and conflict resolution.

## 2.2. The inadequacy of international space law

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<sup>8</sup> Article VII, Convention on International Liability for Damages Caused by Space Objects

<sup>9</sup> HOBE Stephan, Cloppenburg Jurgen, « Towards a New Aerospace Convention ?-Selected Legal Issues of Space Tourism”, 47 Colloq. L. Outer Space 2004, IAC-04-IISL.4.14, p. 1

<sup>10</sup> DE SAUSSURE H/HAANAPEL P.P.C., A unified Multinational Approach to the Application of Tort and Contract Principles to Outer Space, 6, Syracuse J. Intl’L&Com. L. 1978, p. 1

Certain authors<sup>11</sup> prefer talking about ‘inadequacy’ rather than inapplicability. They do consider that passengers may fly at some risk. But the partial relevancy of the current corpus juris spatialis is underlined.

The first issue is related to the political aspect of the Liability. Indeed, the current legal framework only allows the State to present a Claim to the launching state<sup>12</sup>. The risk is that a state might prefer to maintain safe diplomatic relations with the appropriate State rather than care about the sad fate of one of its citizens. As Steeve Freeland states, “To date no such claim has been made and it is not certain that a state would decide to bring such an action unless the circumstances were of such magnitude that it would be politically expedient for it to do so”<sup>13</sup>

### 3 The real need of an international regulation at the international level

Obviously, the current liability framework is not sufficient. Space tourism liability issues need to be internationally regulated. Although national laws can deal with space tourism, one can not rely on them. An international text or guidelines drafted by the international community needs to serve as a basis. Domestic laws are supposed to be complementary.

The debate about how much authority the national government should have regarding commercial space activities has been essentially debated in the US. It was decided that privately owned and operated spacecraft transporting space passengers should be allowed to make them fly at their own risk<sup>14</sup>. The main trend is to include this kind of clause<sup>15</sup>. The private industry has succeeded for the moment to impose this point of view. The Commercial Space Launch Amendments Act mentions clearly this clause. It is a strong position of the FAA. In this sense, the Associate Administrator for Commercial Space Flight at the FAA stated that “passengers should be able to board their vehicles with the same freedom as the stunt pilots who pioneered commercial aviation<sup>16</sup>”. The problem here is that he is making a comparison. However, space activity is a very specific one. One has to keep in mind that it is

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<sup>11</sup> FREELAND, Steven, « Up, Up, and...back : the emergence of Space Tourism and its impact on the international law of outer space », 6, Chi. J. Int'l L., 1<sup>st</sup> Summer 2005, pp. 1-22

<sup>12</sup> Article VIII C.L

<sup>13</sup> FREELAND Steeve, supra note 4, p. 16

<sup>14</sup> for example Hearings on Commercial Space Transportation before the House Committee on Transportation and Infrastructure, 108th Cong., 2<sup>nd</sup> Session 1, February 2005, available online at <http://www.spaceref.com./viewwsr.html?pid=15408>

<sup>15</sup> DE SELDING, Peter, FAA urges liability Leeway for Space Pioneers, Spacenews.com (Dec 2, 2004)

<sup>16</sup> idem

still a developmental activity. Making comparisons is very tricky<sup>17</sup>. However, we will point out that the aviation legal framework can not be transferred to the space one for several reasons. First, although states and companies have been launching orbital vehicles for fifty years, the field is not developed enough to consider liability measures appropriate for a mature industry. During the first fifty years of each field, far more aircraft than spacecraft have been built- only around 5000 rockets have been launched towards orbit. Furthermore, “It was not that different from early airplanes, which tended to crash about as often as they flew. Aircraft seldom crash these days, but rockets still fail between two and five percent of the time (....) It is unlikely that launching a space vehicle will ever be as a routine an undertaking as commercial air-travel certainly not in the lifetime of anybody who reads this.”<sup>18</sup>.

Although space tourism has been lately developed by private industry, the State has to keep an eye on this activity and has to be actively involved in procedures of licensing, authorization, and registration.

## Conclusion

To conclude, the current legal framework is obviously inadequate. A reinforcement at the international level would be required involving notable a constant supervision by states. In this sense, a “not at your own risk” clause would be the most suitable.

However, this type of clause is more likely not to be adopted via an international treaty. It would be more realistic to advocate an international regulation through a code of conduct.

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<sup>17</sup> for some comparisons see Columbia Accident Investigation Board, 1 Columbia Accident Investigation Board, 19( NASA and GPO 2003), available online <http://caib.us/news/report/default.html>

<sup>18</sup> MACAULEY, Molly, Flying in the face of uncertainty : human risk in space activities, Chi. J. Int’l. L., 131, Summer 2005, p. 138