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Liability & insurance in air & space law; Regulation of suborbital flights in Europe

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Liability in air law

- 2nd party liability of the carrier towards passengers well developed
 - Extensive system to protect passengers, incl. case law
 - Evolved from limited (Warsaw), to unlimited (Montreal)
- 3rd party liability mostly governed by nat. law
 - Rome convention limits are low
- Treaty rules apply to international flights
 - Otherwise national law
- Extensive EU regime

Liability in space law

- Only 3rd party liability, no 2nd party liability in Treaties
 - No reference to personnel on board, crew, passengers
 - Only 'astronauts'; 'envoys of mankind'
 - Nationals of launching state/visitors not protected
- Only states may present a claim, not victims
- No limit on liability
 - National law can provide cap & obligatory insurance
- These rules apply to international flights
 - Otherwise national law
- No EU law

Art. VII OST/LIAB Convention

- 3rd party: launching state is internationally liable for damage caused by its space object or its component parts, on earth/in air (absolute) or in space (fault), to another state party or its natural or legal persons
- Compensable damages
 - Loss of life, personal injury or other impairment of health; or loss of or damage to property

National space legislation

- Translates the space treaties' obligations in case of activities by private entities
- Sometimes puts a cap on liability
- Often requires insurance

- Only US has (temporary) provisions on private human spaceflight
 - 2nd party: informed consent by passengers, waivers by partners
 - 3rd party: protecting safety of the public

Liability for suborbital flight?

- **Space** activity: state-based 3rd party liability, few details, vague terms, not tested in court
 - Some national legislations introduce liability limits for private entities, with obligatory insurance
 - Only one so far addresses human spaceflight
- **Aviation**: detailed 2nd and 3rd party operator-based liability, case law
 - Certainty for parties, facilitates insurance
 - Moved to unlimited liability after industry matured
 - More rules in EU law

Liability for suborbital flight?

- We will need elements of both...
- In aviation, operators' liability evolved from limited liability to unlimited liability, as industry matured
- In suborbital spaceflight the same approach could be taken: start with limited liability of operators, then evolve

Aviation & space insurance

- Aviation insurance
 - Statistics, History
 - Cover multiple take-off and landings
 - Competition, big market
 - Reasonable rates
 - Clear liability rules
- Space insurance
 - Less practice, less customers, less statistics
 - Difficult to access or repair objects
 - Coverage per launch
 - High severity/high frequency
 - High rates
 - Unclear liability rules

Insurance for suborbital flight?

- If seen as **space** activity:
 - No obligatory insurance in treaties
 - US: operators must insure 3rd party, and passengers sign informed consent
 - Europe: some laws oblige 3rd party liability but not 2nd party liability
 - Laws do not yet address human spaceflight
 - When they will, not certain if 2nd party liability insurance will be obligatory or informed consent?

Insurance for suborbital flight?

- **If aviation:**
 - 2nd party liability coverage obligatory under Montreal (not Warsaw)
 - 3rd party obliged in Rome Convention & General Risks Convention
 - EU: 2nd & 3rd party liability insurance obliged
 - Also in many national laws

Insurance for suborbital flight?

- Operators must get 3rd party liability insurance, whether considered as aviation or space
 - And it is available in both markets
- Europe: 2nd party liability insurance seems optional if considered space activity, but obligatory if aviation
- Only experience in aviation market, so if obliged, it will probably be placed in the aviation market
 - Not certain if similar rates and conditions, risk may be considered higher

What about Europe?

- S3, Virgin Galactic, SXC in UK, Sweden, Spain?
- SXC from Curacao, Neth. Antilles
- Effect in other jurisdictions possible
- Some states have national space legislation
 - BUT none addresses private human spaceflight
- EU law (art 189 Lisbon): No harmonization
- Risk: patchwork
- ‘Some EASA officials’ took position in 2008
 - ‘Anything with wings’ falls under its jurisdiction
 - Put on hold in 2011 by DG MOVE

EU increasingly interested

- EASA able to regulate SoA, with restricted type certificates, but no mandate (yet) from EC
- EC market study & legal study (Strategy&)
- Industry needs certainty
 - Different preferences: full certification or light touch licensing...
- EC should provide vision, direction; pioneer states must move ahead

How?

- Step-wise approach best
- Ideally, EASA's mandate should be extended to spaceflight, to develop a coherent flexible framework
 - Not probable in short term
- Develop national regimes first
- Coordination desirable

Conclusions

- Safe, efficient private human access to space at reasonable cost will boost space activity, global economy, and benefit mankind
- Platform for science, launch of small satellites, not just for the rich and happy few
- A clear, functional, harmonized legal framework is essential to safeguard State and private interests → AEROSPACE law?
- Probably first regulation at national level
- Europe needs to act to be a relevant player

Thank you

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