

Using Social Media to Promote Space Law Education and Dispute Settlement: Developing Stellar Decisis, the Animated Space Law Moot Court Educational Series

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Abstract

In this paper, Christopher Hearsey, Nathan Johnson, and Nivedita Raju explore the future of dispute settlement arising from space activities and space law education through storytelling using a multi-episode educational series called Stellar Decisis. Launched on July 20, 2021, on SCF's YouTube channel,¹ Stellar Decisis is an animated space law moot court educational series produced by the Space Court Foundation (SCF). Our paper discusses the production and lessons learned from the development of Stellar Decisis and explores space and international law themes through the lens of future dispute settlement using a fictitious court that operates in space. Finally, we outline and announce the administration of a survey for space professionals, scholars, and practitioners relating to participants' expectations of dispute settlement mechanisms needed to address issues arising from current and future space activities and its importance for space law education and training.

Keywords: Space Law, Moot Court, Social Media, YouTube, Dispute Resolution, Education, Animation, IISL

1. Introduction

Space law education is at an inflection point. The last twenty years has seen tremendous growth in opportunities to study and practice space law. The

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1 Stellar Decisis: Case No. 1 - Concerning Planetary Defense; Mixed-Claims Arbitration, pilot episode, Space Court Foundation's (@SpaceCourtFoundation) YouTube Channel, YouTube.com, *accessible at* <https://www.youtube.com/watch?v=6YxPEOlnWlk&t=656s>.

number of space law educational centers, classes, degrees, certificate programs, and research opportunities has steadily increased providing students today more options to break into space law and succeed than in any previous decade. Moreover, greater employment opportunities exist in the United States and globally in all areas of the civil, commercial, nongovernmental organization, intergovernmental organization, and military and defense space sectors. Precisely to support these changes, we created the Space Court Foundation (SCF) to conduct research and create content that helps the general public understand ‘what is space law?’ and engender greater dialogue and knowledge in support of the rule of law in space.

Now, more than at any other time, students present international and space law educators with the challenge of greater demand for training and knowledge to meet this growth, but space law educators continue to have access to limited resources. Demand for knowledge and community building is growing among students internationally as more and more students leverage such short form and long form social media content in their daily lives.² Yet, to a large degree space law education has not leveraged social media platforms or connected the space law community through content creation. Nor has space law education evolved to incorporate content creation on social media platforms into the classroom or in a way accessible to the public.³ Furthermore, most space law educators continue in the tradition of teaching space law survey courses relying on an overview of international space law, national legislation, and/or licensing regimes presented in lecture format. While these approaches satisfy basic curriculum requirements, we believe more could be done to assist educators, students, practitioners, and the public in understanding ‘what is space law?’ and present hypothetical space activity storylines in an educational, entertaining,

2 Anecdotally, we have observed that Twitter has the greater participation of space professionals relative to other platforms because Twitter generally functions as a platform that links to resources found elsewhere, like Facebook, or a means to post opinions or present timely or topical information for general consumption. YouTube is a great platform for promoting content about space law and the rule of law because it’s the best platform for longer form content (> 5 mins), however it’s difficult to find channels or videos that include a space law topic or lecture or discussion. Instagram and TikTok are great platforms for short form content (< 1 min.), but hardly many space professionals are on these platforms because most of those platforms’ users are teens and young adults, sometimes the children of space professionals.

3 The two examples the authors are aware of are our own work and that of the IISL’s efforts. Visit constellation.iisl.space; [YouTube.com/spacecourtfoundation](https://www.youtube.com/spacecourtfoundation). We are constantly looking out for other groups and their work in order to evaluate collaboration opportunities. For collaboration inquiries, please email info@spacecourtfoundation.org with subject line “Collaboration Inquiry”.

and accessible format.⁴ That is why the authors developed Stellar Decisis - to enhance and disrupt traditional space law education learning approaches.

As a flagship program of SCF, Stellar Decisis examines how courts in the not-too-distant future might adjudicate disputes in space. SCF decided to produce and animate a space law educational series because of the storytelling power of animation and the educational power of social media platforms. Utilizing a moot court style format, each episode of Stellar Decisis explores how peaceful dispute settlement arising from space activities would likely operate. The moot court format was inspired by the authors' collective experiences participating in, coaching in, judging in, and administrating the International Institute of Space Law's Manfred Lachs Space Law Moot Court Competition (Lachs Moot).⁵ The authors have incorporated these experiences as well as their law school experiences to create storylines centered around a fictional court system in space. This approach engenders a familiar but unique format whereby Stellar Decisis invites a conversation about space law through dialogue with expert guest judges to resolve the case within each episode as if the viewer is watching the deliberations in chambers as well as hear oral arguments from leading space lawyers presented with on-screen resources for viewers to follow how each side of the case argues the dispute. This approach also promotes and introduces to a wider audience the experts and practitioners that are doing space law today and helps connect viewers to the space law community directly and provides a window into the roles that space lawyers may play in future legal processes and disputes.

Not every person goes to law school, nor does every law student have the opportunity to participate in moot court competitions. While the reasons vary, such a lack of opportunity should not hinder space law educators from connecting with the public or inspiring students to a career in space law. Moot court formats are an excellent way to articulate the presentation of the peaceful dispute resolution process found in all legal systems. For over thirty years, Lachs Moot has molded and inspired a community of professionals bonded by an interest in space law, which many take and leverage in their careers. For Lachs Moot, the presentation is founded on the Statute of the

4 SCF believes that the space law community should seek to embrace educational content for all ages across all platforms. SCF develops content across six platforms to promote different aspects of the foundation's work and its programming because it is important to explain topics of great impact to society. The nature of space activities and its relationship to society is underappreciated and not promoted enough. SCF aims to address this challenging opportunity by bringing together the space community through educational programming initiatives that relate to different modes of learning and across all legal subfields and across non-legal disciplines.

5 Visit mootcourt.iisl.space; SCF is the host organization for the North American region of Lachs Moot.

International Court of Justice and the storylines presented once a year reflect common and in vogue issues in space law. Those who do participate in Lachs Moot spend months preparing written memorial responses to that year's *compromis* (the agreed set of facts among the litigants) and oral arguments for presentation and evaluation at the regional level. Winners of each region are then qualified to argue their case at the International Rounds of the Lachs Moot, which coincides with the International Astronautical Federation's International Astronautical Congress. Winners of the International Round generally go on to have interesting and inspiring legal careers, many times in areas of law unconnected to space law. But most participants, whether or not participants are regional or international round winners, take with them in their careers great pride and interest in moot court competitions and an interest and passion for space law.

1.1 The Space Court Foundation and the Use of Social Media Platforms

In 2018, Christopher Hearsey and Nathan Johnson co-founded SCF, a 501(c)(3) nonprofit organization in the United States. The purpose of SCF is to promote space law education and the rule of law. A core objective of SCF is to advance knowledge and understanding of space law through its Editorial Board, writers' groups, internship program⁶, partnerships, and special projects. SCF approaches the promotion of space law education and the rule of law through a variety of endeavors including the use of social media platforms including YouTube, Facebook, Twitter, LinkedIn, Instagram, and TikTok to present its programming and communicate with the public.⁷

SCF's main programming is hosted on its YouTube Channel. This includes SCF's space law video series, intern orientation series, interview series, and the 'Haley Project' - a year-long retrospective program about the life and work of the first space lawyer, Andrew G. Haley, among other programming. SCF has also been working with content creators on projects such as Stellar Decisis and The Space Bar Show to popularize and present space law in an educational and accessible format. SCF continues to seek partnerships with content creators and social media platforms and hopes to lead and grow the space law community online.

6 A cornerstone of SCF is our internship program. Every year, SCF hosts between twenty and thirty interns (internally designated 'clerk' or 'rapporteur') globally with representation in almost all regions on Earth. Interns support SCF research projects and are assigned to officers to provide support and mentorship. Our interns come from a wide range of backgrounds and experiences. Some of our interns are currently in law school in their respective country or are post-graduates or students in LLM, PhD, and other advanced degree programs.

7 Visit YouTube: youtube.com/spacecourtfoundation; Facebook: facebook.com/spacecourtfdn; Twitter: twitter.com/spacecourtfdn; LinkedIn: linkedin.com/company/spacecourtfdn; Instagram: instagram.com/spacecourtfdn; TikTok: tiktok.com/@spacecourtfoundation.

The main research question of SCF is: ‘what is space law?’. As many a space lawyer has experienced with friends, family, and the public, most people do not know or understand what space law is. Through SCF programs like Stellar Decisis, we seek to bring clarity and frame for the public just what space law is, how space law arises, how space law functions, and what impact space law has on our daily lives on Earth and in space.

As Stellar Decisis is SCF’s flagship educational program, we have partnered and continue to partner with notable scholars, practitioners, and experts to develop a series of animated episodes that take on or address important questions relating to the future of space activities. We invite the space law community to work with SCF and provide feedback to strengthen the approaches to space law education and the promotion of the rule of law. For more information about SCF and its initiatives, please visit www.spacecourtfoundation.org.

1.2 Why Is Dispute Resolution Important to Teaching Space Law?

The goal of Stellar Decisis is to explore through the peaceful dispute settlement process the presentation of fact patterns relating to space activities that straddle the line of known law, regulations, policies, and norms providing insight about our current system of space laws and its enforcement. The main reason for this approach is that, as of publication, there exists a de minimis amount of case law relating to space activities. Only a handful of courts across the Earth have even entertained space related claims. We therefore frame space law disputes through a fictional court, the ‘Space Court’.

The Space Court in Stellar Decisis is founded under a jurisdictional treaty that captures all disputes that arise in space to be adjudicated within in-situ courts. Stellar Decisis will explore a variety of dispute resolution mechanisms in its storytelling including the adjudication of international claims, mixed claims, arbitration claims, private litigation, and injunctive relief, among others. For each episode of Stellar Decisis, there is a backstory that articulates the existence of a dispute in space. The tools of and issues relating to peaceful dispute resolution are addressed in each episode’s *compromis*, bench brief, and other supporting documents to provide context for the guest judges to understand jurisdiction, admissibility, authority to adjudicate claims, relevant applicable law, and available remedies. These materials will comprise the educational modules that accompany the full release of future Stellar Decisis episodes and will enable educators to present a robust and visual learning experience for students.

Through this educational initiative, SCF produces Stellar Decisis to promote the rule of law by demonstrating legal processes around potential or hypothetical future disputes arising from space activities. Stellar Decisis leverages the introduction of and brings to life foundational concepts such as

fairness, equitable relief, distinguishing national from international claims, complexity of future claims, clarity of jurisdiction, the legal adversarial process, how judges decide based on law and fact, among other juridical and prudential concerns. But most importantly, Stellar Decisis upholds fundamental principles of the rule of law - the peaceful resolution of disputes, the principles and obligations under the UN charter, and the responsibility of states over its nationals and national activities in space. These themes form the foundation of any course in public international law and its applicability to space activities is important to communicating to the public as well as students and practitioners the principal elements of any legitimate and authoritative legal system.

Furthermore, Stellar Decisis also enables creative ways to communicate the rules that relate to space activities. The Space Court presentation in each episode gives context to *what space law is and is not* and reinforces why peaceful dispute resolution is key to the future of space activities. As many lay viewers of TVs, movies, and other media about the legal system have become accustomed to, the format of Stellar Decisis provides a familiar frame of reference of a court to understand the context around the laws that apply to space activities. Moreover, the moot court style format of Stellar Decisis reinforces the legal concepts of peaceful dispute resolution to law students and practitioners engendering a greater degree of awareness about the potential future of the space law profession. To maximize the potential benefits of Stellar Decisis, SCF will publish all future episodes of Stellar Decisis on its YouTube channel and publish educational modules around each episode through SCF's Patreon page as well as select content across SCF's social media channels. To get updates, please follow and subscribe.⁸

2. The Making of Stellar Decisis

The concept for Stellar Decisis centers on the educational foundations of law school and the experiences earned by law students through moot court opportunities. Inspired by Lachs Moot, Stellar Decisis seeks to deconstruct the moot court format for educational purposes to present a contextual and visual means by which to teach space law, international law, and provide a picture of what the future administration of justice relating to space activities could look like. The goal of Stellar Decisis is to explore through social media the future of dispute settlement and fact patterns that relate and straddle the

8 Visit Patreon: patreon.com/spacecourtdn; YouTube: youtube.com/spacecourt foundation; Facebook: facebook.com/spacecourtdn; Twitter: twitter.com/space courtdn; LinkedIn: linkedin.com/company/spacecourtdn; Instagram: instagram.com/spacecourtdn; TikTok: tiktok.com/@spacecourtfoundation.

line of known law, regulations, and norms providing insight about our current system of space laws and its enforcement. The format of Stellar Decisis focuses heavily on interesting and provocative space law themes deliberated by the court's guest judges who are experts in the subject matter of the case. The series brings together the space law community, scholars, and practicing space lawyers to resolve the dispute in the fictional Space Court. Through these episodes, SCF explores all forms of dispute settlement as they relate to current and future space activities.

Stellar Decisis seeks to tell stories about the future of space activities and the adjudication of disputes arising from such activities in an animated format. Each episode of Stellar Decisis is formatted into five short Acts. The opening sequence establishes the dispute through the perspective of those directly harmed by the acts of the accused, setting an emotional tone and context to the dispute that has arisen. The next Act provides a narrative form to the *compromis* - those sets of facts agreed upon by the parties to the dispute before the Space Court. The third Act consists of the legal arguments as argued by two guest actors, one arguing for the applicant or plaintiff and the other arguing for the respondent or defendant, depending on the context of the case or jurisdiction of the Space Court. The fourth Act transitions directly into the judge's chambers where two law clerks guide three subject matter experts serving as guest judges through the contentions and facts of the dispute. The judges discuss in chambers the elements of the dispute and deliberate in order to find a resolution. In the fifth Act, the guest judges reach a decision about the case and announce how they decided the case, i.e., who shall prevail. In the background throughout the episode, Stellar Decisis introduces other characters of the Space Court, including the Advocates, i.e., space lawyers, litigants, and other characters that build up and provide backstories to the overall program.

2.1 Case No. 1 - Concerning Planetary Defense; Mixed-Claims Arbitration⁹

The storyline for the pilot episode of Stellar Decisis focuses on the topic of planetary defense. The episode's storyline serves as the Space Court's first case where the court takes up the issue of whether and the extent to which a country on Earth may protect itself from the certainty of an asteroid strike on its territory by unilaterally launching nuclear weapons to destroy the asteroid threat, which subsequently causes extremely high economic losses on the Moon and in cislunar space caused by left over irradiated debris. A mix of governments and private companies file claims against that launching state

⁹ Stellar Decisis: Case No. 1 - Concerning Planetary Defense; Mixed-Claims Arbitration, Space Court Foundation's (@SpaceCourtFoundation) YouTube Channel, YouTube.com, *accessible at* <https://www.youtube.com/watch?v=6YxPEOlnWlk&t=656s>.

for damages suffered and bring the first case to call for the Space Court. For the viewer unaccustomed to such ideas, the pilot episode raises the question: can one nation be held liable for use of its nuclear arsenal to destroy an asteroid threatening the existence of the State, with the unfortunate consequence of raining radioactive debris down on the far side of the Moon? The episode begins with a tour through the solar system; past the Sun, Mercury, Venus, and finally zooming in on the surface of the Moon - with the Earth out of frame. As the screen zooms further onto the surface of the Moon, the figure of an astronaut and a lunar buggy come into view. As the shot focuses on our subject astronaut, an alarm signals an anomaly on the astronaut's wrist computer signifying a serious event is taking place. Suddenly, reflected from the astronaut's visor, we see meteorites impacting the surface of the Moon in close proximity to the astronaut's worksite. Our astronaut soon becomes aware that the situational environment is off nominal and begins to survey her surroundings. Our subject astronaut reacts quickly to the dangers detected. As our astronaut turns around, she watches two astronaut colleagues near the lunar buggy abandon protocol and assault one another for control of the lunar buggy. In an instant, our astronaut watches the lunar buggy speed off screen while her other astronaut colleague lays unconscious on the surface of the Moon as more irradiated meteorite debris falls from above and over the horizon. Without hesitation, our subject astronaut runs looking for safety and finds her opportunities to seek shelter diminish.

First, our astronaut seeks shelter from the raining meteorite debris in a solar cell field. As she approaches, the solar cell field is impacted by meteorite debris. She then flees to seek shelter at the spaceport nearby only to see meteorite debris destroy the only rocket on the launch pad along with the launch support structures. Feeling hopeless, the astronaut walks slowly away from the operational area as meteorites and other debris rain down from over the horizon as the debris barely misses hitting our astronaut. Finally, unsure what to do, our astronaut falls to her knees in hopelessness looking up at planet Earth wondering what to do next.

After the intro sequence, the episode transitions to a news flash where the news anchor introduces the facts of the case and transitions the viewer into the courtroom. Inside the courtroom, the Clerk of the Space Court calls the court to session and viewers are introduced to the Advocates (i.e., the space lawyers, or also known as 'Agents' in most international moot court settings) for the litigants (applicant and respondent) who will present oral arguments before the Space Court. Advocates for the applicant and respondent present their arguments to the judges where pop-up windows help the viewer follow along and understand the facts and law of the case. Both sides take in turn to substantiate or defend against arguments in support of the contentions presented in the *compromis* of the case. The contentions set forth in the pilot episode are as follows:

1. Whether deployment of nuclear missiles by Respondent is permissible
2. Whether Respondent is liable for damage caused on the Moon & in Cis-Lunar Space
 - a. Whether Respondent violated obligations under Article IX of the Outer Space Treaty
 - b. If Respondent's actions are precluded by the doctrine of necessity under the Articles of State Responsibility.

After each side presents their oral arguments, the Clerk of the Space Court calls the court into recess and the judges retire to their chambers to deliberate the case with the assistance of the Space Court's two law clerks. The law clerks facilitate the conversation among the judges as they consider the facts and the arguments presented. The bulk of each episode is reserved for the conversation and deliberation among the guest judges. The guest judges decide amongst themselves who shall prevail in the case and present a final verdict at the end of the episode. We encourage the reader to discover the decision of the Space Court by watching the pilot episode on YouTube (no spoilers!).

The production team is very honored and proud to have had the opportunity to work with our guest justices of the inaugural Space Court, which includes President Dr. Alissa Haddaji (Harvard University), Justice David Koplow (Georgetown University), and Justice Chris Newman (Northumbria University). Furthermore, our guest applicant and respondent space lawyers are distinguished in their own right having notable experience as practitioner space lawyers. We are greatly honored and appreciative to have Ryan Noble act as Advocate for the Applicant and Jessica Noble act as Advocate for the Respondent.

2.2 Production of Stellar Decisis - Lessons Learned

In the writing and production of the pilot episode of Stellar Decisis, the authors followed a process that included the drafting of a *compromis*, a bench brief, a script, a vetting process for the draft materials with leading space law experts, the recording of the actors, the animation, and music production. The production process took approximately one year to complete, and we learned from trial and error how to bring Stellar Decisis to life. Our focused and deliberate production process enabled greater insights into utilizing an animation format for educational purposes as well as how to approach the factual and legal elements of any Stellar Decisis episode. Through this process we learned the following:

- Vet everything! Do not take for granted facts because they could turn the applicable law.
- Subject matter experts are key to a successful editing process.
- Have a clear picture of story elements including graphic design.

- Do not take for granted the power and opportunity for community building. Know your audience and learn to adapt materials to tell a story clearly and passionately.
- Deliberative conversation works. The guest judges for the pilot episode worked well together and presented the material and arguments clearly.
- You can win copyright strikes on YouTube.
- Stellar Decisis required a group effort and its success is a reflection of the individuals who made the pilot a reality.
- Animation is expensive. Fundraise through viewer support, like on Patreon or the sale of related merchandise.
- Educators like new ways of teaching a subject - create content. Disrupting educational practices are a good thing.
- Peaceful dispute resolution is important and critical to the future administration of space law.
- Utilizing social media platforms to market and distribute space law content is the reality that the space community must accept. Young people utilize and consume social media content in large quantities. The space law community must adapt to these new realities to reach future space lawyers.

The production of Stellar Decisis is a group effort and we were fortunate to find and work with an amazing and talented set of people that helped the authors produce and make freely available the pilot episode on YouTube. Notable aspects of the production of the Stellar Decisis pilot include:

- Christopher Hearsey and Nathan Johnson produced the pilot episode, served as the law clerks, and wrote the script for the pilot episode.
- Christopher Hearsey and Nivedita Raju served as lead writers for the pilot episode.
- Meggie Sheehan animated the pilot episode and first-time animation took approximately eleven months.
- Music production was led by Charlie Harris, who composed the opening music, with lyrics written by Christopher Hearsey. The opening music theme is a parody of David Bowie's 'Life on Mars'. Ben Corbin provided additional music production support.
- The Stellar Decisis writing and production team held five moot sessions with space law experts over a period of two months to complete the script and bench brief.

3. Measuring the Expectations in Space Law Education – 2023 SCF Space Law Education Survey

While it is true that there has yet to be a body of case law relating to the adjudication of disputes in space, focusing on how courts could resolve disputes arising from space activities serves as a differentiating educational vehicle to provide context to space activities and bring different aspects of the practice of space law to life. SCF created Stellar Decisis to contextualize peaceful dispute resolution and promote its importance to the teaching and learning of space law. To refine Stellar Decisis' usefulness in the classroom, SCF seeks to survey space law educators about, for example, their curriculum and solicit their opinions on which skill sets and expertise are expected in the practice of space law. In addition, SCF seeks to survey members of the professional space law and policy communities to evaluate and report on opportunities, for example, to practice space law and as well as the types of education and training expected in professional space law work. The results of each survey will be analyzed and compared to evaluate the degree of alignment between space law education and training and expected professional skill sets and expertise. SCF will open the private survey on 19 September 2022, and the survey will stay open until 2 June 2023. To request the survey link, please email survey.stellardecisis@spacecourtfoundation.org with the subject heading "Request Stellar Decisis Education Survey". Survey participants are anonymous, and data will be made public without attribution to individual participants.

SCF believes that it is important to measure educational outcomes to evaluate whether the space law community is providing opportunities for students to compete for employment opportunities and whether space law educators are training today's students to keep in line with the growth in the demand for skills and expertise relating to the laws and policies that govern space activities. SCF seeks information from the professional space community to measure more effectively expectations, needs, demands, and ideas relating to the education of future space lawyers and the types of resources space law educators could utilize in the classroom. The survey therefore considers some of the following research questions:

- What are the expectations among the space community about how disputes will arise from space activities?
- How will future disputes arising from space activities be adjudicated by future courts?
- What do space law educators believe are the skills necessary in the education of future space lawyers?
- How could social media be leveraged in the classroom to teach space law and policy?

- Is contextualizing space law around dispute resolution effective for learning space law?

SCF appreciates all the hard work of the dedicated professionals in the space community that make the practice of space law enriching and rewarding. Your opinions are invaluable to the future workforce and the administration of the rule of law. We therefore invite and encourage all professionals and educators in the space community to return a survey before 2 June 2023.

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