

SPACE, CYBER, AND TELECOMMUNICATIONS LAW

2018-2019 Annual Report



COLLEGE OF LAW

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Matt Schaefer



Justin (Gus) Hurwitz



Elsbeth Magilton

In assembling this Annual Report

we appreciated the opportunity to review major accomplishments and growth of the Space, Cyber, and Telecommunications Law (SCTL) program over the past eleven years.

For readers unfamiliar with the program, the SCTL program was established in 2007 largely in response to interest by the U.S. Air Force in establishing a U.S. based program in space law to which it could send Judge Advocate General (JAG) officers. At the time it was established, the law school recognized the narrowness of the field and decided to focus the program more broadly on space law as the then-current domain of interest to the Department of Defense (DoD), on cyberlaw as the likely next domain of interest both to DoD and the nation generally, and on telecommunications as a common foundation necessary to both.

The core focus of the program has been, and continues to be, educating a cohort of 8-12 LL.M. students each year. The majority of these students are JAG officers, but we also have a number of civilian students in the program, including in our online program. One of our current goals is to increase J.D. enrollment in the classes offered through the program, as well as to develop interdisciplinary programs that support other initiatives throughout the university and that channel undergraduate students to the law school.

In addition to the student mission, the program faculty (and students) are active researchers, and the program organizes various events, including an annual conference in Washington, D.C. (one of the largest regular events focusing on space law), an annual conference in conjunction with USSTRATCOM (on DoD operational issues relating to space, cyber, and related issues), and an annual conference in Lincoln focusing on telecommunications and cyber issues as they impact the region.

We appreciate continued support from the state of Nebraska, the University of Nebraska, our board members, and many of our friends and colleagues across the world.

Thank you,

Professor and Co-Director Matt Schaefer, Professor and Co-Director Justin (Gus) Hurwitz, and Executive Director Elsbeth Magilton



Brian Israel and Oonagh Sands debate space mining and property rights



Courtney Bailey shared "5 Big Ideas in 10 Minutes"

11th Annual University of Nebraska Washington, D.C., Space Law Conference, "Intersections of Commercial and National Security Space"

The 11th Annual University of Nebraska Washington, D.C., Space Law Conference, "Intersections of Commercial and National Security Space" was held Friday, September 21, 2018, at the National Press Club. New to 2018, the conference was co-sponsored

by the American Society of International Law (ASIL) and the American Branch of the International Law Association (ABILA) Space Law Committee. Panels included discussion on Commercial Space Law Reform, Cybersecurity Threats to Satellites,

and Security Challenges in Space.

Also new to 2018, the conference included, "The Great Mining Debate" posing the question of whether there is an issue with space mining and property rights in extracted resources. The debate featured Brian Israel, General Counsel, Planetary Resources v. Oonagh Sands, Senior Associate, Fietta International Law (Ireland).

During the lunch hour, Courtney Bailey, NASA Associate General Counsel (IP/Commercial), presented "5 Big Ideas in 10 Minutes." Matt Schaefer and Elsbeth Magilton then joined her on stage to announce the program was awarded a \$25,000 NASA grant to create a nationwide network for students interested in space law.



Professor Gus Hurwitz moderates a panel on satellite cybersecurity

D.C. Space Law Stakeholder Roundtable Conversation

Prior to the 11th Annual University of Nebraska Washington, D.C., Space Law Conference, the program again hosted a private stakeholders roundtable conversation on commercial space law reform. The group included industry attorneys,

regulators, and academics. The event is an invite-only and off-record opportunity for diverse stakeholders to have frank conversations about the issues that impact their work and their ideas for solutions.

First Annual Women's Mixer in Washington, D.C.

Nebraska Law's Women's Initiative events and the "New! Now. Next?" Acceleration Academies expanded rapidly in 2018, including partnering with Ms. J.D. The Initiative's purpose is to provide career development support and services to female attorneys in the Midwest, and this year the Space, Cyber, and Telecommunications Law program joined forces with

the Initiative. The Program invited women in the D.C. area who practice in the areas of aerospace, defense, and technology to join Elsbeth Magilton (executive director of the Space, Cyber, and Telecommunications Law Program) and Dean Molly Brummond (assistant dean for Student and Alumni Relations and creator of the Nebraska

Law Women's Initiative) to learn about what Nebraska Law is doing in the Midwest, provide feedback and insight, and of course network with other professional women in these unique fields.

The event was kindly hosted by Husch Blackwell LLP in their downtown D.C. offices.



Law students from around the U.S. learned about space law and international research at the NASA Weekend Workshop hosted at Nebraska Law

Program Awarded Major NASA Space Law Grant



In September, the Space, Cyber, and Telecommunications Law program received a NASA Space Law grant to create a nationwide network of students, faculty and practitioners interested in space law and policy.

"NASA understands workforce development is crucial to the United States' prosperity in space. We hope to foster a great pool of attorneys to pull their legal workforce from," said Elsbeth Magilton, executive director of the Space, Cyber

and Telecommunications Law program in the University of Nebraska College of Law. "The key objective of the Space Law Network is to implement a system to support, educate and provide opportunities to law students across the country interested in space law and policy."

The project was facilitated by the NASA Nebraska Space Grant office at the University of Nebraska at Omaha, led by Scott Tarry, director, and Michaela Lucas, associate director, and primarily implemented by Nebraska's space law program, led by Matt Schaefer, co-director and program faculty, and Magilton. "This grant allows the Space Law Network to fund legal internships at NASA, as well as bring students from all over the U.S. to numerous national conferences, where they'll hear from leading scholars," Schaefer said.

The project's first event was bringing a diverse group of law students to the American Branch of the International Law Association's International Law Weekend in New York. Over 74 individual applications were received and the team selected a group of 15, representing over 14 different states. Students attended sessions on space law, including a career-building workshop lunch.

In December, the Space Law Network brought a group of students to Washington, D.C., for an annual symposium. The International Institute of Space Law's Annual Galloway Symposium brings together speakers and panelists from all over the United States who come together to share their knowledge and thoughts on the pressing issues in space today. Prior to the symposium, students

visited D.C. firm Fish and Richardson for a career session and "space law crash course" with Elsbeth Magilton, Dennis Burnett (Nebraska Law J.D. alumnus), and NASA attorney Victoria Kauffman.

In January and February, law students applied for Space Law Network-funded NASA internships at eight different centers across the country. All eight interns had the opportunity to serve NASA over their summer, gaining practical legal experience. The grant provided a stipend to these students, creating an opportunity for many students who are not in a position to apply to unpaid government internships.

The grant is also focused on becoming a scholarly resource for students and faculty, hosting a weekend workshop April 6-7, 2019, intended to help students and new scholars focus on publication and scholarly writing in the field of space law. The workshop featured a mixture of sessions detailing the international and domestic

foundations of space law, including multiple practice focus areas, while highlighting holes in current policy or scholarship ripe for discussion. The workshop also included working sessions, dedicated to developing topics and outlines, and sessions on legal research and "how-to" publish in a variety of forums. In addition to the weekend workshop, the Space Law Network created a robust online platform with research guidance, introductory information to the field, and online resource links. The video resource catalog, featuring internationally prominent experts, was managed and led by NASA Space Law Network student researcher Amanda Berman.

The Network also assembled a world class Cooperation Council to advise on all these activities, including Caryn Schenewerk (Senior Counsel and Director of Government Affairs, SpaceX and Georgetown Law School Adjunct Professor of Space Law), Jeanne Suchodolski (International Space University, Nebraska Law

LL.M. alumna, 2015), Christina Mulligan (Professor of Law, Brooklyn Law School), Nate Woodford (Corporate Counsel, Firefly AeroSpace, Nebraska Law J.D. alumnus, LL.M. student), Mary Sandy (Virginia Space Grant Consortium Director), Henry Hertzfeld (Professor, Elliott School and Law School, GWU), Jeff Brooks (Director of Externship Programs and Assistant Professor of Professional Practice, LSU Law Center), Ellis Brazeal (Partner, Jones Walker and Adjunct Professor, University of Alabama), D'Lorah Hughes (Director of Externships, University of California-Irvine School of Law), and Sajani Desai (Assistant Career Service Director and Externship Director, University of Miami Law School).



Frans von der Dunk Presents at 61st Colloquium on the Law of Outer Space in Bremen, Germany

Professor von der Dunk presented and participated in the 61st Colloquium on the Law of Outer Space in Bremen, Germany, as part of the 69th International Astronautical Congress (IAC), October

1-5, 2018. In 2019, the IAC will be held in Washington, D.C. Professors von der Dunk, Schaefer, Beard, and Executive Director Magilton have all been accepted to present at the event.

International Institute of Space Law Galloway Symposium

Nebraska Law continued its annual support of the International Institute of Space Law's Eilene M. Galloway Symposium for its 13th symposium, "Critical Issues in Space Law" on December 5 at the Cosmos Club in Washington, D.C. The conference is organized and run by Nebraska Law Space, Cyber, and Telecommunications

Law Advisory Board President and Adjunct Professor Dennis Burnett. Nebraska Law also brought a group of law students from across the U.S. to the symposium as part of the NASA Space Law Network project.

Professors Jack Beard and Matt Schaefer both spoke on panels at the symposium, including

moderating a panel on careers in space law, "Careers in Space Law -What does a Space Law Career Involve? What Paths to Follow?" which featured a variety of different professionals including LL.M. alumna Jessica Tok who is currently a policy advisor in the office of space policy for the secretary of defense.



NASA Space Law Network Grant travel stipend awardees attended the International Law Weekend with Professor Schaefer and Exec Dir Magilton

Tallinn Manual." He emphasized the need to carefully apply international law to a wide

spectrum of information operations which may affect space activities and to avoid

analysis that begins by labeling diverse uses of information as "cyber weapons."



NASA Space Law Network Grant travel stipend awardees attended the Galloway Symposium and joined IISL treasurer and Nebraska Law Adjunct Professor Dennis Burnett for a photo

Frans von der Dunk Organizes European Centre for Space Law Practitioners Forum

The 2018 European Centre for Space Law (ECSL) Practitioners' Forum was held on March 23, 2018, at the European Space Agency Headquarters in Paris, on the topic of "Cyber Issues in

Space: Legal Tools." Professor von der Dunk served as the coordinator of the forum, and it was attended by over 120 participants, featuring many international speakers. Professor

Jack Beard was the forum's final presenter, speaking on "International Law Applicable to Military Activities in Outer Space, Cyber Operations and the Shortcomings of the

Schaefer and Beard Lead at the ABILA International Law Weekend

At the American Branch of the International Law Association annual International Law Weekend, held at Fordham Law in New York City in October each year, Professors Schaefer and Beard again hosted multiple

panels and sessions. Schaefer's panel focused on space law and treaty interpretations while Beard moderated the "War, Peace, and International Law on the Korean Peninsula" panel. Nebraska Law also brought

a group of law students from across the U.S. to the event as part of the NASA Space Law Network project, hosting an additional session for them on career development.

Beard and Magilton Co-Lead the American Society on International Law Space Law Interest Group

The ASIL Space Law Interest Group (SLIG) is a professional group fostering interest and engagement in the field of space law, and Nebraska Law is heavily involved. Professor Jack Beard continues to serve as the group's co-chair and Elsbeth Magilton moved from vice chair to a co-chair position in March 2019. The outgoing co-chair, George Anthony Long, is a Nebraska Law LL.M. graduate. At the Annual Meeting in March, SLIG supported the panel entitled "International

Law as an Instrument to Regulate the Behavior of Non-State Actors in Areas Beyond National Jurisdiction," as Nebraska space law expert Professor Frans von der Dunk joined the panel. Jack Beard and George Anthony Long also continue to serve as members of the ASIL Signature Topics Initiative Steering Committee "Beyond National Jurisdiction: Human Activities in the Oceans, Polar Regions, Cyberspace and Outer Space." Upcoming SLIG activities include: planning

a Mentorship Brunch in October, when many professionals in the space sector will be in Washington, D.C., for the International Astronautical Congress, and; co-sponsoring the Annual Nebraska Law Space Law Conference on Friday, October 18, 2019, at the National Press Club.

Beard Presents at George Mason Space Law Symposium

This November, Professor Beard presented at a Space Law Symposium “Above the Horizon: Developments and Challenges to National Security in Space Law and Policy,” at the National Security Institute (NSI) at George Mason Law School in Arlington, Virginia. The Symposium featured three distinguished experts in space law and policy as panelists: Dr. Brian Weeden, the director of program planning at Secure World Foundation; David Koplow, a professor of international and national security law at Georgetown University Law Center; and Professor Beard. NSI Visiting Fellow Kristen Hajduk served as moderator.



Beard Leads Woomera Manual Workshop

The Woomera Manual project is an international research project that is spearheaded by The University of Adelaide, the University of Exeter, the University of Nebraska, and the University of New South Wales-Canberra. The mission is to develop a Manual that objectively articulates and clarifies existing international law applicable to

military space operations. The Woomera Manual gathers together legal experts specialized in the fields of international space law, international law on the use of force and the law of armed conflict, together with technical experts. Experts contribute in a personal capacity on the basis of their own conclusions as to

the state of the law, independent of the official position or preference of any State or organization. These experts, including Professor Jack Beard and more recently Professor Frans von der Dunk, work collaboratively and meet in four distinct drafting workshops.

Woomera Manual project participants pose for a group photo this February at the Nebraska Union



Woomera Manual participants taking a vote on manual provisions as part of the drafting process

Nebraska Law hosted one of these workshops in February 2019. Despite one of the state’s largest and most intense blizzards, the Woomera Manual experts gathered at the University of Nebraska Student Union for four days of drafting and meeting, pushing the Manual forward. While in Lincoln, the group also enjoyed the best food and shops the Railyard and Haymarket District has to offer.

Additionally this year, together with representatives of the Australian Embassy in Washington, D.C., Professor Jack Beard briefed the staff of the

U.S. Senate Armed Services Committee on the Woomera Manual on the International Law of Military Space Operations on December 5, 2018.

The full set of draft rules and associated commentary will undergo a process of State consultation and engagement, which is scheduled to occur in 2020. Known as the Soesterberg Process, this State engagement with the Woomera Manual will be conducted at the invitation of the Kingdom of the Netherlands, hosted by the Royal Netherlands Air Force.

Schaefer Teaches Course at the University of Miami

Professor and Program Co-Director Matt Schaefer again taught a mini-course on regulating and incentivizing commercial space activity at the University of Miami School of Law in March 2019. Schaefer is a regular visiting professor at Miami Law, teaching space law.



The 3rd Annual Advanced Operational Law Conference with U.S. Strategic Command, “Defense Planning and Legal Practice in 21st Century Domains”

For the third year, Col. Darren C. Huskisson, Staff Judge Advocate, U.S. Strategic Command, invited military members and select academic scholars to Nebraska for this annual conference. The ongoing conference objective is to share best practices on strategic level international and operational law, with a focus on the legal challenges facing current practitioners. The conference is intended to be a forum to discuss the evolving space domain, nuclear weapons, and to increase the understanding of potential adversaries and issues relating to the law of war. The conference will provide an opportunity to develop professional relationships with counterparts within the U.S. government and the wider academic community. This conference is presented annually by U.S. Strategic Command with support from the University of Nebraska College of Law Space, Cyber, and Telecommunications Law program and the National Strategic Research Institute at the University of Nebraska. In 2018, the September conference was held in Bellevue, Nebraska.

Author and scholar P.W. Singer keynoted the conference. Mr. Singer is a strategist at New America and an editor at Popular Science magazine. Mr. Singer’s novel, *Ghost Fleet: A Novel of the Next World War*, is a technothriller crossed with nonfiction research and has been endorsed by people who range from the Chairman of the Joint Chiefs to the co-inventor of the Internet to the writer of HBO Game of Thrones. His past work includes serving at the Office of the Secretary of Defense, Harvard University, and as the founding director of the Center for 21st Century Security and Intelligence at Brookings, where he was the youngest person named senior fellow in its 100-year history.



Current students and alumni of the University of Nebraska gathered during a break for a group photo



Dr. Tyler White leads a panel featuring Jenny Town, managing editor of Stimson's 38 North, a website devoted to policy and analysis on North Korea



USSTRATCOM Staff Judge Advocate Col. Darren Huskisson welcomes attendees



Author and keynote speaker Peter Singer signs a copy of his book *Ghost Fleet* for a conference attendee

The second conference keynote was from Dr. Brian Weeden, the director of program planning for Secure World Foundation who has nearly two decades of professional experience in space operations and policy. Dr. Weeden directs strategic planning for future-year projects to meet the Foundation's goals and objectives, and conducts research on space debris, global space situational awareness, space traffic management, protection of space assets, and space governance. Our final keynote was delivered by Brigadier General Susan K. Escallier, Assistant Judge Advocate General for Military Law and Operations.

USSTRATCOM Fellows Training

The Space, Cyber, and Telecommunications Law program annually supports the USSTRATCOM Fellows training sessions. The fellows program was developed by the National Strategic Research Institute (NSRI), University of Nebraska at Omaha (UNO) and USSTRATCOM in 2014. It is designed to further develop some of the nation's top civilian national security specialists in support of the USSTRATCOM organizational transformation, to broaden mission awareness and to develop leadership skills. During the program, the fellows learn mission-oriented skills from national security

and defense experts. The course emphasizes team building, collaboration management, data-driven decision making and project management.

Nebraska Law's 2019 fellows program included an intelligence law primer from Professor Jack Beard, followed by a session on the legal analysis of military operations by USSTRATCOM Staff Judge Advocate Colonel Darren Huskisson. Afternoon sessions featured discussion of innovative technologies with Professor Gus Hurwitz and a visit to the University of Nebraska NIMBUS drone lab. Finally, the fellows enjoyed a conversation with Dr. Rupal Mehta from

Magilton joins the European Centre of Excellence on Countering Hybrid Threats

In spring 2019, Magilton was invited to join the European Centre for Excellence in Countering Hybrid Threats expert pool and attend the first legal working group session during the Legal Resilience conference at the University of Exeter in April. The European Centre of Excellence for Countering Hybrid Threats is an intergovernmental think tank

based in Helsinki, Finland, focusing on responses to hybrid threats under the auspices of the European Union and NATO. Magilton's contributions and focus discuss the trend of international law as an operational tool, providing legal analysis in an operational context, and space law.

USSTRATCOM Deterrence Symposium Panel, "New Thinking on Deterrence and Academic Alliance Panel"

In August, Space, Cyber, and Telecommunications Law Program Executive Director Elsbeth Magilton represented the Deterrence and Assurance Academic Alliance (DAAA) at the Annual U.S. Strategic Command (USSTRATCOM) Deterrence

Symposium in front of 750 people, including the USSTRATCOM Commander General Hyten and multiple generals from the U.S. military and those of our allies, featuring impressive student research the DAAA selected to highlight at this



Exec Dir Magilton moderates a panel at the USSTRATCOM Deterrence Symposium

larger conference. The highlighted papers covered a range of topics, from cyber threats facing NC3 to explaining conflicts that fall short of war, from analyzing how urban geography shapes nuclear strategy to mining the rhetoric of North Korea.

In Magilton's words, "Their work represents what the DAAA does best: engage a new generation of deterrence thinkers and push the boundaries of traditional thinking."

Magilton Awarded Inclusive Excellence Grant for Women in National Security



An interdisciplinary team from the College of Law and the Department of Political Science was awarded one of the University of Nebraska's Inclusive Excellence Development Grants from the Office of Diversity, Access and Inclusion in Spring 2019. Magilton and political science faculty member Dr. Tyler White, will be implementing their proposal, "Recruiting, Retaining, and Supporting Women in the National Security Field" over the next two semesters. The proposal seeks to establish student

programming and resources to provide career development and field-specific mentorship to women engaged in national security.

The project will focus on three core objectives to achieve their desired impact: visibility of female role models in the field, field-specific mentorship, and professional skills building. Efforts will include public panels, career development workshops, and more cross-department collaborations.

Beard Leads Workshop Session for the ABA National Security Committee

In January, Professor Jack Beard led a session at a Law and Policy Workshop entitled "Defending America's Place in Space: Future Threats and Rules," co-sponsored by the Nonproliferation Policy Education Center and the American Bar Association (ABA) Standing Committee on Law and National Security, at the Army and Navy Club in Washington, D.C.

TELECOMMUNICATIONS AND THE DIGITAL DIVIDE



Hurwitz and Magilton Host Telecom Student Tour

This fall, Professor Gus Hurwitz and Space, Cyber, and Telecommunications Law Executive Director Elsbeth Magilton took students and technology staff on a four-day road trip coordinated with the Nebraska Telecom Association, Comcast, and CableLabs. Their goal was to give students and staff exposure to the business and regulatory side of a technologically-dynamic and highly regulated industry. Rural telecom providers are sophisticated businesses operating here in the middle of America, on the front lines of many regulatory challenges. Their first stop was Hamilton Telecommunication in Aurora, Nebraska, with Nebraska Law alumnus Jim Ediger. There, the group discussed Hamilton Relay, a nationwide provider of relay services for the deaf and speech impaired, and Hamilton NG911 which provides next-gen 911 services. Afterward, the tour drove to Louisville, Colorado, to visit CableLabs, meeting their legal leadership, Mark Walker and Rob Alderfer. Discussion included the state of cable gigabit services and cable broadband generally, as

well as their services and business. While there, the group went inside a RF Anechoic Chamber (wireless performance test chamber), experiencing complete sound deprivation.

The following day, the group pivoted back to Nebraska to visit Hemingford Cooperative Telephone Company, where they saw fiber line conversion in action with their host, Tonya Mayer. After a short drive, the group went on to tour Consolidated Companies with Brian Thompson in Paxton, Nebraska. The sessions there included a visit to a cell tower and a feedlot tour, introducing what one student termed the IoC—the Internet of Cows. Each cow in the lot has a “cow fit bit” like tag monitoring it. Transmission of the data means massive broadband needs—a point brought home to the group time and time again throughout the experience.

The final day of the tour brought the group to an area farm owned by the family of Kara Ronnau ('11) of the Aurora Cooperative, where they learned how broadband access and telecom infrastructure is vital to agriculture at her family's farm.

The Rural Telecom Tour is poised to become an annual event, combining the programs dedicated to the state of Nebraska and to innovative technologies.



Professor Hurwitz, Exec Dir Magilton, students and staff learn about “smart farming” at a farm owned by the family of Kara Ronnau ('11)



The group gathered in front of a cellular tower, directly next to a major feedlot for cattle production

Students Visit the NTIA at the U.S. Dept of Commerce

Nebraska Law students in Washington, D.C., for the Annual Space Law Conference had the opportunity to visit the National Telecommunications and Information Administration (NTIA) in October 2018. Students heard from John Morris, the associate administrator for OPAD, Derek Klopik, the spectrum lead from the Assistant Secretary's Office, and Tim May who handles public safety for the Assistant Secretary's Office and covered FirstNet and other public safety functions. Students enjoyed the opportunity to discuss cybersecurity, spectrum and a wide variety of issues the administration faces.



Faculty and students gathered for a group photo after the visit

The Rural Digital Divide: Challenges and Solutions Conference



Nicol Turner-Lee, Brookings Institute, addresses the conference

The rural digital divide is one of the most pressing, and difficult to solve, public policy issues in America today. The 2019 “Rural Digital Divide: Challenges and Solutions” conference brought together experts from around the country that have been involved in digital divide policy, to discuss the challenges and potential solutions to this problem. Particular attention was given to the role of wireless technologies in rural America and federal programs funding.

Panels included robust discussion of the challenges facing regulators rural services providers, the state-federal interface, the role of wireless in rural America, and proposed solutions. The conference also included a legislative update by Loel Brooks, Brooks, Pansing-Brooks PC LLO and information about the Nebraska Rural Futures Institute from Connie Reimers-Hild, Rural Futures Institute executive director.

the New America Open Technology Institute, the Nebraska Rural Futures Institute, and the Nebraska Telecommunications Association.

The conference and roundtable were sponsored by Microsoft, Comcast, the International Center for Law and Economics,



Hurwitz Presents at Silicon Flatirons Conference

Professor Gus Hurwitz attended and presented at “Internet Platforms’ Rising Dominance, Evolving Governance,” an annual technology policy conference exploring emerging forms of governance of platforms, evaluating the appropriate strategies for overseeing Internet platforms, held at Silicon Flatirons at the University

of Colorado at Boulder. Hurwitz participated in a debate on whether “Privacy Law Should Focus Only on Economic Harm,” and gave a talk on “The Misdiagnosed Need for User Control and Autonomy in the Platform Economy” as part of the “User Control and Autonomy in the Platform Economy” panel.



Stakeholders participate in the Second Annual Roundtable

Second Annual Rural Digital Divide Stakeholder Roundtable

Following the 2019 “Rural Digital Divide: Challenges and Solutions” conference, the program hosted a local, regional, and national stakeholder roundtable for the telecommunications industry led by Professor Gus Hurwitz at the University of Nebraska–Lincoln Student Union. The goal was to foster organic, candid discussion between stakeholders who may not often have the opportunity to interact. The

discussion was moderated to keep it from moving too far afield or getting too deep into the weeds, but there were no panels or formal presentations. Participants included representation from the Nebraska Telecommunications Association, Microsoft, the FCC, Iowa Communications Alliance, Great Plains Telecommunications, Century Link, the Nebraska Public Service Commission, and more.



CLASS OF 2018-2019 STUDENT EXPERIENCE AND RESEARCH



The 2018-2019 Space, Cyber, and Telecommunications students with faculty and leadership

Public Policy Speakers Series

Professor Hurwitz again hosted the Government and Policy Speaker series, bringing in professionals working in policy in Washington, D.C., to Lincoln to meet with students. In fall 2018, Kristi Boswell (senior advisor to Sonny Perdue, Sec. of Ag) and Megan Reiss (R Street Institute) met with law students in class and over lunch-hour sessions. This spring, the speaker series invited three Nebraska Law alumni back to Lincoln for two sessions, one at the college and one focused on undergraduate students at the Nebraska Student Union. Taylor Brooks (strategic cyber intelligence analyst, Booz Allen Hamilton, J.D. '15), Bijan Koochmaraie (Counsel for Committee on Energy and Commerce, United States



Alumni participate on a Government and Policy Speaker Series spring panel

House of Representatives, J.D. '14), and Sarah Morris (director, New America Foundation Open Technology Institute, J.D. '09, LL.M. '10) discussed what it is

like to work on policy issues in Washington, D.C., and their career paths.

Second Nebraska Law Student at Blue Origin



Summer 2018 saw the first J.D. student, Lyndsay Hurilla, head to the Seattle, Washington, area to intern with the Blue Origin legal team. Blue Origin, LLC is an American, privately-funded aerospace manufacturer and sub-orbital spaceflight services company headquartered in Kent, Washington. Following in Hurilla's success, Amanda Berman was selected to intern in the legal office in summer 2019.



Student Wade Burkholder meeting FCC Chairman Ajit Pai

Burkholder Completes Spring Semester at the FCC

J.D. student Wade Burkholder spent the spring semester of 2019 working in Commissioner Carr's office at the Federal Communications Commission. There, he had the opportunity to work on policy, attend hearings, and engage with regulators and law makers in Washington, D.C.



Adler Spends Fall 2018 at NASA Kennedy Launch Services

2018 J.D. graduate Kevin Adler was hired to intern at the Launch Services Program at NASA's Kennedy Space Center. Adler is the third Nebraska Law student to be placed in the office in the past eighteen months, following Lyndsay Hurilla and Nate Woodford.

Firefly Fellowship Turns into Corporate Counsel Position

J.D. alumnus and current LL.M. student Nate Woodford started at Firefly Aerospace as a Legal Fellow directly after finishing his internship at the Launch Services Program at NASA's Kennedy Space Center in 2018. Shortly after beginning there, Woodford was promoted to full time counsel, supporting the private aerospace firm, based in Austin, Texas, that develops small and medium-sized launch vehicles for commercial launches to orbit. In fall 2019, Executive Director Elsbeth Magilton visited the company and their test launch sites.



Magilton visited the Firefly test facilities

DoD General Counsel Program Continues

Professor Jack Beard annually supervises externships at the Department of Defense General Counsel's Office, sending Nebraska Law J.D. students to the Pentagon. This year, the Honors Externs were Nichole Costanza and Taylor Hayes (Fall Semester 2018) and Cody Nickel (Spring Semester 2019). The program, under Professor Beard's oversight, continues to be a valuable experience for students each year.

First DIA General Counsel Student Prepares for D.C.

Andrew Wurdeman has been selected to serve as an Honors Extern in the Office of the General Counsel of the Defense Intelligence Agency (DIA) for Fall 2019, after going through the security clearance process during the academic year. He is the first Nebraska Law J.D. to hold an externship at the DIA.

Streetman Promotion

2018-2019 LL.M. student Amanda Skylar Streetman was promoted from Captain to Major in the United States Air Force JAG Corp during her time at Nebraska Law. Professor Jack Beard, a retired Army JAG officer, officiated her promotion ceremony, which was held at the College of Law.



Major Streetman with her peers after her promotion

Papers and Thesis Projects



Active duty JAG students meet at Professor Beard's home for dinner

Thomas Burks - "Cyberspace, the Jus ad Bellum, and the Imperative of Precise Analogy" supervised by Professor Jack Beard.

Alix Holtsclaw - "Responding to Hostile Acts Below the 'Armed Attack' Threshold: State Practice in the Physical and Cyber Domains" supervised by Professor Jack Beard.

Bret White - "China's Legal Warfare Strategy in Outer Space and Cyberspace: The Consequences

for International Law" supervised by Professor Jack Beard.

Trent White - "Taking it to the Bank: Does cyber action directed towards financial data during a NIAC trigger LOAC, and if so, does it violate it?" supervised by Professor Jack Beard.

Justin Barrow - "The Preparedness of the Current Legal and Administrative Framework to Address Cyber-Attacks on Satellites" supervised by Professor Matt Schaefer.

Pat Clary - "Redefining Data Sovereignty" supervised by Professor Gus Hurwitz.

Skylar Streetman - "Cyber Warfare, the Law of Armed Conflict, and the CDM" supervised by Professor Gus Hurwitz.

Nate Woodford - "Economic Nationalism in Space" supervised by Professor Matt Schaefer.

ADVISORY BOARD

- **Dennis Burnett** (Chair), Retired Vice-President, Trade and Export Controls, EADS North America
- **Tim Hughes**, Vice-President and Chief Counsel, SpaceX
- **Franceska Schroeder**, Schroeder Law PLLC, (former Principal, Fish & Richardson)
- **Nicol Turner-Lee**, Fellow at Brookings' Governance Studies Program's Center for Technology Innovation
- **Eric Carstenson**, President, Nebraska Telecommunications Association
- **Fred Campbell**, Fellow, Competitive Enterprise Institute, (former Wireless Bureau Chief, FCC)
- **Bill Ojile**, Partner, Armstrong Teasdale (Denver)
- **Steve Avila**, Senior Legal Counsel, The Spaceship Company (A Virgin Galactic Affiliate)
- **Peter Marquez**, Partner, Andart Global, (former Vice-President for Global Engagement at Planetary Resources)

FACULTY & LEADERSHIP

2018-2019 Academic Year Scholarly and Notable Publications by the Space, Cyber, and Telecommunications Law Team



Professor Justin (Gus) Hurwitz:
ghurwitz@unl.edu
@GusHurwitz
Post-Cartesian Antitrust, Nebraska Law Review (forthcoming 2019)

Madison and Shannon on Social Media, Business, Entrepreneurship & Tax Law Review (forthcoming 2019)

Response to McGeveran's The Duty of Data Security: Not the Objective Duty He Wants, Maybe the Subjective Duty We Need, Minnesota Law Review Headnotes (2019)

Chevron's Political Domain: W(h)ither Step Three?, DePaul Law Review (2019)

Telemarketing, Technology, and the Regulation of Private Speech: First Amendment Lessons from the FCC's TCPA Rules, Brooklyn Law Review (2018)

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Professor Matthew Schaefer:
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Professor Frans von der Dunk:
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FACULTY & LEADERSHIP



Professor Jack Beard:
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Professor Jack Beard was one of the five founding leaders of the Woomera Manual

on the International Law of Military Space Operations, an international research project spearheaded by The University of Adelaide, the University of Exeter, the University of Nebraska College of Law, and the University of New South Wales-Canberra. Its mission is to develop a Manual that objectively articulates and clarifies existing international law applicable to military space operations. Its publication is expected in 2021.

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Executive Director Elsbeth Magilton:
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NEBRASKALAWSTORE.COM SPACE, CYBER, TELECOMMUNICATIONS LAW PROGRAM APPAREL



DATE	SPACE, CYBER, AND TELECOM LAW PROGRAM 2018-2019 ACTIVITIES	WHERE
8/2	Executive Director Magilton moderates a panel at the 2018 U.S. Strategic Command Deterrence Symposium, "New Thinking on Deterrence and Academic Alliance Panel"	Omaha, NE
8/6-10	Professor Beard participates in the first workshop of core experts drafting the Woomera Manual on the International Law of Military Space Operations at the University of Exeter	Exeter, England
8/26	Professor von der Dunk is teaching the summer course on European Space Law and Policy at the University of Helsinki, organized by ECSL	Helsinki, Finland
9/5-7	Nebraska Law's Advanced Operational Law Conference with U.S. Strategic Command, "Defense Planning and Legal Practice in 21st Century Domains," organized by Executive Director Magilton, Professor Beard presents	Offutt AFB, Bellevue, NE
9/14	Professor von der Dunk presents the keynote lecture "The Infinite Frontier: Space Colonization and the Law" at a seminar on New Frontiers at the University of Amsterdam	Amsterdam, Netherlands
9/21	Nebraska Law's 11th Annual Washington, D.C., Space Law Conference, "Intersections of Commercial and National Security Space"	Washington, D.C.
9/22	Professor Hurwitz presents a paper on "Telemarketing, Technology, and the Regulation of Private Speech" at the 46th Telecommunications Policy Research Conference	Washington, D.C.
9/27	Professor Hurwitz presents at the Nebraska Cyber Security Conference sponsored by the Nebraska Chief Information Officer, Chris Hobbs	Lincoln, NE
10/2	Professor von der Dunk presents "The European Union and Space: Space for Competition?" at the 61st Colloquium on the Law of Outer Space	Bremen, Germany
10/3	Executive Director Magilton guest lectures for the St. Mary's School of Law Women's Law Association, "Empowering Women to Bridge the Gap Between Law and Technology"	San Antonio, TX
10/3	Executive Director Magilton visits the University of Texas political science department and presents on the history of academic cooperation with the Deterrence and Assurance Academic Alliance	San Antonio, TX
10/15-16	Professor von der Dunk participates in the seminar "Space Resources: Promising and Problematic?" organized by the Radcliffe Institution, Harvard Business School/Harvard-Smithsonian Centre for Astrophysics	Boston, MA
10/18-20	Professor Schaefer hosts a space law panel focusing on treaty interpretation at ABILA International Law Weekend	New York, NY
10/18-20	Professor Beard moderates a panel on "War, Peace, and International Law on the Korean Peninsula" at the ABILA International Law Weekend and participates as a member in a meeting of the ABILA Board of Directors	New York, NY
10/20	Executive Director Magilton visits Peterson AFB to present programmatic information about Nebraska Law and visits alumni at the Air Force Academy	Peterson AFB, Colorado Springs, CO
10/21-23	Professor Hurwitz teaches a seminar on platform economics and antitrust law for Asian competition regulators as part of the GMU Global Antitrust Initiative	Tokyo, Japan

DATE	SPACE, CYBER, AND TELECOM LAW PROGRAM 2018-2019 ACTIVITIES	WHERE
10/24	Professor Hurwitz speaks to Nebraska Telecommunications Association ProMarks subgroup	Lincoln, NE
10/26	Professor Hurwitz co-hosts a conference on "Have We Exceeded the Limits of Antitrust?" with the International Center for Law and Economics and the University of Leeds	Washington, D.C.
11/9	Executive Director Magilton presents at the University of Nebraska Council of Libraries Research and Instruction Group, "Introduction to Space Law"	Lincoln, NE
11/14-17	Professor Hurwitz and Executive Director Magilton take students on a three-night trip to tour rural telecommunication providers in western Nebraska, including an extended stop in Denver to visit CableLabs and the Comcast Innovation Center	Denver, CO Alliance, NE Aurora, NE
12/5	Nebraska Law is a supporting sponsor of the Galloway Symposium presented by the International Institute of Space Law and organized by Board Chair Dennis Burnett	Washington, D.C.
1/3	Executive Director Magilton speaks on a panel at the American Association of Law Schools Annual Conference, "Alternative Sources of Revenue: Certificates, Centers and Non-Attorney Courses"	New Orleans, LA
Feb 2019	Professor von der Dunk organizes and chairs the ECSL Practitioners' Forum	Paris, France
2/8	Professor Hurwitz presents "First Principles of Regulation" at a University of Missouri symposium	Columbia, MO
2/11	Professor Hurwitz presents on "User Control and Autonomy In the Platform Economy" at University of Colorado Silicon Flatirons Conference on Internet Platforms' Rising Dominance, Evolving Governance	Boulder, CO
2/23	Professor Hurwitz co-hosts conference on "Understanding the Visible: The Undisputed Facts and Disputed Law of Platform Antitrust" with Richard Epstein at New York University	New York, NY
2/24-28	Nebraska Law hosts the Woomera Manual on the International Law of Military Space working group as one of the founding four partners, led by Professor Jack Beard	Lincoln, NE
3/13	Nebraska Law faculty training session for the USSTRATCOM Fellows Program	Lincoln, NE
3/18-23	Professor Schaefer teaches a mini-course on regulating and incentivizing commercial space activity at University of Miami Law School	Miami, FL
3/27-29	Professor Beard and Executive Director Magilton attend the American Society of International Law Annual Meeting as co-chair and vice chair of the Space Law Interest Group	Washington, D.C.
3/28-29	Nebraska Law competes in the Manfred Lachs Moot Court Competition in Washington, D.C.	Washington, D.C.
4/11	Thesis-Palooza is an opportunity for LL.M. candidates to rapid-fire present their thesis research for 7-10 minutes followed by 3-5 minutes of questions	Lincoln, NE
4/18-19	Spearheaded by Professor Hurwitz, the annual Cybersecurity and Telecommunications Lincoln Conference on closing the "digital divide," includes public panels on the first day, followed by a closed roundtable session for industry stakeholders the following day	Lincoln, NE
4/12	Professor Schaefer guest lectures on space law at Vanderbilt University Law School	Nashville, TN

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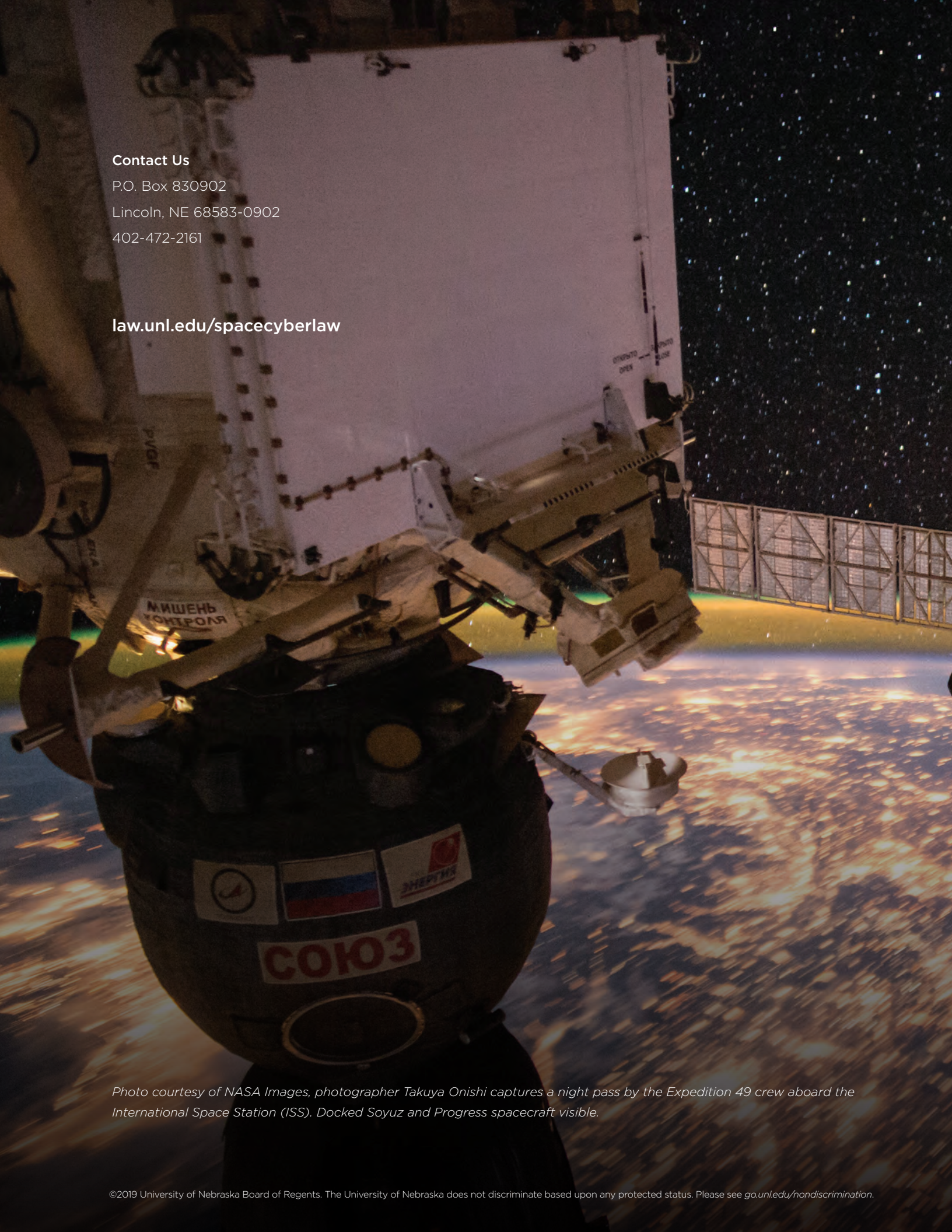


Photo courtesy of NASA Images, photographer Takuya Onishi captures a night pass by the Expedition 49 crew aboard the International Space Station (ISS). Docked Soyuz and Progress spacecraft visible.