

TWITTER NOTES ON ENTREPRENEURIAL SPACE AND EXPORT CONTROL: RED TAPE IN THE FINAL FRONTIER THE HYATT REGENCY, WASHINGTON, DC FROM 1:00 – 5:00 PM ON WEDNESDAY, 29 APRIL 2009

The following special comments are important, so please read them first!

- These notes are listed in reverse chronological order, so you need to start at tweet #90 and work your way up to tweet #1.
- I've edited the original tweets to correct misspellings and other gross errors.
- DoC = Department of Commerce
- OSC = Office of Space Commercialization
- DoS = Department of State
- ITAR = International Traffic in Arms Regulations
- TAA = Technology Assistance Agreement

Twitter Notes

1. That's all! Thanks for reading the tweets!
2. In Closing: thanks to AIAA. Don't let this be the end. Be active and help build a better world.
3. Q (Beavin to Gold): what are gold's plans after CJ success? A: have a law review article pending challenging ITAR's constitutionality.
4. Q: are there any exchanges with China now? A: not really, even after Griffin's visit. There's some science work, all publicly available.
5. Q: if China got involved with ISS, what would have to be changed? A: Congressional action would be required. NASA wouldn't be driving.
6. We can help security and commerce at the same time.
7. MGold says congress would be more willing if EAR99 status (which the bill thinks is a free for all) was more controlled.
8. ... Massive move from USML to CCL? A: DoC does a lot already, so new components moved over can be accommodated.
9. MBeavin: OSC has an acting director, director of NOAA NESDIS. New DoC Secretary is filling in team. Audience Qs: is DoC equipped to handle...
10. GNield: we facilitate as needed, incl COMSTAC working group. Q for MBeavin: DoC is traditional leader for industry. Will there be a OSC Dir?

11. Q: Will DoC support future CJs? MBeavin: yes! Q: AST is regulatory with a promotional role. What role can AST play in ITAR discussions?
12. Q: Intl space tourists don't need TAA to use ISS facilities. Use is CCL, data is controlled.
13. Q: ISS dichotomy is fascinating. HW is CCL but detail design data is ITAR controlled. A: partners can get data they need.
14. Its very difficult to hold to policies that haven't progressed with globalization tendencies of the general population.
15. ... Paying a contractor to do. Not efficient.
16. NASA prime, USA, cannot have direct technical discussions with principle ISS partner, Russia. Civil servants end up doing jobs we're...
17. Some foreign govts are reluctant to sign TAAs with NASA contractors b/c of anomaly resolution, NDAs, and non-US citizens.
18. In general, all spacecraft are captured on the USML. ISS however is listed on the CCL in 9A004. ISS payloads are classified case-by-case.
19. There are 21 NASA export control administrators across the agency. NASA is subject to the same laws as everybody else, as well as the INKSA.
20. John Hall, director of Export Control & Interagency Liaison Division at NASA HQ. NASA's experience is similar to private sector's.
21. New space commerce website: space.commerce.gov with RSS feed, search clouds, etc!
22. 36% of companies have been hurt by ITAR -free products. (Data is 2003-2006). 52% of companies feel their products should not be controlled.
23. 27% of companies have decided not to get into the global market. #1 barrier to foreign markets is export controls.
24. Results of the USAF study: big launch vehicle companies feel ITAR is a nuisance. Smaller companies feel ITAR is a big burden.
25. OSC covers comm'l remote sensing, PNT (GPS), entrepr. Space, Space Industrial Base, etc.
26. Mike Gold says mike B helped get the CJR thru the system. Overview of Office of Space Commercialization and review of data from USAF report.
27. Export controls are a tangled subject but will greatly affect US competitiveness. Mike Beavin up next.
28. AST has participated in CSIS and USAF studies. COMSTAC has new ITAR working group. We operate under old policies the skies have changed a lot
29. Need to balance security, trade. COMSTAC report from 9 yrs ago said ITAR was important. Space is a vital global economic activity.

30. GNield: quotes from psychologist "so many tangles in life are so hopeless but we have appropriate sword but laughter" is that itar?
31. Now govt panel starts. MGold is introducing the panel. George Nield (AST), Mike Beavin (DoC OSC) and John Hall (NASA OER).
32. Just confirmed with others that what we just saw was pretty unique. Mike Gold is still walking on air.
33. Critter asking questions and taking advice! 15 min break.
34. Going to be pulling in Udall on the senate side, langerman, and others. Sorry I got engrossed in the discussion. I've never seen a congress-
35. Ruppensberger will put in a bill in foreign affairs committee. DoC is on board. He's directly engaging Gold et al on specific recommendations.
36. Sees no pushback to ITAR reform just needs to get the ball rolling.
37. Talking about STEM education now. Unwise visa policies are keeping talented students out of the US.
38. Ruppensberger wants to be the champion of this issue. He's asking questions of mike Gold to fill in some gaps of his knowledge domain.
39. ITAR is counterproductive. Commerce Second Locke has given commitment to ITAR reform. Obama called for reform in his campaign.
40. Ruppensberger is talking very quickly and hard to keep up. Wrote a report given to Obama saying ITAR is an issue that needs to be resolved.
41. Had tabletop meetings on space and found we stopped putting \$ into R&D and contractors have to do it during contracts.
42. Ruppensberger trying to be the one person to pull all the players together. Says our space program is weakening.
43. Hopes Congress can pass laws to mandate ongoing review. ITAR traditionally comes up to the wrong committee. Should be foreign affairs.
44. Ruppensberger says we over-study things sometimes. Dept of Commerce said they'd work with Congress on ITAR.
45. Should always the question whether export will affect security. Nonaction in Congress is a problem.
46. MG says Congressional approval was the problem. How to fix this? AIAA Pres Dittman says list should be reviewed using exceptions.
47. ITAR is getting better because timelines in DoS are getting shorter. Changes were done by DTSA internally.
48. Telling coffee table story. Telling another story showing how itar is sometimes not sensible.
49. Security is very important. NSA, Aberdeen, port of Baltimore, all in his district. Intel committee have heard protests of space community.

50. Dutch: thanks to Steve Howell. Exciting time on Capitol Hill. Will outline itar history and reform. Intended to protect sensitive tech.
51. Congressman Ruppberger now here, serves on Approps Committee and CSJ committee and others...
52. ... Than toothbrushes.
53. Paraphrasing statement by MGold: if you protect your toothbrushes to the same extent as you protect diamonds, you will lose more diamonds...
54. End of industry panel. Congressman did NOT arrive earlier... Will be here in 7 minutes, so it's break time!
55. FACA = Federal Advisory Committee Act (which non govt groups can give govt advice).
56. Audience Q: is that's so, can this be combined industry and govt responsibility? A: would have to be a FACA arrangement.
57. PGS says everyone says reform is needed but nobody takes the first step. Audience Q: should we fix USML first? A: that's the major issue.
58. Audience Q: who's opposing ITAR reform & why? MG: china is the opponent. Everyone wants reform. Opening up to China makes people nuts.
59. MG: need to leverage DoS expertise and need to use them. Doesn't like the 1-time request. Need process. Targeting OSTP & NSC is good.
60. ITAR is referred to as "the full employment in Europe Act" in Europe. Audience Qs: advocating 1-time ITAR review. Thoughts?
61. PGS Q4: what should this administration do first re ITAR? MG: needs to the set context of the debate, and that is Jobs.
62. PGS Q3: what is current posture on hill re ITAR? TH A: a crouch. Needs to be fwd leaning to be more precise about controls.
63. PGS Q2: what are biggest ITAR challenges in new Virgin business plans? MH A: depends on customer. Also where launches are conducted.
64. Need ongoing annual review of USML because technology changes. Allows govt to focus on techs that demand protection. Security & sanity both!
65. PGS Q1: how to balance trade v. Security tradeoff. MG A: this is a false dichotomy. We can have both. Can strengthen security thru reform.
66. Hopes favorable decision of BA CJR will extend to SpaceX but it's not clear it will necessarily. CJRs are one-off ways to minimize unknowns.
67. US Munitions List (USML) technologies affect traditional markets. Nontraditional markets are Dragonlab experiments, manned cargo for NASA & Bigelow.
68. Most mfg operations under one roof in Hawthorne CA. Known markets are civil & comm'l sats, and military & civil cargo & manned carriage.

69. Falcon9 will make maiden voyage later this year. Won \$1.6 Commercial Resupply Services contract w/NASA. State of the Art facility...
70. Tim Hughes of SpaceX now. Acknowledges traditional nature of SpaceX's business model. ITAR is a significant unknown. Will also pursue a CJR.
71. Showing Spaceport America graphics. Sold ~300 tickets world-wide with deposits from 25K\$ on up. The bigger the deposit, the sooner you fly.
72. Showing heritage of WK2 from WK1 and Global Flyer. Showing pics of WK2 test flights, SS2 under construction.
73. MH said BBinnie tried to destabilize SS1 upon feathered reentry, but couldn't. He's not a technical guy. Talking to potential markets.
74. Marc Holzapfel to talk to VG background. He's making mistakes of details, but I should cut him some slack. Talking about SS2 flight profile.
75. ITAR runs against dream of Star Trek. Kirk needs TAA to tell Checkov to fire phasers! ITAR reform leads to economic gains.
76. Passengers for Bigelow can train on BA systems, operations, enter the facility, and are not under control of ITAR. No paperwork needed!
77. ... With DoState in Dec 2007 to get passengers out of the way of ITAR. DoS took a long time, but they came through.
78. We need export control to pay more attn to sensitive systems and less time on noncritical systems. Filed a Commodity Jurisdiction request...
79. No one is against export control, but ITAR is akin to doing heart surgery with a chainsaw. Now telling coffee table story.
80. Now showing Yasnny launch video. Difficulties of technology were dwarfed by those of ITAR. Mike is telling familiar stories of monitoring.
81. Showing TV News video of Yazny Military Base of Genesis 2 launch.
82. Genesis program is tech demo program. Hired Russian company to launch Genesis on RUS nuclear vehicle on RUS nuke facility... Enter ITAR.
83. Correction: MGold is "King of ITAR Reform". Gold providing company background for those unfamiliar. Inflatables are much cheaper habitats.
84. Tim Hughes is VP and Chief Counsel for SpaceX. MGold steps up to the plate...
85. (Ruppersberger just walked in, I think.) MGold is legal counsel for Bigelow Aerospace. MHolzapfel is Sr. Legal Counsel for Virgin Galactic.
86. PGS: ITAR's time has come. "ITAR-Free" is a selling point of our competitors. She introduces MGold as "the King of ITAR".
87. Ruppersberger is tied up in Congress so starting with Industry Panel. PGS opening remarks: this is timely, emotional and motivating topic.
88. Industry Panel: Marc Holzapfel, Mike Gold, Tim Hughes, Patti Grace-Smith (mod). Government Panel: George Nield, Mike Beavin, John Hall, Mike Gold (mod)

89. AGENDA: Mark Maurice (VP-Elect AIAA) welcome address. Opening Keynote by Dutch Ruppertsberger.
90. Notes from the Entrepreneurial Space & Export Control event here in Washington DC starting now. About 50 people in seats at start of mtg.

ENTREPRENEURIAL SPACE AND EXPORT CONTROL:



Red Tape in the Final Frontier

A half-day event exploring the impact of America's export control regime on the job growth, competitiveness, and capabilities of domestic entrepreneurial space entities

Agenda

1:00 pm

Welcome

Mark Maurice, *Vice President-Elect, International, AIAA*

1:10 pm

Opening Keynote

The Honorable C.A. "Dutch" Ruppensberger (MDO2), *Chair, U.S. House of Representatives' Permanent Select Subcommittee on Technology and Tactical Intelligence*

2:00 pm

Industry Perspective Panel

Featuring

Marc Holzapfel, *Senior Legal Counsel, Virgin Galactic*

Mike Gold, *Director, Washington, D.C. Area Office, Bigelow Aerospace*

Tim Hughes, *Vice President and Chief Counsel, SpaceX*

Moderated by

Patti Grace Smith, *Former FAA Associate Administrator for Commercial Space Transportation and Aerospace Consultant with Patti Grace Smith Consulting*

3:30 pm

Government Perspective Panel

Featuring

George Nield, *FAA Associate Administrator for Commercial Space Transportation*

Michael Beavin, *Senior Program Analyst, Department of Commerce Office of Space Commercialization*

John Hall, *NASA, Director of the Export Control and Interagency Liaison Office*

Moderated by

Mike Gold, *Director, Bigelow Aerospace Washington, D.C. Area Office*

**Wednesday,
April 29th,
2009**

**Hyatt Regency Washington
on Capitol Hill
The Thornton Room
400 New Jersey Avenue, NW
Washington, DC 20001**

This unique event is free and open to the public, however space is limited. If you plan to attend please RSVP to ITARPanel@aiaa.org as soon as possible.

Media planning to attend should RSVP separately to ITARPanel_Media@aiaa.org for reserved seating.

Organized by:

