

AST Commercial Space
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Commercial Space Transportation Advisory Committee (COMSTAC)

June 22, 2020 Meeting

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June 22, 2020 Meeting

Elaine L. Chao
Secretary of Transportation
Welcome Remarks



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Steve Dickson
FAA Administrator
Welcome Remarks



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Wayne Monteith
FAA Associate Administrator for
Commercial Space Transportation
Welcome Remarks



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June 22, 2020 Meeting

**Committee Member
Introductions**



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Committee Members

Committee Chair: Charity Weeden

Committee Vice-Chair: Karina Drees

Jim Armor, Maj. Gen., USAF (Ret.)

Dr. Greg Autry

Bill Beckman

Shana Dale

Paul Damphousse

Dr. Mary Lynne Dittmar

Mike French

Christopher Hassler

Hon. David Karnes

Dale Ketcham

Kate Kronmiller

Steve Lindsey

Mike Moses

Clay Mowry

Dale Nash

Sharon Pinkerton

Lee Rosen

Robbie Sabathier

Eric Stallmer

Ann Zulkosky



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FAA/AST Updates



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FAA/AST Updates

Office of Commercial Space Transportation
Reorganization – Associate Administrator Wayne Monteith

Part 450 Status – Executive Director, Office of Operational Safety, Lirio Liu

Office of Spaceports – Office of Spaceports Director Pam Underwood



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Reorganization: Office of Commercial Space Transportation

Wayne Monteith, Associate Administrator

June 22, 2020



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AST Reorganization

Why the need for change

- Efficiency
- Effectiveness
- Accountability
- Scalability & Relevancy for the future

How the organization changed

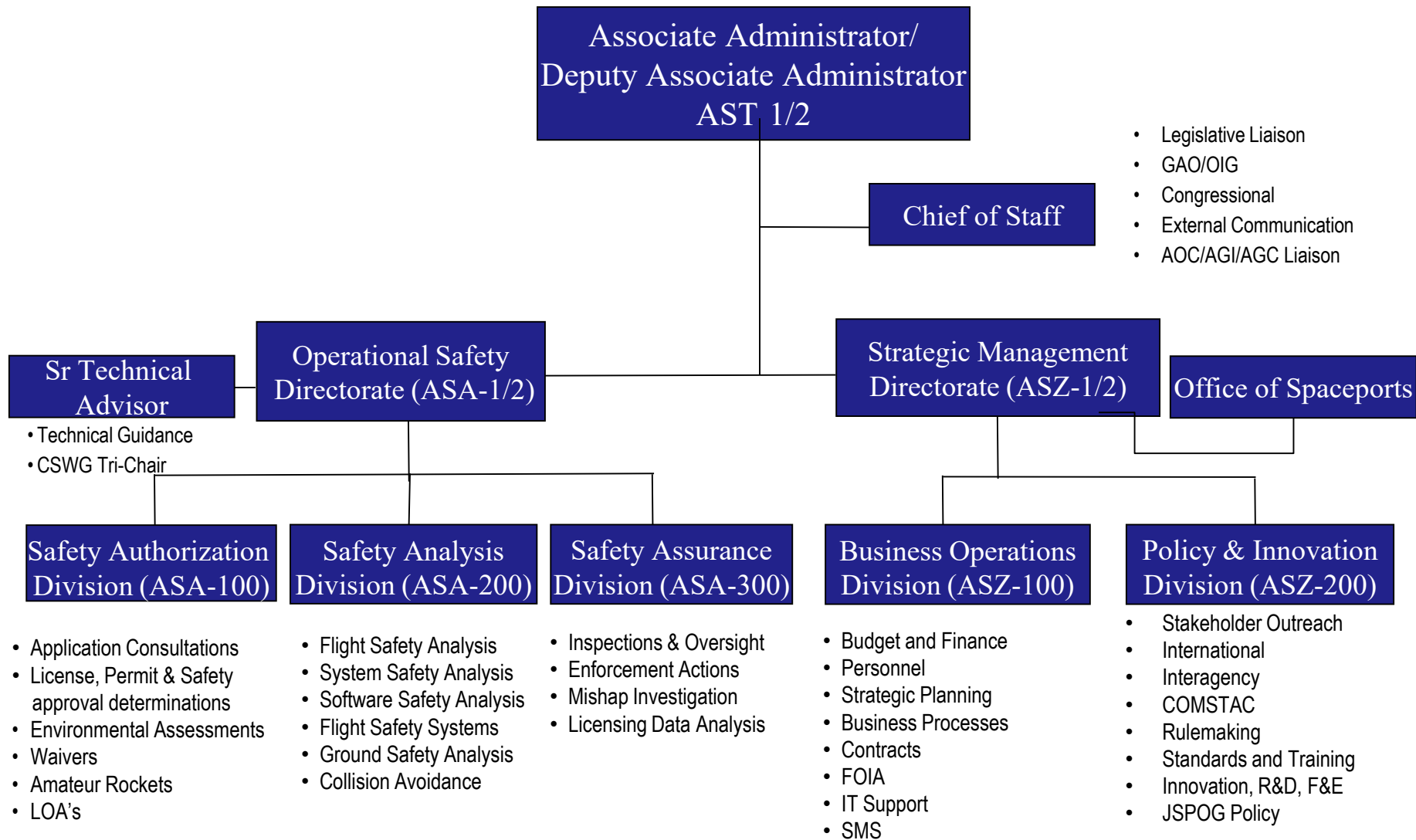
- Functionally realigned organization – focused teams
- Right people doing the right work
- Structured with two offices each lead by an executive
- Allows for streamlined processes
- As mission needs grow, organization can grow

AST Reorganization

Ready to ensure public safety while encouraging, facilitating, and promoting the commercial space transportation industry

- Rapid growth (companies, launches, technology, payloads, and passengers)
- US is leader in taking mankind to and through space
- If there is no safety, there is no business

2020 Office of Commercial Space Transportation



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Part 450 Update

*Lirio Liu, Executive Director,
Office of Operational Safety*

June 22, 2020



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Space Policy Directive 2

Streamlining Regulations on Commercial Use of Space

National Space Policy Released May 24, 2018

- Directs DOT to:
 - Require a single license for all types of commercial space flight
 - Replace prescriptive requirements with performance-based criteria
 - Coordinate with DOD and NASA to minimize requirements that would conflict with DOT's streamlining efforts.

Background and Activities

- *March 26, 2019:*
 - Streamlined Launch and Reentry Notice of Proposed Rulemaking (NPRM) published on FAA website
- *April 15, 2019:*
 - NPRM published in the Federal Register with a 60 day comment period
- *May 31, 2019:*
 - Public comment period extended 46 days
- *June 14, 2019 and July 16, 2019:*
 - FAA posted letters to docket to encourage industry to submit questions concerning the proposed rule and to announce consideration of requests for meetings in the month of July 2019

Background and Activities

- *July 24 – 31, 2019:*
 - Meetings with industry
- *July 16 – August 16, 2019:*
 - Clarifying answers posted to docket
 - Batch 1 – July 16th
 - Batches 2 and 3 – August 16th
- *July 22, 2019:*
 - Public comment period extended 20 days
- *Fall 2020:*
 - Final Rule anticipated publication

Comment Analysis

- 154 total submittals:
 - 55 substantive (2 Proprietary)
 - Other Requests
 - Comment period extension
 - Reconvene the ARC
 - Public meeting
 - SNPRM
 - Clarifying questions
- Commenters:
 - Individuals: 45
 - Companies: 41
 - Associations: 16
 - Foreign Space Agencies: 1
 - Congressmen: 1

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Office of Spaceports

Pam Underwood, Director

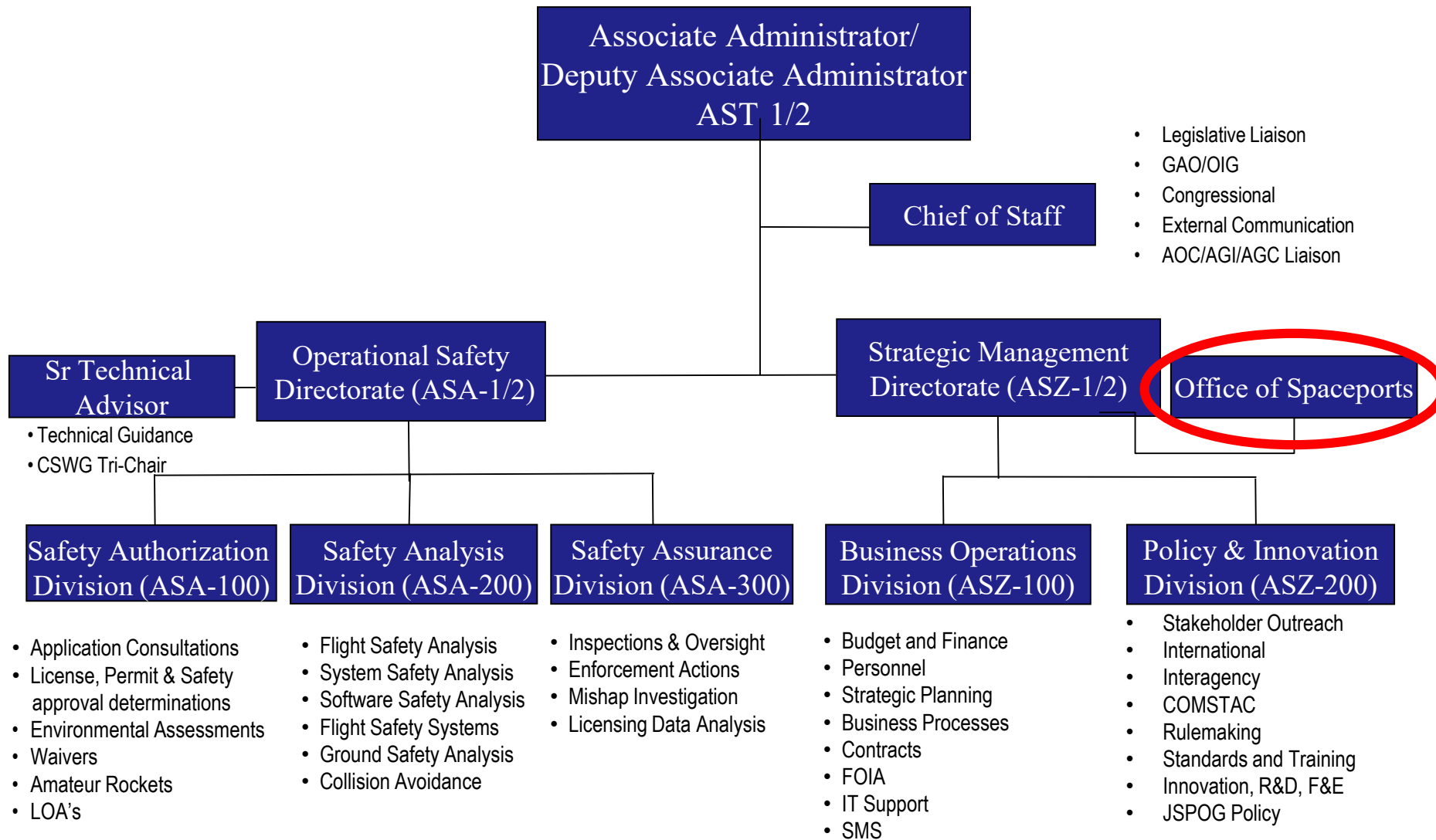
June 22, 2020



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2020 Office of Commercial Space Transportation



FAA Reauthorization Act of 2018

§ 51501. Establishment of Office of Spaceports

(b) FUNCTIONS.—The Office of Spaceports shall—

- (1) support licensing activities for operation of launch and reentry sites;
- (2) develop policies that promote infrastructure improvements at spaceports;
- (3) provide technical assistance and guidance to spaceports;
- (4) promote United States spaceports within the Department; and
- (5) strengthen the Nation's competitiveness in commercial space transportation infrastructure and increase resilience for the Federal Government and commercial customers.

Mission

Enable the safest, most efficient network of launch and reentry spaceports in the world

Vision

Advance a robust and innovative national system of spaceports befitting the U.S. as a global leader in the commercial space transportation industry

Strategic Goals

1. Strengthen the competitiveness of launch and reentry infrastructure and services which support the U.S. commercial space transportation industry, encouraging innovation and strategic partnerships for spaceport future planning and development
2. Modernize the regulation of U.S. launch and reentry sites promoting increased public safety for the growing commercial space transportation industry.
3. Collaborate with countries developing launch or reentry sites to promulgate U.S. commercial space transportation regulations.

Initial Office of Spaceports Focus Areas

- Collaborate with USSF in their transition of the Eastern & Western Ranges
- Develop an internal plan for DOT/FAA spaceport infrastructure grant program, pending Congressional appropriations
- Coordinate U.S. commercial space transportation regulations with countries developing launch or reentry sites to preclude duplicative licensing efforts, and support US as a global leader in commercial space transportation
- Modernize the regulation of US launch and reentry sites
- Promote capabilities and needs of the nation's network of spaceports



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**AST Priorities for COMSTAC for 2020
and 2021**



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Safety Working Group

Preparing for Human Spaceflight: Updates to the Section 111 of the Commercial Space Launch Competitiveness Act.

Task: Formulate human spaceflight best practices to guide industry on how best to protect public safety and, in anticipation of the eventual end of the moratorium, spaceflight participant safety as well.

Additionally, pursuant to the 2015 CSLCA, COMSTAC will draft responses to the following and submit them to FAA/AST no later than September 1, 2020:

- To what extent are voluntary consensus standards in use by industry?
- Are any industry-developed voluntary consensus standards appropriate as means of compliance or regulation?
- Recommendations on how to implement a voluntary safety reporting system for the commercial space transportation industry.

Regulatory Working Group

Task #1: Prioritize future rulemaking. COMSTAC will provide feedback to FAA on a prioritized list of future rulemaking activities for the commercial space transportation industry.

Task #2: Define a “complete” application. Propose language to revise Part 413.13 (Complete application) that defines a complete application. COMSTAC should take into account all the generic components of a typical license and permit application (e.g. flight safety, ground safety, system safety, policy and payload reviews, environmental compliance etc.) and propose benchmarks in each of these areas that an applicant must meet that allow compliance with Part 413.11 (Acceptance of an application). The deliverable should be in the form of a narrative report of sufficient detail that AST could potentially use the language in a future rulemaking.

Regulatory Working Group (continued)

Task #3: International dual licensing. Propose process improvements, policy decisions, and/or regulatory language for the FAA/AST to reduce potential duplication and burden on industry from dual-licensing with other countries during US launches and reentries outside the United States while maintaining safety. The deliverable will include ways to reduce AST costs (such as travel and staff time) of on-site inspection. The deliverable should be in the form of a narrative report.

Innovation & Infrastructure Working Group

Task #1: **FAA Office of Spaceports.** Recommend changes, if any, to the existing Space Transportation Infrastructure Matching (STIM) grants program. Define how this program, or a similar spaceport infrastructure funding mechanism, might work: eligibility criteria for grantees, qualified uses of funds, funding, and preferred funding sources.

Task #2: **National Spaceport Authority.** Provide input on how a National Spaceport Authority covering the Eastern and Western ranges should be organized to both protect public safety and benefit the commercial space transportation industry.

Innovation & Infrastructure Working Group (continued)

Task #3: Research & Development Program. Review and provide findings, observations, and recommendations on the overall AST R&D program. COMSTAC should consider the following program components, both separately and as an integrated whole: (1) internal administration, (2) acquisition structure, and (3) strategic management. To support committee deliberations, AST personnel will provide background presentations and/or descriptive documentation (as available) for each of these components, as requested by the committee. The committee is requested to deliver to AST interim results (for each of the program components individually), and final results (encompassing all three components as an integrated system, if needed), in the form of a narrative report

Regulatory and I&I Working Group Task

The Innovation and Infrastructure (I&I) Working Group will initiate this task and then coordinate with the Regulatory Working Group before completing it and making recommendations to the full COMSTAC.

Task: **Spaceport Regulatory Reform.** Research current methods and best practices, consult with a variety of industry stakeholders, and then propose regulatory language revising how FAA/AST authorizes launch and reentry sites.



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**Dr. Scott Pace
Executive Secretary
National Space Council**



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**Reports from Working Groups
on Progress to Date**



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Safety Working Group

- Chair: Dr. Greg Autry
- Co-chair: Robbie Sabathier
- Dr. Mary Lynne Dittmar
- Chris Hassler
- Steve Lindsey
- Mike Moses

Regulatory Working Group

- Chair: Shana Dale
- Co-chair: Clay Mowry
- Jim Armor
- Bill Beckman
- Mike French
- Kate Kronmiller
- Eric Stallmer
- Ann Zulkosky

Innovation & Infrastructure Working Group

- Chair: Paul Damphousse
- Co-chair: Lee Rosen
- David Karnes
- Dale Ketcham
- Dale Nash
- Sharon Pinkerton



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Public Comments



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