

SPACE TRAFFIC MANAGEMENT:

*ROADMAP TO THE STARS*

**2014**  
CONFERENCE

# Conference Report

IISL-ECSL Symposium  
UN COPUOS Legal Subcommittee  
Vienna Austria  
13 April 2015

**EMBRY-RIDDLE**  
Aeronautical University

Who?

Embry-Riddle, Department of Applied Aviation  
Sciences

Why Us?

Commercial Space Operations

Air Traffic Management

Meteorology

Aerospace Safety

Other faculties...Physical Sciences and Space

Weather

NextGen Test Bed

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What exactly?

2 day conference in November 2014, on campus

Objectives:

Bringing the space traffic roadmap into focus

Identifying surfacing issues in STM

Providing leadership in planning

Facilitating agreement on the next steps

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48 papers total, 26 presented

Peer reviewed

Online and interactive

10,303 downloads as of 7 April 2015

4 keynote speakers

80 attendees

International participation

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5 panels

Air & Space Traffic Integration: Operational Perspectives

Air & Space Traffic Integration: Initiatives

Air & Space Traffic Integration: Legal & Policy Issues

Weather (space and otherwise...)

Space Situational Awareness

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Graphic of Roadmap

Interactive throughout conference

The landscape evolved

We prioritized: **high**, **mid**, and **low**

Using this to move forward

Examples:  
Operational Perspectives

High

regulate traffic lanes  
60,000 feet to LEO ??????

Mid

Incorporate “known” air transport technologies into  
spaceflight  
Compile lessons learned like Vandenberg schedule  
deconfliction

Low

Space vehicle and UAS/RPAS definitions

Examples:  
Initiatives

High

How do we develop/encourage global/SWIM capability?  
Is there a community of practice for spaceports?  
Should there be?

Mid

Refine technologies

Low

Distinguish between space exploration/deep space and LEO/GEO and suborbital



Examples:

Legal & Policy

High

Clearer terms

Leverage insurance companies to assist industry in establishing clear definitions

Mid

Better defined Rules of Right of Way

Low

What happens if the “bingo” field is outside the country of takeoff?

Examples:

Space Weather

Mid

Keep track of weather at spaceports

Low

What is the engineering cost to protect against weather?

Does insurance care to forecast weather for missions?

Examples:

Space Situational Awareness

High

Collaborative research on debris and traffic management at university level

Mid

Better collision predictors

Low

Active debris removal

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Where does the road lead from here?

Proceedings underway

Research is commencing

Developing electronic interactive version of roadmap  
for website

Working to increase international participation and input  
from emerging economies

Call for papers under construction

Dates: 11-13 November 2015

Embry-Riddle Aeronautical University

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Contact me with ideas, questions, to get onto our distribution list and with research needs

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Take a look at the conference website:

<http://commons.erau.edu/stm/>

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Questions?