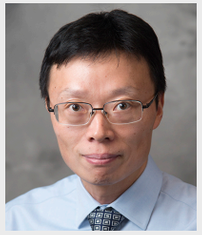
PURDUE UNIVERSITY

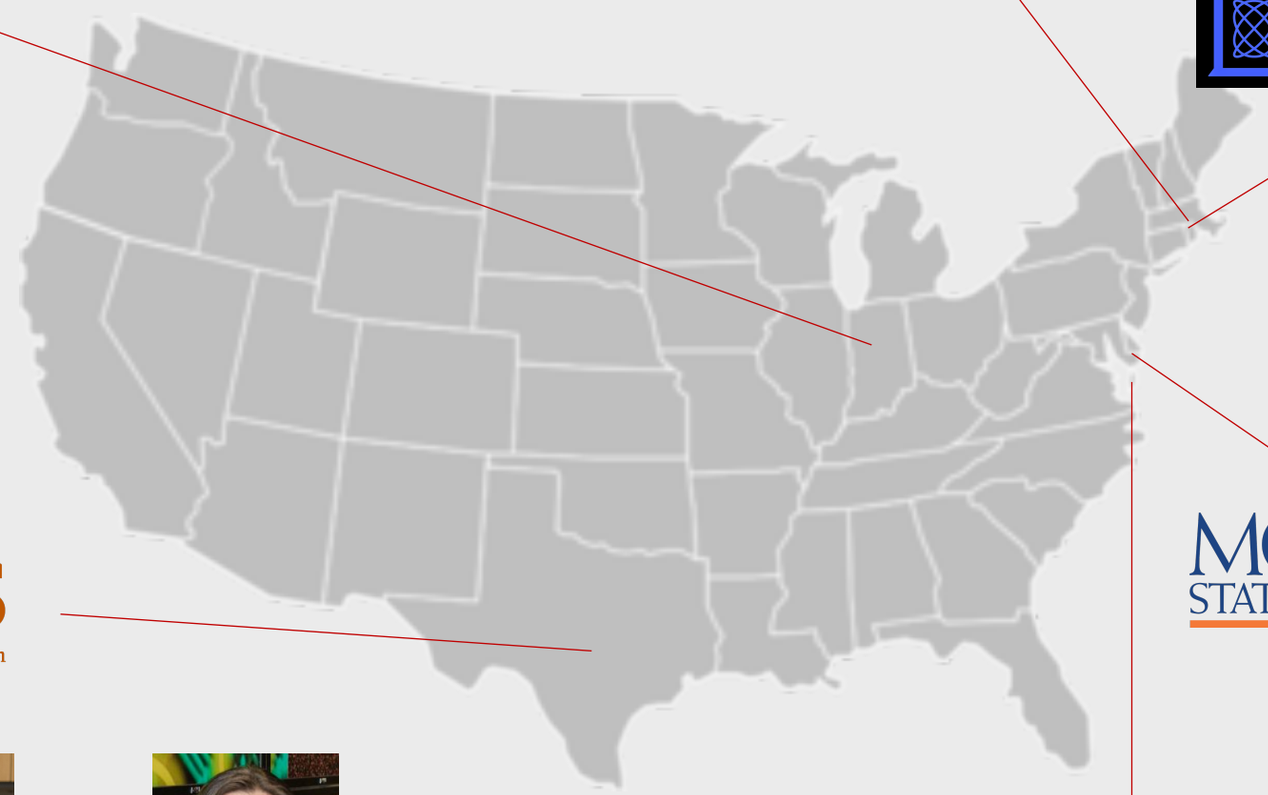
Karen Marais



Dengfeng Sun

Massachusetts Institute of Technology

Hamsa Balakrishnan



MIT Lincoln Laboratory

Matthew Edwards

Allison Chang

TEXAS
The University of Texas at Austin

John-Paul Clarke

Ufuk Topcu

Karen Willcox

MORGAN STATE UNIVERSITY

Willie Rockward

CAVAN SOLUTIONS

Mel Davis

Establish a foundation…

theory and algorithms for design, verification and operation

concepts of operation and demonstrations

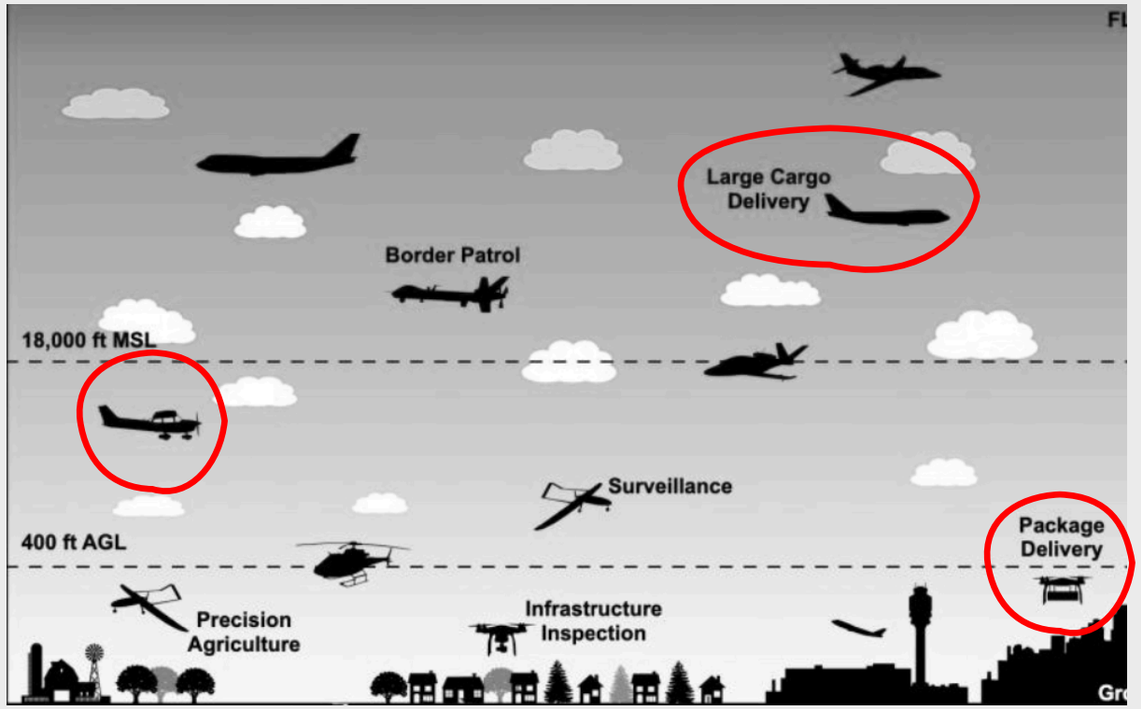
… that will support the development, deployment and adoption of advanced air mobility systems…

including vehicles, traffic, and fleets

… for autonomous cargo operations at scale

all classes of airspace (and the transition between them)

all vehicle types



Figures from NASA.

Compliant with regulations?

Verifiably safe?

How can we scalably verify system-level safety and identify appropriate requirements?

Avoid putting the public at risk due to weakness of regulation or hinder growth due to overly strict regulations.

Adopted by the public?

How can we constrain the design and operation to account for noise footprint, communication, risk and privacy?

Help align the investments with the public's sensitivities.

Economically justified?

How can we optimize the operation of air mobility systems at all relevant scales?

Inform whether the necessary investments can add sufficient economic value and create new business models.

Compatible with the infrastructure?

Education and outreach to expand and diversify the workforce