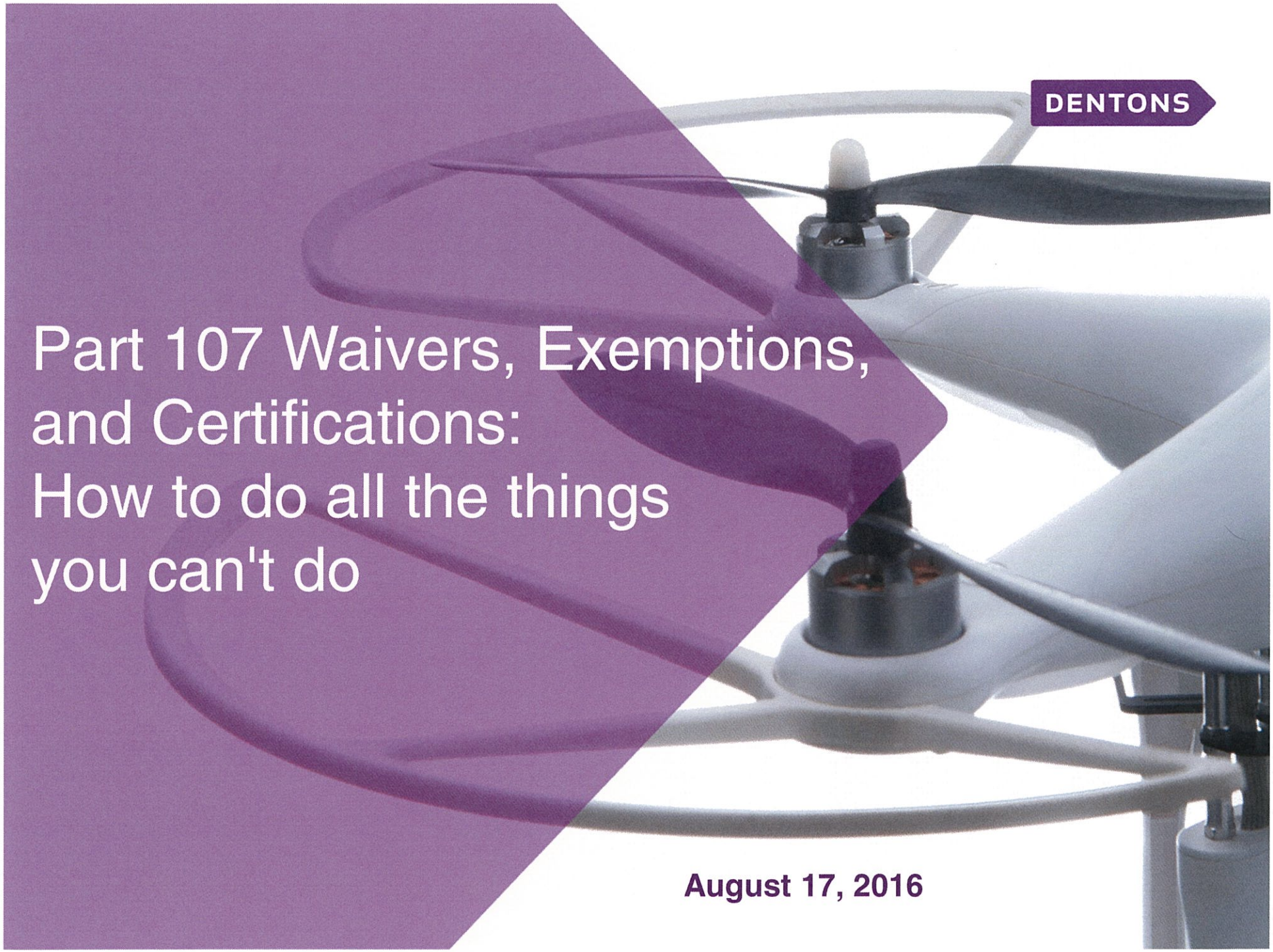
DENTONS

Part 107 Waivers, Exemptions, and Certifications: How to do all the things you can't do



August 17, 2016

Presenters



Mark McKinnon

Partner, Dentons US



Jim Williams,

Principal, Dentons US

New Developments - Litigation



- Haughwout Case
  - UAS are aircraft
  - FAA has broad investigative authority
  - 14 C.F.R. 91.13 can be used in UAS enforcement matters
  - Limits of the Commerce Clause raised but left for another day

New Developments – FAA Reauthorization Act

- Congress passed a 14-Month extension of the FAA Authorization on July 13, 2016 with 24 pages dealing with UAS
- Key provisions require the FAA to:
  - Create industry standards for remote identification of UAS
  - Facilitate UAS operations in support of wildfires and utility outages
  - Conduct pilot projects for counter UAS technology and UAS Traffic Management (UTM)
  - Create a process to expedite emergency approvals for UAS used for disaster recovery
  - Create restrictions for UAS operations near critical infrastructure
  - Accelerate approval of day/night beyond visual line of sight operations for critical infrastructure inspections
  - Create and publish a comprehensive RE&D plan
  - Assess the risks of UAS implementation in the US
  - Mandate inclusion of safety information with small UAS sold in the US
  - Establish a $20K fine for interfering with wildfire suppression

New Developments – Part 107 Pilot Certificate

- FAA has released Remote Pilot Knowledge Test Guide
- "All test questions are objective and multiple-choice. Each question can be answered by the selection of a single response. Each test question is independent of other questions; therefore, a correct response to one does not depend upon, or influence, the correct response to another. The minimum passing score is 70 percent. The UAG test contains 60 questions; you are allowed 2 hours to complete."
- "You may use any reference materials provided with the test. In addition, you may use scales, straightedges, protractors, plotters, navigation computers, log sheets, and electronic or mechanical calculators that are directly related to the test."

New Developments – Part 107 Pilot Certificate



- A local TV station has hired a remote pilot to operate their small UA to cover breaking news stories. The remote pilot has had multiple near misses with obstacles on the ground and two small UAS accidents. What would be a solution for the news station to improve their operating safety culture?
  - A. The news station should implement a policy of no more than five crashes/incidents within 6 months.
  - B. The news station does not need to make any changes; there are times that an accident is unavoidable.
  - C. The news station should recognize hazardous attitudes and situations and develop standard operating procedures that emphasize safety.

New Developments – Part 107 Pilot Certificate

- Some of the questions are technical:
- 11 (Refer to FAA-CT-8080-2G, Figure 2.) If an unmanned airplane weighs 33 pounds, what approximate weight would the airplane structure be required to support during a 30° banked turn while maintaining altitude?
  - A. 34 pounds.
  - B. 47 pounds.
  - C. 38 pounds.
- 4 (Refer to FAA-CT-8080-2G, Figure 59, area 2.) The chart shows a gray line with "VR1667, VR1617, VR1638, and VR1668." Could this area present a hazard to the operations of a small UA?
  - A. No, all operations will be above 400 feet.
  - B. Yes, this is a Military Training Route from 1,500 feet AGL.
  - C. Yes, the defined route provides traffic separation to manned aircraft.

New Developments – Civil Penalties

- Civil Penalties have been increased under the Federal Civil Penalties Inflation Adjustment Act
- Under the old system, a penalty increase that was greater than $1,000, but less than or equal to $10,000, would be rounded to the nearest multiple of $1,000, and was capped at a total of 10% increase.
- Now, the increases are rounded to nearest dollar and there is a "catch-up" adjustment.
- Baseline: $25,000, Previous Adjustment $27,500, New Value: $32,140
- Baseline: $10,000, Previous Adjustment $11,000, New Value: $12,856

Waivers

- Waivable sections of part 107
  - Operation from a moving vehicle or aircraft (§ 107.25)*
  - Daylight operation (§ 107.29)
  - Visual line of sight aircraft operation (§ 107.31)*
  - Visual observer (§ 107.33)
  - Operation of multiple small unmanned aircraft systems (§ 107.35)
  - Yielding the right of way (§ 107.37(a))
  - Operation over people (§ 107.39)
  - Operation in certain airspace (§ 107.41)
  - Operating limitations for small unmanned aircraft (§ 107.51)

Waivers - Form 7711-2

- Form 7711-2 will be used for Waivers:
  - Name of organization
  - Name of responsible person
  - Permanent house number and street or route number, city, state and ZIP code, telephone number and mailing address
  - FAR section and number to be waived
  - Detailed description of proposed operation (Attach supplement if needed)
  - Beginning (date and hour) and Ending (date and hour)
  - Aircraft make and model
  - Pilot's name
  - Certificate number and rating
  - Certification - I CERTIFY that the foregoing statements are true

Waivers

- The operator must show that the proposed operation can be conducted safely
- You must provide a complete description of the proposed operation and justification for the waiver
- The Administrator can add any terms and conditions necessary for safety
- Standard special provisions for part 107 waivers (coming soon)

Exemptions - Section 333

- Some types of UAS do not fit under Part 107, particularly those with a gross takeoff weight over 55 pounds.
- The existing Section 333 process is available
- Operating rules and aircraft requirements will be the same or similar to operators flying under the small UAS rule.
- Pilot requirements will be evaluated on a case-by-case basis.
- So, going forward, the Exemptions will not have the standardized numbered paragraphs for the operating restrictions that the FAA developed over the past two years.

Operations Beyond 14 CFR Part 107

- Existing designs
  - May not meet FAA safety expectations
  - Requirements change for mission and operating area
  - DOD designs vs. design for reliable repeatable civil use
- Operators
  - Prefer to purchase existing designs
  - Seeking operational credit from DOD use
- DoD classifications don't meet FAA needs



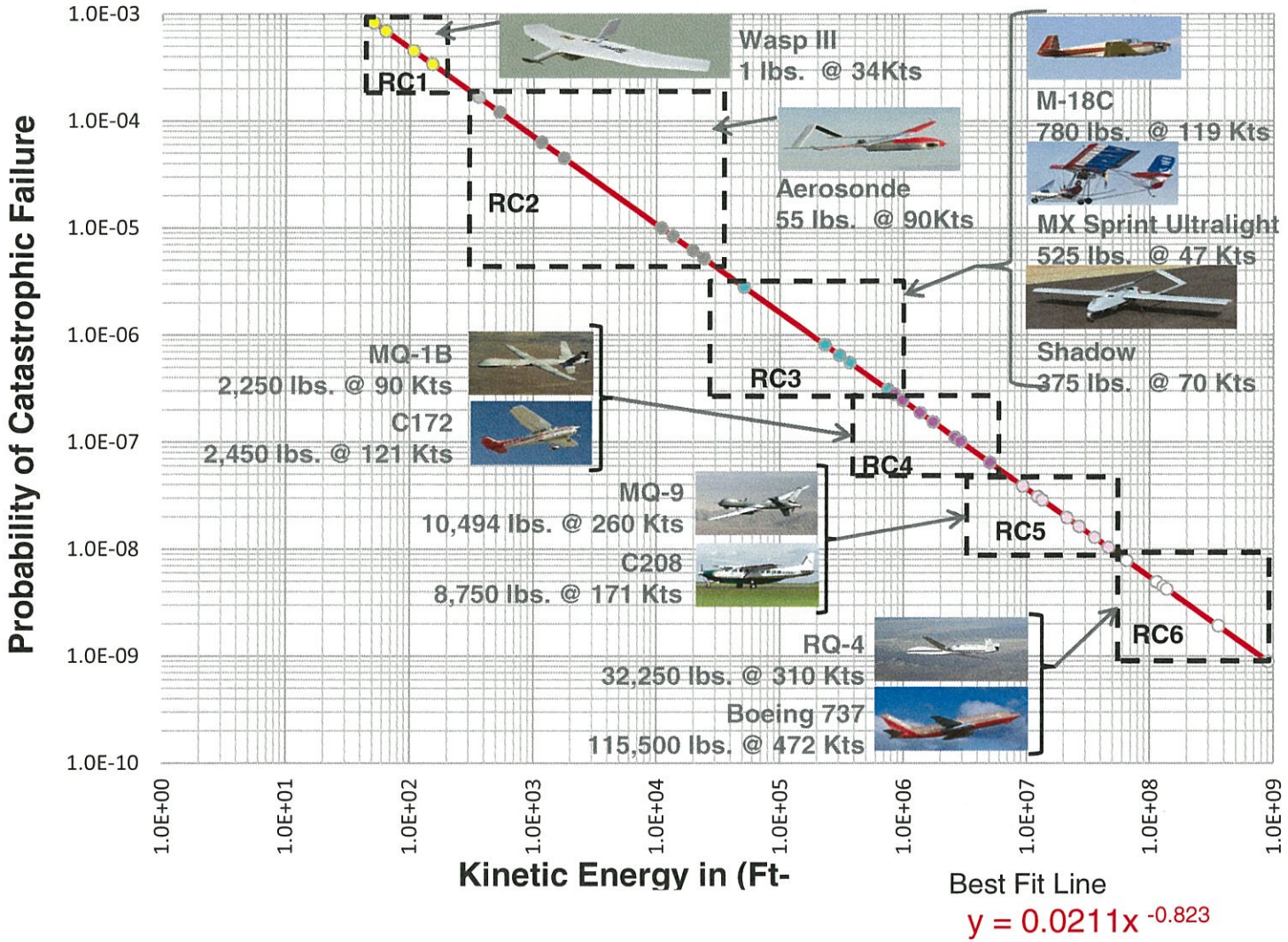


DOD Classifications

- DoD groups focus on airspace
  - Breaks at Class A (18K ft. for IFR)
  - Does not align with FAA Safety Continuum
  - Works for equipage, but not civil risk exposure
- FAA classification (next page)
  - Starts with energy based risk class
  - Allows mitigation down from initial certification class for operational and geographic mitigations



FAA Classification By Energy



- FAA UAS groups match continuum, for manned aircraft
- Natural groupings by size, energy, airspace, means of control, etc.

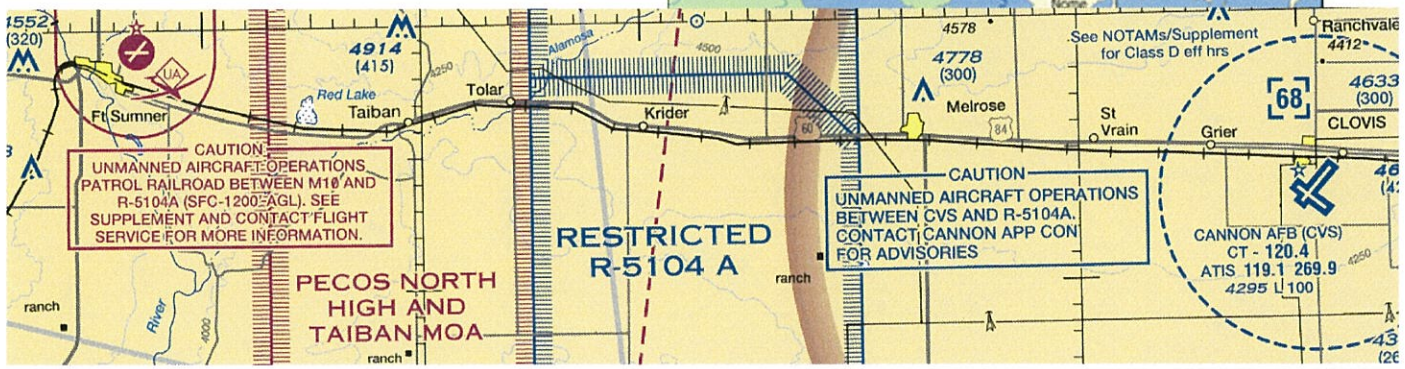
DENTONS

Restricted TC For Remote Area Ops

- Operations – Chukchi Sea, AK North Slope, NM Desert
- Limited geographic area/strict operations
- Safety mission
  - Significant Risk for manned aviation
  - Wildlife, geological surveys, search and rescue, rail safety
  - Limited Risk Exposure





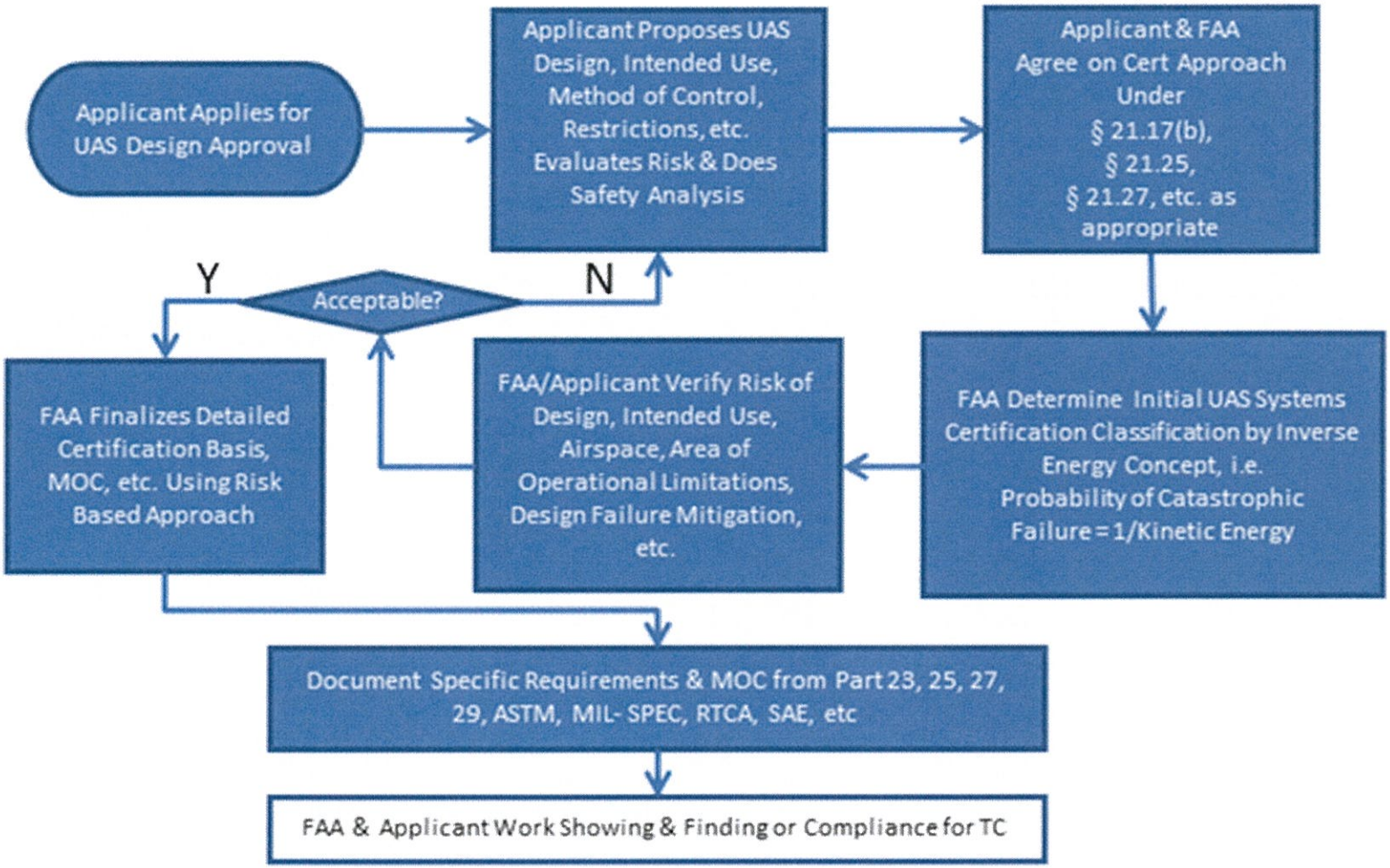


DENTONS

14 CFR 21.17(b) Tailored Certification Process

- Risk drives level of effort and oversight by FAA
- ASTM Standards used for small UAS outside of 14 CFR Part 107
- 14 CFR Part 23 Commuter or Part 25 rules for large UAS

Tailored UAS TC Process

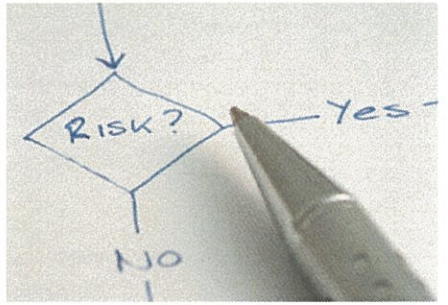


DENTONS

Certification: Driving Principles

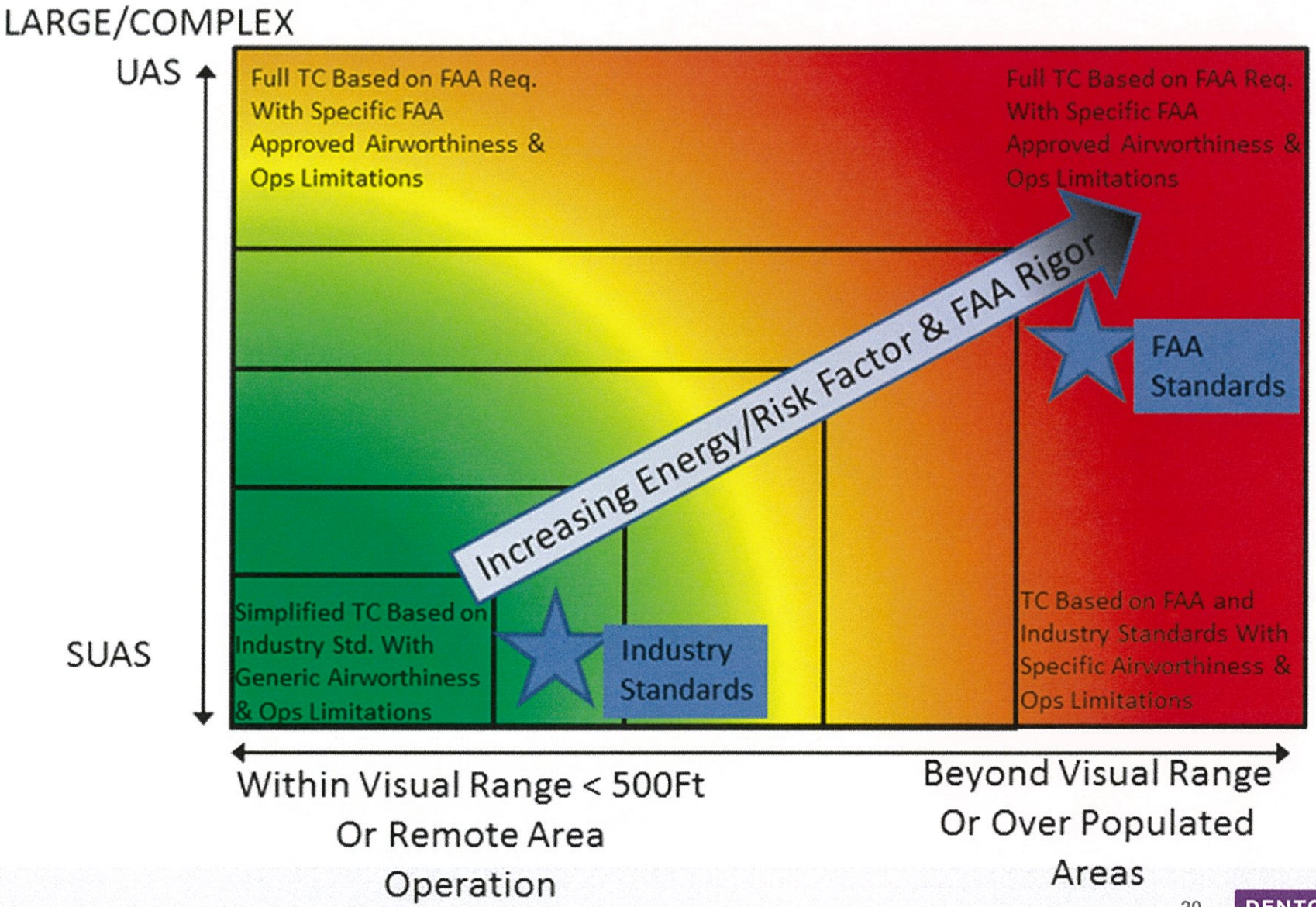
- Tailored TC Requirements:
  - Vehicle, mission, and area of operation – managed risk
  - Use industry and FAA standards
- Single TC Approach Will Not Work
  - Follow safety continuum
- Manage Risks – Do-No-Harm
  - UAS must meet existing NAS requirements, not the other way around







Conceptual Certification Involvement



DENTONS

Join Us For Our Next Webinar - September 14, 1 PM

DRONES & INSURANCE: THE NEXT STEPS!

- This webinar, presented by Dentons and the UAS Insurance Association, will discuss these increased risks and exposures and how they can be managed. Among the topics we will address:
  - What impact will waivers have on risks, insurance, and coverage?
  - What type of insurance is out there and how do you get it?
  - Managing risks from contracts and subcontracts for UAS services
  - State privacy laws and coverage for incidents, civil penalties, and invasion of privacy lawsuits
  - Cyber security and data protection issues arising from UAS operations

Contact Information

For assistance in any issues regarding UAS Operation or if you have any questions, please contact us:

Mark Dombroff
Dentons US LLP
1676 International Drive, PH
McLean, VA 22102
Phone (703) 336-8700
mark.dombroff@dentons.com

Mark McKinnon
Dentons US LLP
1676 International Drive, PH
McLean, VA 22102
Phone (703) 336-8708
mark.mckinnon@dentons.com

Jim Williams
Dentons US LLP
1676 International Drive, PH
McLean, VA 22102
Phone (703) 336-8716
Jim.williams@dentons.com

For UAS News and Analysis, follow us at:

http://www.planelyspokenblog.com

Thank you

Dentons US LLP
1676 International Drive
Penthouse
McLean, VA 22102-4832
United States

Dentons is a global law firm driven to provide a competitive edge in an increasingly complex and interconnected world. A top 20 firm on the Acritas 2014 Global Elite Brand Index, Dentons is committed to challenging the status quo in delivering consistent and uncompromising quality in new and inventive ways. Dentons' clients now benefit from 3,000 lawyers and professionals in more than 80 locations spanning 50-plus countries. With a legacy of legal experience that dates back to 1742 and builds on the strengths of our foundational firms—Salans, Fraser Milner Casgrain (FMC), SNR Denton and McKenna Long & Aldridge—the Firm serves the local, regional and global needs of private and public clients. www.dentons.com.

© 2015 Dentons. Dentons is a global legal practice providing client services worldwide through its member firms and affiliates. This publication is not designed to provide legal advice and you should not take, or refrain from taking, action based on its content. Please see dentons.com for Legal Notices.