



Office of Commercial Space Transportation
PART 450: 3 DAY WORKSHOP AGENDA
November 4-6, 2020
10:00 AM – 4:30 PM Eastern

(all agenda times are approximate)

Wednesday, November 4, 2020	
10:00 AM	Opening Remarks
10:10 AM	Part 450 Overview
10:55 AM	Pre-Application Consultation
10:55 AM	Sample Application Letter Template
11:05 AM	Application Compliance Checklist
11:15 AM	Sample Compliance Document List
11:20 AM	Pre-Application Consultation Checklist
11:25 AM	Means of Compliance Table
11:30 AM	Q&A
11:45 AM	LUNCH BREAK: 30 minutes
12:15 PM	Subpart A - General Information
12:15 PM	§ 450.1 Applicability
12:17 PM	§ 450.3 Scope of a vehicle operator license
12:22 PM	§ 450.5 Issuance of a vehicle operator license
12:24 PM	§ 450.7 Duration of a vehicle operator license
12:26 PM	§ 450.9 Additional license terms and conditions
12:28 PM	§ 450.11 Transfer of a vehicle operator license
12:30 PM	§ 450.13 Rights not conferred by a vehicle operator license
12:32 PM	Q&A
12:47 PM	Subpart B - Requirements to Obtain a Vehicle Operator License
12:47 PM	§ 450.31 General.
12:49 PM	§ 450.33 Incremental review and determinations
12:54 PM	§ 450.35 Accepted means of compliance
12:59 PM	§ 450.37 Equivalent level of safety
1:04 PM	§ 450.39 Use of safety element approval
1:09 PM	§ 450.41 Policy review and approval
1:14 PM	§ 450.43 Payload review and determination
1:19 PM	§ 450.45 Safety review and approval
1:24 PM	§ 450.47 Environmental review
1:26 PM	Q&A
1:41 PM	BREAK: 10 minutes
1:51 PM	Part 450 Subpart C - Safety Requirements
1:51 PM	§ 450.101 Safety Criteria
2:51 PM	Q&A

3:11 PM	BREAK: 10 minute
3:21 PM	§ 450.103 System Safety Program
3:36 PM	Q&A
3:51 PM	§ 450.107 Hazard Control Strategies
4:06 PM	Q&A
4:26 PM	Closing Remarks: Day 1

Thursday, November 5, 2020	
10:00 AM	Opening Remarks
10:06 AM	Part 450 Subpart C - Safety Requirements - Continued § 450.108 Flight Abort
10:51 AM	Q&A
11:06 AM	§ 450.109 Flight Hazard Analysis
11:21 AM	§ 450.110 Physical Containment
11:23 AM	§ 450.111 Wind Weighting
11:25 AM	Q&A
11:40 AM	LUNCH BREAK
12:10 PM	Flight Safety Analysis
12:10 PM	§ 450.113 Flight Safety Analysis Requirements—Scope
12:40 PM	§ 450.115 Flight Safety Analysis Methods.
12:50 PM	Q&A
1:00 PM	§ 450.117 Trajectory Analysis for Normal Flight
1:15 PM	§ 450.119 Trajectory Analysis for Malfunction Flight.
1:30 PM	§ 450.121 Debris Analysis.
1:45 PM	§ 450.123 Population Exposure Analysis.
1:55 PM	BREAK: 10 minutes
2:05 PM	§ 450.131 Probability of Failure Analysis
2:20 PM	§ 450.133 Flight Hazard Area Analysis
2:35 PM	Q&A
2:50 PM	§ 450.135 Debris Risk Analysis
3:05 PM	§ 450.137 Far-field Overpressure Blast Effects Analysis
3:15 PM	§ 450.139 Toxic Hazards for Flight
3:25 PM	Q&A
3:40 PM	BREAK: 10 minutes
3:50 PM	Prescribed Hazard for Safety - Critical Hardware and Computing Systems
3:50 PM	§ 450.141 Computing Systems
4:10 PM	Q&A
4:25 PM	Closing Remarks : Day 2

Friday, November 6, 2020	
10:00 AM	Opening Remarks
10:05 AM	Prescribed Hazard for Safety - Critical Hardware and Computing Systems - Continued § 450.143 Safety-Critical System Design, Test, and Documentation
10:20 AM	§ 450.145 Highly-Reliable Flight Safety System
10:25 AM	Q&A
10:40 AM	Other Prescribed Hazard Controls
10:40 AM	§ 450.147 Agreements
10:42 AM	§ 450.149 Safety-Critical Personnel Qualifications
10:44 AM	§ 450.151 Work Shift and Rest Requirements
10:49 AM	§ 450.153 Radio Frequency Management.
10:51 AM	§ 450.155 Readiness
10:54 AM	§ 450.157 Communications
10:56 AM	§ 450.159 Pre-flight Procedures
10:58 AM	§ 450.161 Control of Hazard Areas
11:03 AM	§ 450.163 Lightning Hazard Mitigation
11:08 AM	§ 450.165 Flight commit criteria
11:11 AM	§ 450.167 Tracking
11:13 AM	§ 450.177 Unique Policies, Requirements and Practices
11:15 AM	Q&A
11:30 AM	LUNCH BREAK: 30 minutes
12:00 PM	COLA, Safety at End of Launch
12:00 PM	§ 450.169 Launch and Reentry Collision Avoidance Analysis Requirements
12:10 PM	§ 450.171 Safety at End of Launch
12:15 PM	Q&A
12:30 PM	Mishap and Test Induced Damage
12:30 PM	§ 450.173 Mishap Plan—Reporting, Response, and Investigation Requirements.
12:45 PM	Q&A
1:00 PM	§ 450.175 Test-induced Damage
1:15 PM	Q&A
1:30 PM	BREAK: 10 minutes
1:40 PM	Ground Safety
1:40 PM	§ 450.179 Ground Safety—General.
1:45 PM	§ 450.181 Coordination with a Site Operator
1:47 PM	§ 450.183 Explosive Site Plan
1:49 PM	§ 450.185 Ground Hazard Analysis
1:54 PM	Q&A
2:09 PM	§ 450.187 Toxic Hazards Mitigation for Ground Operations

2:19 PM	§ 450.189 Ground Safety Prescribed Hazard Controls
2:25 PM	Q&A
2:40 PM	BREAK: 10 minutes
2:50 PM	Subpart D - Terms and Conditions of a Vehicle Operator License
2:50 PM	§ 450.201 Public safety responsibility.
2:52 PM	§ 450.203 Compliance with license.
2:54 PM	§ 450.205 Financial responsibility requirements.
2:56 PM	§ 450.207 Human spaceflight requirements.
2:58 PM	§ 450.209 Compliance monitoring.
3:00 PM	§ 450.211 Continuing accuracy of license application; application for modification of license.
3:02 PM	§ 450.213 Pre-flight reporting.
3:04 PM	§ 450.215 Post-flight reporting.
3:06 PM	§ 450.217 Registration of space objects.
3:08 PM	§ 450.219 Records.
3:10 PM	Q&A
3:25 PM	BREAK: 10 minutes
3:35 PM	Part 450 Crosswalk Mapping for Legacy Operators
4:20 PM	Q&A
4:35 PM	Closing Remarks : Day 3