

July 24, 2023

Brandon Roberts
Executive Director, Office of Rulemaking, ARM-1
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Re: Recommendation Report – Training Standardization Working Group – Improving the Instructor and Check Pilot Curriculum

Dear Mr. Roberts,

On behalf of the Aviation Rulemaking Advisory Committee (ARAC), I am pleased to submit the enclosed Recommendation Report from the Training Standardization Working Group (TSWG).

At the July 20, 2023, ARAC meeting at FAA's Washington, DC headquarters, Mr. Brian Koester presented an overview of the report and the working group recommendation that the FAA revise Standardized Curriculum Instructor and Check Pilot Qualifications Master Curriculum.

The TSWG previously recommended a standardized curriculum for instructors and check pilots to ARAC in June 2021. Then, after the FAA published a final version of the curriculum in February 2023, the TSWG identified sections that would require technical amendment or improvement – which are covered, in detail, in the recommendation report.

ARAC members who attended the meeting, in-person and virtually, accepted the report, as presented. With that, I would welcome the agency's timely review and incorporation of the working group's recommendations.

Sincerely,



David Oord
ARAC Chair

Enclosure: Recommendation Report – Training Standardization Working Group – Improving the Instructor and Check Pilot Curriculum

FAA Aviation Rulemaking Advisory Committee



Training Standardization Working Group (TSWG) June 2023 Recommendation Report

Table of Contents

Contents

Table of Contents	2
1 Executive Summary	4
1.1 Summary	4
2 Background	4
2.1 The Task and Tasking	4
2.2 Participants in the Training Standardization Working Group (TSWG).....	6
2.3 Working Group Activity	7
3 Historical Information	7
3.1 Overview	7
3.2 Defining the Problem	8
3.3 Resolution and Benefits	9
3.4 The Scope of a Standardized Curriculum.....	9
4 Recommendations	9
4.1 Recommendation to Improve the Instructor and Check Pilot Qualification Master Curriculum	9

1 Executive Summary

1.1 Summary

The Standardized Curriculum Concept supports the overarching goals to enhance training and checking and promote safer operational practices in part 135 operations through a common and consistent methodology for training and evaluating. This supports the National Transportation Safety Board Most Wanted List initiative to improve the safety of part 135 flight operations.

The TSWG is comprised of representatives from the aviation industry, including training centers, aircraft manufacturers, operators and industry organizations, serving as members of the group and report to ARAC. This recommendation report includes the results of the following TSWG actions:

- Identified the components of Adaptive Recurrent standardized curricula, which incorporate the maneuvers, procedures and functions to be performed during training and checking.
- Recommended revision to Federal Aviation Administration (FAA) guidance to facilitate the execution of the standardized curricula.

2 Background

2.1 The Task and Tasking

The FAA established the Air Carrier Training Aviation Rulemaking Committee (ACT ARC) in 2014 to provide a forum for the U.S. aviation community to discuss, prioritize, and provide recommendations to the FAA about operations conducted under parts 121, 135, and 142, addressing air carrier training.

The ACT ARC produced several part 135-specific recommendations it believed would achieve standardization (where appropriate) and significant administrative efficiency in check pilot qualification, flight instructor qualification, and part 135 air carrier training curricula delivered by part 142 training centers. The ACT ARC also recommended the FAA establish a Standardized Curriculum Concept for part 135 training provided by part 142 training centers.

On March 19, 2020, the FAA assigned this task to the Aviation Rulemaking Advisory Committee (ARAC), who established a new Training Standardization Working Group (TSWG) for this purpose. The TSWG tasking for standardization includes addressing inefficiencies that exist between part 135 and part 142, such as:

1. *Training, Testing, and Checking: Operators may not receive training that matches its operational environment; instructors and check pilots may focus on multiple operational methods, which decreases the quality of training, and checking.*
2. *Lack of curriculum uniformity and improvements.*

3. *Complicated Approval Process: Multiple Principal Operations Inspectors (POIs) are currently required to review technical elements of the same curriculum.*
4. *Administrative Inefficiencies: Supplemental training for training center instructors and check pilots is required, with individual letters of approvals for each, which leaves an administrative gap with no easy means to verify qualifications. Additionally, part 135 operators must develop their own aircraft-specific fleet curriculum and must reproduce a physical copy of each as part of their training program records.*

Standardized curricula will provide a common method for quality training accessible to any operator that obtains approval to use the curriculum in its FAA-approved training program. The Standardized Curriculum Concept aims to provide an efficient means to approve training curricula offered by part 142 training centers while increasing the consistency of training, testing, and checking delivered to part 135 operators. The use of standardized curricula is strictly voluntary and is one means to comply with the applicable regulatory requirements of parts 135 and 142. The standardized curriculum does not modify existing regulatory requirements for pilot training or qualification.

The Aircraft-Specific Part 135 Standardized Curriculum Model will enhance operator/training center safety programs and create a feedback loop that allows part 135 operators and part 142 training centers to partner in an effort to systematically use safety information to continually review and improve the standardized curriculum, as well as target areas of emphasis to enhance the quality of training provided. This “train as you fly, fly as you train” approach harmonizes with safety management principles, industry best practices, and risk mitigation, raising the level of safety competencies, threat awareness, and feedback for continual evaluation.

This improvement feedback mechanism forms the basis for revising the standardized curriculum, conducting training and administering checking. These three components then work together to allow the part 135 operator to spotlight the quality of the training program rather than the administration of the training program. Likewise, it also allows the part 142 training center to deliver a standardized and consistent training product that has the capability for continual improvement on a national level.

The TSWG will provide advice and recommendations to the ARAC on the most effective ways to standardize part 135 air carrier curricula delivered by training centers. The group is formally tasked with the following:

1. *Recommend a detailed master schedule for the development of part 135 standardized curricula for each aircraft or series of aircraft.*
2. *Develop and recommend a standardized curriculum to qualify training center instructors and evaluators (check pilots) to provide part 135 training, testing, and checking.*
3. *Develop and recommend part 135 standardized curricula for each aircraft or series of aircraft, which includes the maneuvers, procedures, and functions to be performed during training and checking.*
4. *Recommend continuous improvements to each part 135 standardized curriculum for a specific aircraft or series of aircraft.*

5. *Develop reports that contain recommendations for standardized curricula and results of the tasks listed. The group should review relevant materials to assist in achieving their objective, including FAA Advisory Circular 142-1, Standardized Curricula Delivered by Part 142 Training Centers.*

Under the Standardized Curriculum concept, the TSWG uses formalized stakeholder input to develop and recommend to the ARAC standardized curricula for each aircraft fleet. The ARAC uses the work of the TSWG to make recommendations to the FAA. The FAA reviews the recommendations and, if acceptable, makes draft standardized curricula available for public comment through published notices in the Federal Register. The FAA may task the ARAC, through the TSWG, to use the public comments to refine its recommendations to ARAC. The FAA reviews the recommendations and, if acceptable, publishes the standardized curricula at a national level.

2.2 Participants in the Training Standardization Working Group (TSWG)

Name	Organization
TSWG Members	
Brian Koester, Chair	National Business Aviation Association
Thomas Benvenuto	Solairus Aviation
Stephen Bragg	Executive Jet Management
Greg Brown	Helicopter Association International
Doug Carr	National Business Aviation Association
Gene Copeland*	Jet Aviation
Jon Dodd	Coalition of Airline Pilots Associations
Aimee Hein	CAE, Inc.
Jens Hennig	General Aviation Manufacturers Association
Todd Lisak	Air Line Pilots Association
Steve Maloney	Sun Air Jets
Allan Mann	Wheels Up, LLC
John McGraw	National Air Transportation Association
Brian Neuhoff	Airbus Helicopters
Fabricio Oliveira de Toledo*	Embraer
Janine Schwahn	Summit Aviation, Inc.
Brian Small*	FlightSafety International
Annmarie Stasi	Northwell
Daniel Von Bargen	Pilot
Matthew Zeimen*	Textron
FAA, Other Advisory, and Support Staff	

Josh Tarkington, Project Lead	Training and Simulation Group, AFS-280
Paul Preidecker, Facilitator	Training and Simulation Group, AFS-280
Jim Sapoznik, Subject Matter Expert	Training and Simulation Group, AFS-280

**Participants awaiting DOT approval*

2.3 Working Group Activity

The TSWG members agreed to form subgroup teams to research and analyze:

- Curriculum, which includes published guidance, regulations, reference materials, data sources, and airframes practical for standardization.
- Qualifications, to include instructors, pilots, and safety-implications.
- Continuous Improvement methods, which includes data-driven metrics and recommendations.

The TSWG must comply with the procedures adopted by the ARAC as follows:

- Conduct a review and analysis of the assigned tasks and any other related materials or documents.
- Draft and submit a work plan for completion of the task, which includes the rationale to support the plan, for consideration by ARAC.
- Provide a status report at each ARAC meeting.
- Draft and submit the recommendation report based on the review and analysis of the assigned tasks.
- Present the recommendation report at the ARAC meeting.

TSWG was able to comply with the schedule and deadlines as outlined in the FAA Tasking Notice:

June 2021 – Deadline to submit the initial recommendation report, which includes the proposed master schedule for standardized curriculum development to ARAC. The deadline to submit the interim report to the FAA is June 30, 2021.

December 2021 – Deadline to submit the addendum recommendation report, which includes a standardized curriculum to qualify training center instructors and check pilots to provide part 135 training, testing, and checking to ARAC. The deadline to submit the interim report to the FAA is December 31, 2021.

The TSWG will submit ad hoc recommendation reports, which includes type-specific standardized curricula packages (SCPs) and continuous improvements to the standardized curricula, via ARAC to the FAA for review and consideration at any time.

3 Historical Information

3.1 Overview

The concept of the standardized curriculum was recommended by industry through the Air Carrier Training Aviation Rulemaking Committee to remedy inefficiencies in the current

dynamic between part 135 and part 142. The new standardized curriculum is expected to improve the efficiency of approval processes and increase the consistency of training, testing, and checking delivered to part 135 operators.

FAA Advisory Circular 142-1, Standardized Curricula Delivered by Part 142 Training Centers, provides the framework for implementation of the Standardized Curriculum Concept. Under the concept, the FAA accepts an aircraft-specific standardized curriculum at a national level. A part 142 training center may deliver the nationally accepted standardized curriculum to any part 135 operator that obtains approval to use it.

The part 135 operator's POI reviews the curriculum and grants approval for use of the aircraft-specific part 135 standardized curriculum, without changes, as part of the operator's training program. In discussions with the operator, the POI determines whether use of the aircraft-specific standardized curriculum (which comes with a cadre of qualified instructors and check pilots, along with use of the standardized curriculum) is appropriate for that operator based on the published guidance, rather than reviewing the specific content of individual modules in the aircraft-specific curriculum and the accompanying training center instructor/evaluator documentation. Introducing an aircraft-specific part 135 standardized curriculum for operators, coupled with guidance that enables part 142 training centers to develop a curriculum that would qualify part 142 training center instructors and evaluators to conduct training/checking under that aircraft-specific part 135 standardized curriculum, would address a number of inefficiencies in the current system.

3.2 Defining the Problem

Part 142 training centers generally have clients operating under a variety of 14 CFR parts and develop a core curriculum to meet the needs of their stakeholders. Currently, these core curriculums cannot be used by part 135 operators. Instead, each part 135 operator must have its own training program approved by the operator's POI. The training program can be based on the part 142 training center's core curriculum; however, the operator or POI may require changes so that the resulting curriculum meets all part 135 regulatory requirements. Because some of these curricula were not originally designed for part 135 operators, many adjustments and improvements may be necessary, which results in a lack of curriculum uniformity.

These changes, combined with the time it takes for each POI to conduct an in-depth review of each operator's curriculum, creates strain on the POI, the operator, and the training center. The operator is required to obtain POI approval of the "contract check pilot" to conduct checks under the operator's training curriculum, generally through the center's Training Center Evaluators (TCE).

The framework for the aircraft-specific part 135 standardized curriculum model, which also addresses the inefficiencies involved with each operator having approved instructors/contract check pilots, should include a manner by which training center instructors/evaluators can be qualified as instructors/check pilots under part 135. Specific guidance can be developed that would assist training centers to develop a standard non-aircraft-specific training curriculum that satisfies the requirements of § 135.329, 135.345, 135.293, and 135.297 in a manner consistent with the size, scope, and complexity of the operator (in this case, a part 142 training center) and

can be approved under part 142. The training center would use this special curriculum to train and qualify its instructors/evaluators to conduct training, testing, and checking under standardized curriculums for part 135 operators.

3.3 Resolution and Benefits

The standardized curriculum may be valuable to the industry due to the expectation it will enhance safety and increase administrative benefits. Within the industry, this curriculum will be especially advantageous to part 142 training centers, part 135 operators that use a part 142 training center, training personnel who develop and deliver training under parts 135 and 142, as well as individual contract pilots.

Enhanced Training, Testing, and Checking.

The use of a common set of Standard Operating Procedures (SOPs) eliminates the situation in which part 142 training center personnel deliver training and checking to numerous part 135 operators with widely varying objectives, standards, and procedures. This approach allows instructors and check pilots to focus on one operational method, which increases their ability to evaluate comprehensively the pilots they are checking.

Leveraging Expertise.

An industry-led group composed of subject matter experts (SMEs) that represent manufacturers, part 135 operators, part 142 training centers, and industry trade organizations develops the standardized curriculum. Any stakeholder can recommend improvement at any time. This means that as risks are identified (i.e., NTSB safety recs), the curriculum can be updated at a global level, with those improvements drilled down to all the operators using the curriculum.

Streamlined Approval Process.

The FAA approves and publishes the standardized curriculum at a national level. This eliminates the need for multiple POIs to review technical elements of the same curriculum. Instead, POIs evaluate if the curriculum (and associated standards and procedures) fit the needs of the part 135 operator.

Administrative Efficiency.

A part 142 training center qualifies its personnel as instructors and check pilots for the part 135 standardized curriculum. This eliminates the need for individually issued check pilot letters of approval for each part 135 operator. Also, a part 135 standardized curriculum listed in a training center's Training Specifications (TSpecs) may be referenced in the part 135 operator's training program as an FAA-published curriculum in accordance with § 135.341, without the need to reproduce a physical copy of the curriculum.

3.4 The Scope of a Standardized Curriculum

An aircraft-specific standardized curriculum is only one segment of the training required to serve as a pilot in part 135 operations. It will not provide part 135 operators with a complete training program, and is only a segment of training in accordance with § 135.324(b). See Figure 2-1 Standardized Curriculum Elements below:

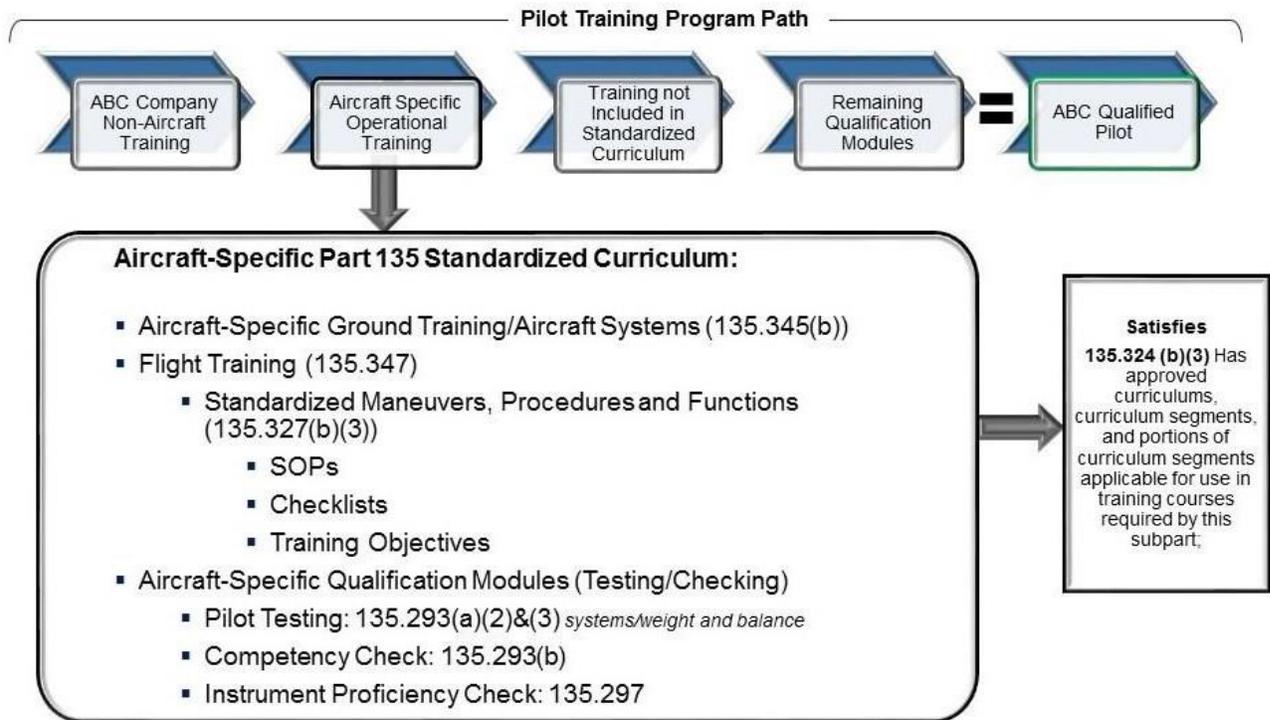


Figure 2-1 Standardized Curriculum Elements

As required for any training conducted in accordance with § 135.324(b), the part 142 training center must qualify its personnel to provide part 135 training, testing, and checking as outlined in AC 142-1 in order to deliver the standardized curriculum. The image above, Figure 2-1, Standardized Curriculum Training Elements, illustrates “the box” in which training, testing, and checking is included in the standardized curriculum. Figure 2-1 also illustrates where the standardized curriculum resides in the path to part 135 pilot qualification. The expanded area, “Aircraft-Specific Operational Training portion of the Pilot Training Program Path”, defines the elements within the box of the standardized curriculum, and represents what the ACT ARC recommended.

The Standardized Curriculum Package (SCP) is a package comprised of the training curricula and the supporting courseware, equipment, records, personnel, and facilities necessary to deliver a curriculum or group of curricula for part 135 training. The part 142 training center qualifies its personnel to deliver the part 135 training.

A part 142 training center may deliver the nationally accepted standardized curriculum to any part 135 operator that obtains approval for its use. It is one, voluntary way to comply with existing regulations as well as a way to simplify the approval process for an air carrier’s training program.

4 Recommendations

4.1 Recommendation to Improve the Instructor and Check Pilot Qualification Master Curriculum

The Training Standardization Working Group recommends the FAA revise Standardized Curriculum Instructor and Check Pilot Qualification Master Curriculum with the following technical corrections and improvements.

The TSWG recommended a standardized curriculum for instructors and check pilots to ARAC in June 2021. In February 2023, the FAA published a final version of the Instructor and Check Pilot Qualification Master Curriculum. As the TSWG reviewed the final document, the working group recognized sections of the curriculum that require technical amendment or improvement, which are listed below.

The underlying premise of the following improvement to the Instructor and Check Pilot Qualification Master Curriculum is that the appropriate training and qualification checking to serve as PIC in an operation under Part 135 applicable to a Simulator Only Contract Training Instructor is distinct and different from those applicable to a Line Qualified PIC in revenue service for all types of Part 135 operation in all types of aircraft as asserted by the curriculum currently issued. Existing FAA Policy supports this premise of distinction with the various means to comply with Part 135 PIC and/or Instructor requirements allowing aircraft from Single Engine to Gulfstreams to all be compliant with Part 135 regulations applicable to their operation. Additionally, the FAA is on record in Federal Register Part 135 Amendment 135-64, 6 JUN 1996, espousing the value of differentiating the required training and qualification of (simulator) flight instructors versus (aircraft) flight instructors. Finally, the current common method to qualify Air Carrier Simulator Flight Instructors is to have Simulator instructor PIC qualified for simulator operations by training and checking these instructors in a simulator and obtaining currency serving as SIC or LOP without being PIC qualified for revenue service. This being the precedent set by FAA Policy, it is the intent of these improvement recommendations to distinguish those items/tasks in the currently published Instructor and Check Pilot Qualification Master Curriculum that should be removed to be consistent with precedent that will support a more suitable level of Contract Training Simulator Instructor Initial Qualification.

Page and Paragraph	Reviewer's Comment and Rationale	Reviewer's Recommendation
Pg. 5. 1.2 B. Training.	This section requires bifurcation between flight instructor/check pilot (aircraft) and flight instructor/check pilot (simulator). The purpose of standardized curriculum is for part 142 training center to deliver training to part 135 certificate holders' pilots, thus a focus on simulator IP/CP should be the focus.	The TSWG recommends amending this paragraph to the following: To satisfy the regulatory requirements of §§ 135.337(c)(2-3), (f), and 135.338(c)(2-3), (f), the proposed training must be completed in a flight simulator that replicates the same aircraft type that the instructor or check pilot seeks to become qualified in to provide training and checking. In addition, §§ 135.337(f) and 135.338(f) requires that the check pilot or flight

Page and Paragraph	Reviewer's Comment and Rationale	Reviewer's Recommendation
		instructor fly in the “type, class, or category aircraft” for which they seek to gain qualification to serve as a flight instructor or check pilot or complete an approved line-observation program.
Pg. 5. 1.3.B. Applicable Requirements	Making a statement including the word "must" without clear definition as to what is required and how compliance is evaluated should not be included.	The TSWG recommends deleting paragraph 1.3.B.
Pg. 6. 2.1.B. Note.	The sentence in the note should be removed. "Should" is subjective but will be interpreted as mandatory.	The TSWG recommends amending this paragraph as follows: NOTE: Basic Indoctrination is for pilots who have not operated under part 135. Also, it should be considered for those pilots who have previous experience but have not operated under Part 135 in the past 36 months. The goal is to provide instructors and check pilots a basic understanding of part 135 operations.
Pg. 10 NOTE	Incorrect use of the word “Planned” and subsequent language only permitting exceedance of stated planned hours is incompatible with existing 8900.1 language regarding planned vs. programmed hours as well as POI guidance regarding acceptance of hours less than the “national norm” based on modern training methods.	The TSWG recommends amending this paragraph as follows: Planned hours are estimated ranges. Actual Planned hours may be exceeded until less than or in excess of estimated ranges with the requirement that the candidate demonstrates proficiency in all applicable maneuvers.
Pg. 10. Table 2. 1. Basic Indoctrination Training. 46 hours initial planned hours.	The 46 planned hours for initial indoctrination training is excessive and does not demonstrate a basis in guidance or regulation. The FAA Order 8900.1, Vol. 3, Chap. 19. Section 3 contains "direction and guidance to POIs" regarding Basic Indoc hours. For a line pilot this would be 32 hours for	The TSWG recommends amending 46 to 24 hours, which is the threshold listed in the Order 8900.1.

Page and Paragraph	Reviewer's Comment and Rationale	Reviewer's Recommendation
	<p>Transport category and 24 hours for IFR Multi-engine. Given the fact that the contract training provider is given limited scope of authorizations, any planned hours in excess of the established norms has no added value. Planned hours for exposure to 135 basic indoc elements should match up with training time for only those subjects/elements having direct value.</p>	
<p>Pg. 10. Table 2. 1. Basic Indoctrination Training.</p>	<p>Additional clarity is needed in order to ensure the verbiage is not misunderstood from its intent.</p>	<p>The TSWG recommends adding a note associated with the transition 8.0 hours and 4.0 hours indicating by which method subjects/elements to be taught in transition courses will be identified. Example: The emergency drills section contains a note that it is not required for transition. This must be clear as all subjects/elements may not be adequately covered when reducing from 46 to 8 or 4 hours</p>
<p>Pg. 10. Table 2. 2. Initial Instructor/Check Pilot Fundamentals. Initial ground training.</p>	<p>The 10 planned hours for initial ground training is excessive and does not demonstrate a basis in guidance or regulation.</p> <p>Fundamentals training should not exceed 4.0 hours for Initial or transition A</p>	<p>The TSWG recommends changing 10 hours to 4.</p>
<p>Pg. 10 and 11. Table 2. 4, 5, and 6. Qualification Event. 2.5 hours.</p>	<p>It is not necessary to establish a minimum number of planned hours for qualification events. The duration of qualification events is determined by the number of items that need checked and the time required to accomplish them.</p>	<p>The TSWG recommends deleting the planned hours for qualification events.</p>

Page and Paragraph	Reviewer's Comment and Rationale	Reviewer's Recommendation
Pg. 12. 4.4.A General Part 135 Operations Training.	For simplicity and to avoid duplication, please do not include planned hours references in these paragraphs. Please only include total planned hours in the main table.	The TSWG recommends amending the last sentence as follows. This training is planned for 8.5 hours and is designed to provide one acceptable means to satisfy §§ 135.329(a)(1)(i)-(a)(1)(iii). Reference Table 3: General Part 135 Operations Training.
Pg. 13 Table 3 Section 2 Bullet 2	The TSWG does not believe this is necessary training	The TSWG recommends removing the following element: Medical certificates, physical examination, and fitness for duty requirements
Pg. 13 Table 3 Section 2 Bullet 5	The TSWG believes this is not required at this point in training, as it will be covered elsewhere based on the needs of the Training Center.	The TSWG recommends removing the following element: Recordkeeping requirements
Pg. 13 Table 3 Section 2 Bullet 9	The TSWG believes this is not required at this point in training, as it will be covered elsewhere based on the needs of the Training Center.	The TSWG recommends removing the following element: Transportation Security Regulations (49 CFR part 1542, Airport Security and 49 CFR part 1544, Aircraft Operator Security: Air Carriers and Commercial Operators)
Pg. 13 Table 3 Section 3 Bullet 1	The TSWG believes that this is not value-added information and unnecessary	The TSWG recommends removing the following element: Historical basis in 14 CFR part 119 and part 135 and Title 49 of the United States Code (49 U.S.C.)
Pg. 13 Table 3 Section 3 Bullet 6	The TSWG believes this is not required at this point in training, as it will be covered elsewhere based on the needs of the Training Center	The TSWG recommends removing the following element: Description of the Certificate Management Office (CMO)/Flight Standards District Office (FSDO) and responsibilities of FAA principal inspectors

Page and Paragraph	Reviewer's Comment and Rationale	Reviewer's Recommendation
Pg. 14. 4.4.B. Airman-Specific Training.	For simplicity and to avoid duplication, please do not include planned hours references in these paragraphs. Please only include total planned hours in the main table.	The TSWG recommends amending the last sentence as follows. This training is planned for 23.5 hours and designed to provide one acceptable means to satisfy §§ 135.345(a)(1)-(a)(7). See Table 4: Airman-Specific Training.
Pg. 14 Table 4 Section 1 Bullet 2	The TSWG believes this is not required at this point in training, as it will be covered elsewhere based on the needs of the Operator	The TSWG recommends removing the following element: Flight locating systems and procedures based on types of operations (§ 135.345(a)(1))
Pg. 14 Table 4 Section 1 Bullet 4	The TSWG believes this is not required at this point in training, as it will be covered elsewhere based on the needs of the Operator	The TSWG recommends removing the following element: Typical part 135 operator communications
Pg. 14. Table 4. Airman-Specific Training	If the plan is to remove 135.293(a)(3) authority from contract training and checking then there is no need for weight and balance training, as it is already completed under part 142	The TSWG recommends removing section 2. Principles of Weight and Balance (W&B) §135.345(a)(2) from Table 4.
Pg. 15 Table 4 Section 4 Title	The TSWG believes this is not a value-added training for the role of simulator instructor.	The TSWG recommends removing the following text from title: Airspace and Air Traffic Control (ATC) systems, procedures, and phraseology (§ 135.345(a)(4))
Pg. 15. Table 4. 4. Airspace and Air Traffic Control (ATC) systems, procedures, and phraseology (§	Airspace is not included in (§ 135.345(a)(4). Additionally, wake turbulence, as it relates to air traffic control, is referenced in Order 7110.65 2-1-20. In regards to wake turbulence training requirements, because the	The TSWG recommends removing airspace from the Air-man specific training modules listed in table 4 to accurately reflect the scope of the regulatory reference. 4. Airspace and Air Traffic Control (ATC) systems, procedures, and phraseology (§ 135.345(a)(4)):

Page and Paragraph	Reviewer's Comment and Rationale	Reviewer's Recommendation
135.345(a)(4):	module is focused on ATC, the reference should be Order 7110.65 2-1-20, rather than the AIM.	<ul style="list-style-type: none"> • Definitions (precision approaches, airways, automated terminal information service (ATIS), etc.) • Description of airspace • Navigation performance and separation standards • Controller and pilot responsibilities • ATC communications • Wake turbulence recognition and avoidance (Aeronautical Information Manual (AIM) Chapter 7, Section 4; AC 90-23 (current edition) • NextGen concepts (ADS-B, data link communications, Network Enabled Weather (NEW), NAS voice switch (NVS), etc.)
Pg. 15 Table 4 Section 5 Bullet 2-3	The TSWG believes this is not a value-added training for the role of simulator instructor.	The TSWG recommends removing the following elements: Basic navigational instruments Dead reckoning and pilotage concepts and procedures
Pg. 16 Table 4 Section 7 Bullet 1-2	The TSWG believes this is not a value-added training for the role of simulator instructor although the suggested additional items would.	The TSWG recommends replacing the following elements: Flight Information Handbook (FIH) guidance Jeppesen and International Civil Aviation Organization (ICAO) references With the following: ATC Clearances and Aircraft Separation Pilot/Controller Roles and Responsibilities Distress and Urgency Procedures
Pg. 16 Table 4 Section 10 Bullets 1-6 & 9	The TSWG believes this is not a value-added training for the role of simulator instructor.	The TSWG recommends removing the following elements from RVSM training: <ul style="list-style-type: none"> • Background • Definitions • Equipment for RVSM operations • Conditions for approval, removal

Page and Paragraph	Reviewer's Comment and Rationale	Reviewer's Recommendation
		<p>and verification/monitoring</p> <ul style="list-style-type: none"> • Flight planning • Preflight procedures • Procedures prior to RVSM airspace entry • Inflight procedures • Post flight procedures • Inflight contingencies • Use of Traffic Collision Awareness System (TCAS) in RVSM airspace
Pg. 17 Para. C	The TSWG believes better clarity is needed	Remove indicated verbiage from second sentence as follows: Crewmembers will also familiarize themselves with and become accomplished in the actual use of certain items of emergency equipment on the specific aircraft type such as fire extinguishers, life vests, oxygen bottles and first aid equipment (Emergency Drill Training).
Pg. 17 Para. C	Paragraphs should not contain specific time requirements. This sentence is in conflict with Note 1	Remove the following sentence: Emergency Drill training is conducted hands on and is planned for 4.0 hours.
Pg. 17 Para. C	Unnecessary sentence and difficult to comply with. Training Providers should be able to develop courseware for approval by FAA oversight. If off the shelf products are available, Training providers may have the option to purchase and submit those items for review and approval	Remove the following sentence: These video demonstrations can be developed and approved under the aircraft specific standardized curriculum approval process, and published on the Dynamic Regulatory System (DRS) for use by training centers.
Pg. 17. Table 5. 1. Reporting Emergency Situation Training. Reporting incidents and accidents.	Reporting incidents and accidents is trained under Table 3 in the module on NTSB section 830.	The TSWG recommends removing the requirement to train on reporting incidents and accidents from section 1 of Table 5. Emergency Assignments Reporting incidents and accidents.

Page and Paragraph	Reviewer's Comment and Rationale	Reviewer's Recommendation
Pg. 18 Para. C Table 5 Section 2	Conflicts with permission to use video for familiarization	Remove the word "Actual" from sub bullets 1 and 4
Pg. 19 Para. C Table 5 Section 3	The TSWG believes this is not a value-added training for the role of simulator instructor.	Remove the following subject and elements: <ul style="list-style-type: none"> • Illness, injury and basic first aid ◦ Seeking medical assistance (In flight medical services, ATC, etc.) ◦ Ear and sinus blocks ◦ Cuts, bumps, bruises, and burns ◦ Heart attack situations and Cardiopulmonary Resuscitation (CPR) ◦ Automated External Defibrillator (AED) ◦ Treatment of shock ◦ Pregnancy situations
Pg. 19 Para. C Table 5 Section 3	The TSWG believes this is not a value-added training for the role of simulator instructor.	Remove the following subject and elements: <ul style="list-style-type: none"> Abnormal situations involving passenger or crewmembers ◦ Passenger abuse of crewmembers ◦ Passengers who appear to be under the influence of intoxicating substances ◦ Passengers who may jeopardize aircraft or passenger safety
Pg. 19 Para. C Table 5 Section 3	The TSWG believes this is not a value-added training for the role of simulator instructor.	Remove the following elements: <ul style="list-style-type: none"> ◦ Anti terrorist security ◦ Hijack procedures ◦ Bomb threats
Pg. 19 Para. C Table 5 Section 4	The TSWG believes this is not a value-added training for the role of simulator instructor.	Remove the following element: <ul style="list-style-type: none"> Exit procedures

Page and Paragraph	Reviewer's Comment and Rationale	Reviewer's Recommendation
Pg. 19 Para. C Table 5 Section 4	The TSWG believes this is not a value-added training for the role of simulator instructor.	Remove the following element: Actual discharge of each type of extinguisher
Pg. 19 Para. C Table 5 Section 4		Remove the following Subject: Emergency Evacuation (§ 135.331(c)(2))
Pg. 20 Para. C Table 5 Section 4	The TSWG believes this is not a value-added training for the role of simulator instructor.	Remove the following subjects and elements: <ul style="list-style-type: none"> • Fire Extinguishing and Smoke Control (§ 135.331(c)(3)) • Normal and Emergency Exits (§ 135.331(c)(4)): <ul style="list-style-type: none"> — o Actual operation (open and close) of each exit in the normal and emergency modes — o Instruction on slide or slide raft deployment, transfer from one door to another, and detachment from the aircraft or training device of each type of slide or slide raft (if applicable) — o Actual use of slide or slide raft (this requirement needs to be accomplished only once during initial new hire or initial equipment training) — o Procedures for egress
Pg. 20 Para. C Table 5 Section 4	The TSWG believes this is not a value-added training for the role of simulator instructor.	Remove the indicated elements: <ul style="list-style-type: none"> • Use of Crew and Passenger Oxygen Systems (§ 135.331(c)(5)): o Type o Location o Purpose o Inspection tags, seals, dates and pressures o Removal and stowage of oxygen bottles o Procedures for use o Actual operation of each type of bottle and each type of mask

Page and Paragraph	Reviewer's Comment and Rationale	Reviewer's Recommendation
		<ul style="list-style-type: none"> o Emergency oxygen system –PBE <input type="checkbox"/> Inspection tags, dates and pressures <input type="checkbox"/> Removal and stowage <input type="checkbox"/> Donning and operation
Pg. 20 Para. C Table 5 Section 4	The TSWG believes this is not a value-added training for the role of simulator instructor.	<p>Remove the following subjects and elements:</p> <ul style="list-style-type: none"> • Life Rafts (§ 135.331(c)(6)): <ul style="list-style-type: none"> —o Life raft removal and inflation —o Use of lifelines —o Boarding of passengers and crew into life raft —o Instruction on survival equipment in the life raft • Life Preservers (§ 135.331(c)(7)): <ul style="list-style-type: none"> —o Donning and demonstration on inflation of life vest —o Other individual flotation devices
Pg. 21-23 Para. E	The TSWG believes this is not a value-added training for the role of simulator instructor.	Remove HAZMAT/DG paragraph and Table 7 entirely.
Pg. 26 Para. 5 Table 8 Section 4	The TSWG believes this is not a value-added training for the role of simulator instructor.	<p>Remove the following elements:</p> <ul style="list-style-type: none"> o Data usage and benefits o Data consistency challenges o Practice exercises
Pg. 26 Para. 5 Table 8 Section 5	Redundant element	Remove the following element: Performance evaluations
Pg. 28. Paragraph 6.3 Qualification Standards.	This paragraph was included in error, as ground instructor qualification standards are included at the end of paragraph 6.1. Please remove paragraph 6.3.	The TSWG recommends removing section 6.3 Qualification Standards. 6.3. Qualification Standards. Upon completion of the basic indoctrination training, the candidate should be capable of completing a written

Page and Paragraph	Reviewer's Comment and Rationale	Reviewer's Recommendation
		examination with a passing score of at least 80 percent (corrected to 100-percent), failure of which will result in remedial training and the administration of a new written examination.
Pg. 30 Para. 7 Table 10 Section 1	The TSWG believes this is not a value-added training for the role of simulator instructor.	Remove the following subject: Monitoring Priorities
Pg. 30 Para. 7 Table 10 Section 1	The TSWG believes this is not a value-added training for the role of simulator instructor.	Remove the following subject: Training in the operation of flight simulators, flight training devices, or both, to ensure competence to conduct the flight instruction required by part 135
Pg. 35/37 Para. 8/9 Table 14/17 Section 1	The TSWG believes this is not a value-added training for the role of simulator instructor.	Remove the following elements: ○ Elements to be evaluated— □ Grade scale usage and reason codes □ The nature of crew assessment, grading components, rating scales, administrative considerations and examples of the criteria
Pgs. 39-49 Appendix. A Tables	The TSWG believes this needs to be updated with current terminology	Replace all instances of “CRM” with “Human Factors”