



U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: Part 135 Second in Command Professional Development Program **Date:** 6/28/18 **AC No:** 135-43
Initiated by: AFS-200 **Change:**

- 1 PURPOSE OF THIS ADVISORY CIRCULAR (AC).** This AC provides information and guidelines to Title 14 of the Code of Federal Regulations (14 CFR) part [135](#) air carriers/operators to aid in the development of a Second in Command Professional Development Program (SIC PDP) which meets the requirements of part 135, § [135.99\(c\)](#). This program allows a pilot employed by the part 135 air carrier/operator and serving as an assigned second in command (SIC) in a multiengine airplane or single-engine, turbine-powered airplane to log SIC flight time during operations that do not require a second pilot.
 - 2 AUDIENCE.** The primary audience for this AC is air carrier and operator personnel involved in the development of a part 135 SIC PDP. Pilots interested in participating in an SIC PDP should also be familiar with this AC.
 - 3 WHERE YOU CAN FIND THIS AC.** You can find this AC on the Federal Aviation Administration's (FAA) website at http://www.faa.gov/regulations_policies/advisory_circulars.
 - 4 RELATED REGULATIONS.** The current editions of the following 14 CFR parts can be located at <http://www.ecfr.gov>.
 - Part [61](#), Certification: Pilots, Flight Instructors, and Ground Instructors.
 - Part [91](#), General Operating and Flight Rules.
 - Part [135](#), Operating Requirements: Commuter and On Demand Operations and Rules Governing Persons On Board Such Aircraft.
 - 5 RELATED GUIDANCE.** The current editions of the following ACs can be located at http://www.faa.gov/regulations_policies/advisory_circulars/.
 - AC [120-51](#), Crew Resource Management Training.
 - AC [120-62](#), Takeoff Safety Training Aid.
 - AC [120-68](#), Pilot Records Improvement Act of 1996.
 - AC [120-71](#), Standard Operating Procedures and Pilot Monitoring Duties for Flight Deck Crewmembers.
 - AC [120-74](#), Parts 91, 121, 125, and 135 Flightcrew Procedures During Taxi Operations.
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6 BACKGROUND.

6.1 The Airline Safety and Federal Aviation Administration Extension Act.

On August 1, 2010, the President signed Public Law (PL) [111-216](#), the Airline Safety and Federal Aviation Administration Extension Act of 2010. PL 111-216, Section 217, Airline Transport Pilot Certification, directed the FAA to ensure that applicants for an Airline Transport Pilot (ATP) Certificate have received flight training, academic training, or operational experience that will prepare the pilot to, among other things, function effectively in a multi-pilot environment, adhere to the highest professional standards, and function effectively in an air carrier operational environment.

6.2 Regulatory Relief: Aviation Training Devices; Pilot Certification, Training, and Pilot Schools; and Other Provisions Final Rule.

On June 27, 2018, the FAA issued the Regulatory Relief: Aviation Training Devices; Pilot Certification, Training, and Pilot Schools; and Other Provisions Final Rule. This Final Rule included an amendment to § 135.99 to permit a part 135 air carrier/operator to receive authorization of an SIC PDP via its operations specifications (OpSpecs). This amendment is effective on November 26, 2018. Under an SIC PDP, the Final Rule allows pilots employed by the part 135 air carrier/operator to log SIC flight time in an aircraft or operation that does not otherwise require an SIC. The Final Rule allows this flight time to be used to meet certain aeronautical experience requirements of part 61 for an ATP Certificate and certain aeronautical experience requirements specified in part 135.

7 OBJECTIVES. The objectives of an SIC PDP include:

7.1 Developing Professional Pilots. The FAA believes that a comprehensive SIC PDP can provide opportunities for beneficial operational experience in a multi-pilot environment that may not otherwise exist. The FAA also believes that an SIC PDP can provide a strong foundational experience for a developing professional pilot.

7.2 Increased Safety. The FAA believes that an SIC PDP can provide increased safety in operations conducted with two pilots instead of one pilot.

8 SIC PDP REGULATORY REQUIREMENTS. A 14 CFR part [119](#) certificate holder authorized to conduct part 135 operations may receive authorization via OpSpec A062, Second in Command Professional Development Program, of an SIC PDP if the following requirements are met.

8.1 General Requirements.

1. In accordance with § 135.99(c), the air carrier/operator must be authorized to conduct instrument flight rules (IFR) operations under part 135.
2. In accordance with § 135.99(d), the air carrier/operator must not be authorized to operate as a basic operator, single-pilot-in-command (PIC) operator, or single-pilot operator in accordance with OpSpec A037, Basic 14 CFR Part 135 Operator – Commuter and On-Demand Operations, OpSpec A038, Basic 14 CFR Part 135 Operator – On Demand Operations Only,

OpSpec A039, Single Pilot in Command Operator, or OpSpec A040, Single Pilot Operator.

Note: These air carriers/operators, either by regulation or deviation, are not required to develop and maintain manuals, are not required to establish and maintain an approved pilot training program, and are not required to employ certain management personnel. Because of the limited size and scope of these air carriers'/operators' operations, the FAA does not believe that they would provide the environment necessary to foster an SIC PDP.

3. The air carrier/operator must have an accepted manual, as required by §§ [135.21](#) and [135.23](#).
4. The air carrier/operator must have approved SIC training and qualification curriculums as required by part 135 subparts [G](#), [H](#), and [K](#).
5. In accordance with § [135.323\(a\)](#), the air carrier/operator must have approved PIC training for pilots who will serve as PIC on flights conducted in accordance with an SIC PDP.
6. Pursuant to § 135.99(c)(1), the air carrier/operator must maintain records in accordance with § [135.63](#).
7. In accordance with § 135.99(c)(1), the air carrier/operator must have data collection and analysis processes acceptable to the FAA that will enable the air carrier/operator and the FAA to determine whether the SIC PDP is accomplishing the objectives.

8.2 Aircraft Requirements. In accordance with § 135.99(c)(2), the aircraft must be a multiengine airplane or single-engine, turbine-powered airplane and have the following:

1. An independent set of controls (i.e., control wheel or side stick, rudder pedals, and brakes) for a second pilot flightcrew member. The airplane may not have a throwover control wheel.
2. Independent flight instrumentation for a second pilot flightcrew member including at least the following:
 - Airspeed indicator;
 - Sensitive altimeter adjustable for barometric pressure;
 - Gyroscopic bank and pitch indicator (artificial horizon);
 - Gyroscopic rate-of-turn indicator combined with an integral slip-skid indicator;
 - Gyroscopic direction indicator (directional gyro (DG) or equivalent);
 - For IFR operations, vertical speed indicator (VSI) (rate-of-climb indicator);
 - For IFR operations, course guidance for en route navigation and instrument approaches; and
 - Any additional instrumentation required by the air carrier/operator's OpSpecs.

3. An oxygen mask, oxygen dispenser, and oxygen supply for a second pilot flightcrew member in accordance with §§ [135.89](#) and [135.157](#), as applicable.
4. A microphone, transmit switch, and headphone or speaker for a second pilot flightcrew member.

Note: A cockpit voice recorder (CVR) is not required for operations conducted under an approved SIC PDP. In accordance with § [135.151](#), no person may operate a multiengine, turbine-powered airplane or rotorcraft having a passenger seating configuration of six or more and for which two pilots are required by certification or operating rules unless it is equipped with an approved CVR that meets certain requirements. A flight under an approved SIC PDP is not considered an operation for which two pilots are required by operating rules.

8.3 Manual Requirements. The air carrier/operator must have an accepted manual, as required by §§ 135.21 and 135.23 which must contain, for each airplane used in an SIC PDP:

1. Standard operating procedures (SOP) for conducting operations with two pilots. The SOP must include at least the following, as applicable:
 - Normal procedures, non-normal procedures, abnormal procedures, and emergency procedures (refer to § [135.327\(b\)\(3\)](#));
 - Checklist in accordance with § [135.83](#);
 - Weight and Balance (W&B) and load manifest procedures as required by § 135.23(b);
 - Passenger briefing procedures in accordance with § [135.117](#);
 - Functions assigned each crewmember to be performed in an emergency or emergency evacuation in accordance with § [135.123](#); and
 - Any other procedures applicable to operations conducted with two pilots in accordance with § 135.23(s).

Note: If the air carrier/operator uses the same airplane to conduct operations with one pilot, the manual must also contain the above information for operations with one pilot.

2. Duties and responsibilities for an SIC (refer to § [135.329\(a\)\(1\)\(i\)](#)).
3. Crew pairing requirements in accordance with § 135.99(c)(4).

8.4 SIC Requirements. In accordance with § 135.99(c)(3), to serve as an assigned SIC under an SIC PDP, a person must meet the same certification, qualification, training, testing, and checking requirements as required by part 135 for a required SIC.

Note: If an air carrier/operator is authorized under § [135.3\(c\)](#) to comply with the applicable sections of 14 CFR part [121](#) subparts [N](#) and [O](#) instead of the requirements in part 135 subparts [E](#), [G](#), and [H](#), the assigned SIC must meet the

certification, qualification, training, and checking requirements as required by part 121 subparts N and O, except the assigned SIC may meet the requirements of § [135.245](#) instead of the requirements of § [121.436](#).

8.4.1 Certification Requirements.

8.4.1.1 Airman Certificate. In accordance with § 135.245, an assigned SIC must hold at least a Commercial Pilot Certificate with an airplane category and appropriate class rating and an instrument rating.

8.4.1.2 Medical Certificate. In accordance with part 61, § [61.23\(a\)\(2\)](#), an assigned SIC must hold at least a second-class medical certificate.

8.4.2 Qualification Requirements. In accordance with § 135.245, for operations conducted under IFR, an assigned SIC must meet the instrument experience requirements specified in § 135.245(c).

8.4.3 Part 135 Subpart H Training Requirements. In accordance with § [135.343](#), an assigned SIC must have satisfactorily completed the appropriate initial or recurrent training curriculum within the preceding 12 calendar-months. An assigned SIC must have satisfactorily completed the air carrier/operator's approved SIC training as follows:

- Indoctrination training as specified in § 135.329(a)(1);
- Initial or transition ground training, as applicable, as specified in § [135.345](#);
- Emergency training as specified in § [135.331](#);
- Crew Resource Management (CRM) training as specified in § [135.330](#);
- Initial or transition flight training, as applicable, as specified in § [135.347](#);
- Differences flight training, as applicable, as specified in § 135.347;
- Recurrent ground and flight training as specified in § [135.351](#); and
- Training as specified in § 135.329(e), as applicable.

Note: In accordance with § 135.323(b), if a crewmember completes recurrent training in the calendar-month before or the calendar-month after the month in which that training is required, the crewmember is considered to have completed the recurrent training in the calendar-month in which it was required.

8.4.4 Part 135 Subpart K Training Requirements. In accordance with § [135.505\(a\)](#), if an assigned SIC has duties or responsibilities to perform any of the job functions specified in § [135.501\(a\)](#), then the assigned SIC must have satisfactorily completed the air carrier/operator's approved initial or recurrent hazardous materials (hazmat) training curriculum within the preceding 24 calendar-months. The job functions are not dependent on whether the air carrier/operator is a will-carry or will-not-carry air carrier/operator. An air carrier/operator must clearly specify in the manual required by § 135.21 whether

or not an assigned SIC has duties or responsibilities to perform any of the job functions specified in § 135.501(a).

Note: In accordance with § 135.505(d), a person who satisfactorily completes recurrent hazmat training in the calendar-month before or the calendar-month after the month in which the recurrent training is due is considered to have taken that training during the month in which it is due.

- 8.4.5** Part 135 Subpart G Testing and Checking Requirements. In accordance with § 135.293, as assigned SIC must have satisfactorily completed a written or oral test and a competency check within the preceding 12 calendar-months.

Note: In accordance with § [135.301\(a\)](#), if a crewmember completes a required test or check in the calendar-month before or the calendar-month after the calendar-month in which it is required, that crewmember is considered to have completed the test or check in the calendar-month in which it is required.

- 8.4.6** OpSpecs Requirements. In accordance with part 119, §§ [119.5\(l\)](#) and [119.43\(b\)\(2\)](#), an assigned SIC must satisfactorily complete any training, testing, or checking required by the air carrier/operator's OpSpecs for the operations conducted. For example, OpSpec B046, Operations in Reduced Vertical Separation Minimum (RVSM) Airspace, specifies that the flightcrew must have completed approved training on Reduced Vertical Separation Minimum (RVSM) operating practices and procedures. Therefore, an assigned SIC must have completed the air carrier/operator's approved training on RVSM operating practices and procedures before serving in operations conducted in RVSM airspace.

Note: To conduct certain operations, some OpSpecs specifically require the flight to be conducted with an SIC flightcrew member. For example, OpSpec C079, IFR Lower than Standard Takeoff Minima, 14 CFR Part 135 Airplane Operations – All Airports, specifies that the airplane must be operated with a flightcrew consisting of at least two pilots. OpSpec C079 further specifies that use of an autopilot in lieu of a required SIC is not authorized. Therefore, for operations conducted in accordance with OpSpec C079, the SIC is a required flightcrew member in accordance with § [135.109](#) and is not serving under an SIC PDP.

- 8.4.7** Title 14 CFR Part 120 Requirements. In accordance with part 120, an assigned SIC is a covered employee performing a safety-sensitive function. Therefore, an air carrier/operator must comply with the drug and alcohol testing requirements of part 120 for assigned SICs. The assigned SIC must also complete the Employee Assistance Program (EAP) training required by part 120, § [120.115](#).

- 8.5** **PIC Requirements.** To serve as a PIC conducting operations with an assigned SIC under an SIC PDP, a PIC must have been fully qualified as a PIC for the air carrier/operator for at least the previous 6 calendar-months. The PIC must have also satisfactorily completed

the air carrier/operator's approved initial and recurrent (as applicable) PIC training as follows:

1. Mentoring training as specified in § 135.99(c)(4)(ii) (see Appendix [A](#), Pilot in Command Mentoring Training, for suggested topics).
2. CRM training as specified in § 135.330 for operations conducted with two pilots.
3. Training as specified in § 135.329(e) for operations conducted with two pilots.

8.6 Flight Time, Duty Period, and Rest Requirements. In accordance with § 135.99(c)(3), the air carrier/operator, the PIC and the assigned SIC must comply with the flight time, duty period, and rest requirements of part 135 subpart [F](#). If a flight sequence is assigned to a PIC as a two-pilot operation under an SIC PDP, subsequent removal of an assigned SIC from a flight for any reason is not considered a circumstance beyond the control of the air carrier/operator or flight crewmember under § [135.263\(d\)](#). Therefore, to operate the flight, the PIC must meet the flight time, duty period, and rest requirements applicable to one-pilot operations.

8.7 Recordkeeping Requirements. In accordance with § 135.99(c)(1), the air carrier/operator must maintain records for an assigned SIC in accordance with § 135.63 and must provide a copy of the records required by § 135.63(a)(4)(vi) and (x) to the assigned SIC upon request and within a reasonable time. A reasonable time for the air carrier/operator to provide the requested records to the pilot is generally within 20 calendar-days, which is similar to the timeframe in which an air carrier/operator must provide a pilot with Pilot Records Improvement Act of 1996 (PRIA) records.

8.8 PRIA. As specified in Title 49 of the United States Code (49 U.S.C.) § [44703\(h\)](#) and (i), the air carrier/operator must comply with PRIA. See AC 120-68 for information regarding PRIA.

8.9 Data Collection and Analysis Process. In accordance with § 135.99(c)(1)(iii), the air carrier/operator must have a data collection and analysis process that will enable the air carrier/operator and the FAA to determine whether the SIC PDP is accomplishing the objectives. The data collection and analysis process should have the following minimum components to continually ensure compliance with the SIC PDP requirements, identify nonconformance to policies and procedures, and identify opportunities to improve the SIC PDP.

8.9.1 Evaluation Process. A method to evaluate the SIC PDP and the effectiveness of the training, testing, and checking for the assigned SICs and PICs participating in the SIC PDP. Some possible methods that may be used include the following:

- Operating experience for newly assigned SICs conducted by check pilots qualified under § [135.337](#);

- Line checks of assigned SICs and PICs conducted by check pilots qualified under § 135.337; and
- Other quality assurance (QA) verifications during the training, testing, and checking of assigned SICs and PICs or during revenue operations.

8.9.2 Feedback. A method for assigned SICs and PICs to provide feedback to senior management regarding the SIC PDP and the effectiveness of the training, testing, and checking for the assigned SICs and PICs participating in the SIC PDP.

8.9.3 Corrective Action Process. A method for taking corrective action when deficiencies have been identified through either the evaluation process or feedback.

Note: The data provided to the FAA may be de-identified by removing employee names.

9 LOGGING FLIGHT TIME. In accordance with § [61.51\(f\)\(3\)](#), on or after November 26, 2018, pilots operating under an SIC PDP may log flight time during certain parts 91 and 135 operations, provided the flight operation is conducted in accordance with § 135.99(c), which includes complying with the air carrier/operator's OpSpec A062. OpSpec A062 includes additional requirements for part 91 flights.

9.1 PIC Flight Time.

9.1.1 Assigned PIC. In accordance with § 61.51(e)(5), on or after November 26, 2018, a commercial pilot or ATP may log PIC flight time while acting as PIC of an operation conducted in accordance with § 135.99(c).

9.1.2 Assigned SIC. In accordance with §§ 61.51(e)(1)(i) and [61.159\(c\)\(4\)](#), an assigned SIC of an operation conducted in accordance with § 135.99(c) may not log PIC flight time, even when the assigned SIC is the sole manipulator of the controls.

9.2 SIC Flight Time. In accordance with § 61.51(f)(3), on or after November 26, 2018, an assigned SIC may log SIC flight time while serving as an SIC of an operation conducted in accordance with § 135.99(c), provided the requirements of § 61.159(c) are met.

9.2.1 Aeronautical Experience Requirements of §§ 61.159, [61.160](#), and [61.161](#).

9.2.1.1 Permitted. On or after November 26, 2018, SIC flight time logged in accordance with § 61.159(c) may be used to meet the following requirements:

1. Aeronautical experience requirements specified in § 61.159(a) for an ATP Certificate, except for the flight time requirements specified in § 61.159(a)(5).
2. Aeronautical experience requirements specified in § 61.160 for an ATP Certificate with restricted privileges.

3. Aeronautical experience requirements specified in § 61.161(a) for an ATP Certificate, except for the specific helicopter flight time requirements.

Note: As required by § [61.39\(a\)\(3\)](#), if applying for the practical test with flight time accomplished under § 61.159(c), an applicant must present a copy of the records required by § 135.63(a)(4)(vi) and (x) to the inspector or examiner.

9.2.1.2 Not Permitted. SIC flight time logged in accordance with § 61.159(c) may not be used to meet the following requirements:

1. Flight time requirements specified in § 61.159(a)(5).
2. Specific helicopter flight time requirements specified in § 61.161(a)(2) through (4) (e.g., night and instrument).

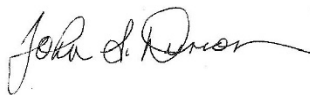
9.2.2 Aeronautical Experience Requirements of Part 135. On or after November 26, 2018, SIC flight time logged in accordance with § 61.159(c) may be used to meet the following requirements:

1. Flight time requirements specified in § [135.4\(a\)\(2\)\(i\)](#), (a)(3), and (a)(4) for “eligible on-demand operations.”
2. Flight time requirements specified in § [135.243\(b\)\(2\)](#) or (c)(2), as applicable, to qualify to serve as a PIC in part 135 operations.
3. Aeronautical experience requirements specified in § [135.247\(a\)\(3\)\(i\)](#) and (ii) for recent experience.

10 LOGBOOK ENDORSEMENT FOR EACH FLIGHT. In accordance with § 61.159(c)(3), to log SIC flight time while serving as an SIC of an operation conducted in accordance with § 135.99(c), the PIC must certify in the assigned SIC’s logbook that the flight time was conducted in accordance with § 61.159(c). The FAA recommends the following endorsement to certify each flight:

I, [PIC Name], certify that [SIC Name] served as an SIC in accordance with § 61.159(c) on the following flight(s) [Airport Identifier to Airport Identifier] on [Date]. [PIC Signature and Airman Certificate Number]

11 AC FEEDBACK FORM. For your convenience, the AC Feedback Form is the last page of this AC. Note any deficiencies found, clarifications needed, or suggested improvements regarding the contents of this AC on the Feedback Form.



John S. Duncan
Executive Director, Flight Standards Service

APPENDIX A. PILOT IN COMMAND MENTORING TRAINING

A.1 PIC Mentoring Training. In accordance with § [135.99\(c\)\(4\)](#), all PICs serving in an SIC PDP must complete mentoring training, including techniques for instilling and reinforcing the highest standards of technical performance, airmanship, and professionalism. PICs must complete this training every 36 calendar-months. The following are suggested topics for PIC mentoring training. Each air carrier/operator should tailor these topics to their specific organizational culture and operations.

A.1.1 Definition of Mentoring. There are many definitions of mentoring currently in use throughout various professions. In a broad sense, mentoring consists of a more experienced individual (the mentor), offering advice, encouragement, guidance, and support to a less experienced individual (the protege). A mentor or protege may seek out a specific mentor–protege pairing. Alternatively, mentor–protege pairings may occur on an ad hoc basis based on factors such as scheduling or availability. Mentoring involves career support and development, psychosocial support, and role modeling.

A.1.2 Objectives. The objectives of mentoring should be developed based on the organizational needs of the air carrier/operator. General objectives are to improve employee knowledge, skills, abilities, and competence. Additional benefits could include improving pilot professionalism and skill building which could enhance CRM, pilot decisionmaking, and interactions with other employees and customers.

A.1.3 Role of a Mentor and Developing Mentoring Skills. The role of the mentor will be influenced by the specific objectives of mentoring at the air carrier/operator. Effective mentoring skills include, but are not limited to:

1. Good listening and effective communication skills.
2. Being approachable and responsive to proteges.
3. Credibility and integrity.
4. Empathy and patience. Remembering your own experiences as a newly employed pilot can help to develop empathy for a protege.
5. Technical expertise and job-related knowledge.

A.1.4 Structure and Boundaries for the Mentor–Protege Relationship. An air carrier/operator should clearly describe the following:

1. Expectations regarding the confidentiality of discussions between a mentor and protege.
2. When or if a mentor should share information about a protege with management.

A.1.5 Communication Considerations. A mentor should have a willingness to share their knowledge with a protege in a supportive and encouraging manner. A mentor must be honest, but not overly critical when providing feedback to a protege. Consideration

should be given to the format in which contact is made, the frequency of contact, as well as the types of topics that may be covered.

A.1.6 Practical Exercises. Practical exercises should focus on improving positive mentoring experiences and avoiding negative mentoring experiences. Role-playing exercises allow a mentor to practice interacting with a protege under situations that might occur on the job. The following are examples of role-playing exercises:

1. Example 1: Professionalism. The protege makes an announcement of potential turbulence to the passengers. The announcement is made in such a manner that many of the passengers are upset. The mentor must counsel the protege regarding the proper manner for making such announcements, with care not to be too negative toward the protege but still effectively making the point.
2. Example 2: Resolving interpersonal problems. The protege complains to the mentor about another PIC. The mentor must counsel the protege in such a way as to not disparage the other coworker or blame the protege unjustly, and potentially reach a positive resolution to the problem.

Advisory Circular Feedback Form

If you find an error in this AC, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by contacting the the Air Transportation Division at 9-AWA-AVS-AFS-200-Air-Transportation-Division@faa.gov or the Flight Standards Directives Management Officer at 9-AWA-AFS-140-Directives@faa.gov.

Subject: AC 135-43, Part 135 Second in Command Professional Development Program

Date: _____

Please check all appropriate line items:

An error (procedural or typographical) has been noted in paragraph _____
on page _____.

Recommend paragraph _____ on page _____ be changed as follows:

In a future change to this AC, please cover the following subject:
(Briefly describe what you want added.)

Other comments:

I would like to discuss the above. Please contact me.

Submitted by: _____

Date: _____