

135.299 (line check) requirements, as an option to the certificate holder, should be conducted in level C/D simulators. The following is an example of a petition for exemption submitted by several certificate holders several years ago. The petitions were turned down.

In The Matter of the Petition of
XXXXX
for an exemption from portions
of 14 CFR Part 135 of the
Federal Aviation Regulations

PETITION FOR EXEMPTION

XXXXX, holder of Air Carrier Certificate Number ZZZZZ, requests exemption from 14 CFR Section 135.299(a) to the extent that a Line Operational Evaluation conducted in a Level C or D flight simulator may be substituted for a Line Check conducted in an aircraft.

AFFECTED SECTIONS OF THE REGULATIONS:

Section 135.299(a) specifies, in pertinent part, that no certificate holder may use a pilot, nor may any person serve, as a pilot in command of a flight unless, since the beginning of the 12th calendar month before that service, that pilot has passed a flight check in one of the types of aircraft which that pilot is to fly. The flight check shall -

- (1) Be given by an approved check pilot or by the Administrator:
- (2) Consist of at least one flight over one route segment: and
- (3) Include takeoffs and landings at one or more representative airports. In addition to the requirements of this paragraph, for a pilot authorized to conduct IFR operations, at least one flight shall be flown over a civil airway, on approved off airway route, or a portion of either of them.

PUBLIC INTEREST:

Favorable acceptance of this petition will serve the public interest of XXXXX and of our clients, the traveling public.

XXXXX is desirous of obtaining the best and safest training and checking possible. Our POI and insurance company share this desire. Of course the cost of this training and checking is a factor to consider and, for the transport category turbojet and turboprop operator, training and checking in the aircraft generally costs more than training and checking in a simulator. Not only are the hourly costs of operating the airplane greater than that of the simulator, but an airplane that is on a checking flight is not producing revenue.

Checking safety and the wear-and-tear of an aircraft checking also argue for simulators. To the extent that advanced simulation is more readily available to XXXXX, our operating costs are reduced, revenue production is enhanced, and economic viability is improved. The chief benefit is that this checking can be accomplished safely.

The traveling public, who comprise the XXXXX clients, are the chief beneficiaries of flying with a crew trained and checked by advanced simulation techniques. Crews professionally trained in the operational realistic environment of advanced simulation, and comprehensively checked in ways not possible in the airplane, are better disciplined and better prepared to meet the challenges of flight than those trained in airplanes. To the extent that the granting of this petition will enable XXXXX to increase the use of advanced simulation, the traveling public will enjoy the safer transportation that better-trained and rigorously - checked crews provide.

BACKGROUND

Part 135 specifies that before a pilot can serve as an unsupervised PIC in revenue operations, that pilot must have satisfactorily completed a line check. Part 135 specifies that all PICs must satisfactorily complete a line check once every 12 calendar months in at least one of the aircraft types in which the PIC is to serve.

Part 135 specifies that the line check may be given by an approved check airman or an FAA inspector. A well run line check program can provide detection of deficiencies and adverse trends and establish the need for a revision of old procedures or an initiation of new procedures.

For Part 135 operations, the line check must consist of at least one route segment over a civil airway, an approved off airway route, or a portion of either, including takeoffs and landings at one or more airports that are representative of the operator's type of operation.

The nature of the on-demand air carrier industry imposes certain constraints on the opportunity for an FAA inspector to observe actual line operations. Most aircraft used in on-demand operations do not have approved observer seats and the FAA inspector must sit in the passenger compartment. In general, the company or individuals chartering the aircraft, object to a third party who is not part of the group being seated in the passenger compartment.

The short notice scheduling and lack of published routes, make the scheduling of the line check very difficult. Out and back trips usually involve extended waiting time and overnight trips may be several days in length. Involving FAA inspectors on these flights is difficult.

The majority of the 135.299 line checks conducted in on-demand air carrier operations are flights that are dispatched for the sole purpose of accomplishing that check. Unlike scheduled air carrier operations, where these checks are conducted during revenue operations, the on-demand operator must bear the total cost of the check. This puts the on-demand carrier at an economic disadvantage.

To counter the economic disadvantages, the on-demand operator will attempt to comply with the requirements of 135.299 with the minimum flight time possible. Line checks from the home base to the nearest airport or an intersection on an airway and back are frequently accomplished. Line checks are often combined with

instrument proficiency checks. Line checks conducted in the aircraft under these circumstances do not provide the inspector with many of the opportunities to comply with the intent of the regulation, such as operations in high altitude airspace.

Due to limited FAA resources, many on-demand operators are having difficulty in scheduling FAA inspectors to conduct line checks for initial, transition and upgrade categories since the inspector must be qualified in the specific type of aircraft. Although recurrent line checks require that the FAA inspector only be qualified in category and class, on-demand operators still face difficulty in scheduling FAA resources for the checks. The majority of small on-demand operators do not qualify for company check airmen designation and must rely on the FAA for all line checks.

LINE OPERATIONAL EVALUATION PROGRAM

Training Centers can provide the Principal Operations Inspectors with the tools to accomplish meaningful and valid PIC evaluations in controlled environment. Principal Operations Inspectors may assist the Training Centers in designing Line Operational Evaluation scenarios based on the operators specific needs and history of operations. Training Centers can provide the on-demand certificate holder with cost efficient and timely line checking thus leveling the playing field with the advantages held by the scheduled air carriers in accomplishing these checks. Finally, Training Centers can create a line checking environment, that, when compared to the actual nature of on-demand line checking as currently conducted in the aircraft, would not adversely affect safety, and would afford a level of safety equal to that provided by 135.299.

Line Operational Evaluation modules are designed to provide the opportunity to evaluate the following elements:

- * PIC knowledge, ability, and proficiency
- * XXXXX manuals and checklists
- * Use of MELs
- * XXXXX operational control functions
- * Use of checklists, approved procedures, and safe operating practices
- * Crew coordination/cockpit resource management
- * XXXXX training program effectiveness

LINE OPERATIONAL EVALUATION CHECK AIRMEN

For approval as an Line Operational Evaluation Check Airman for XXXXX, a Training Center Evaluator must meet the following eligibility requirements:

- * Hold the required certificate and ratings to serve as PIC in the particular aircraft
- * Meet the currency requirements to serve as PIC, including ground and flight training, proficiency, competency, and line checks. These requirements may be met entirely in a level C or higher simulator for this designation.
- * Have completed the Training Center's check airman qualification training program equivalent to that required by FAR 135.337 and FAR 135.339, as applicable.

* Have completed the part 142 Certificate Holders CRM training program. Training Center developed pilot evaluation strategies must at least include provisions for assessing the extent to which poor CRM skills are a contributory factor in a pilot's failure to meet technical standards of operational flight performance in proficiency evaluations and line checks.

* Satisfactorily demonstrate, initially and at least biennially, to the Training Center Manager, the ability to conduct Line Oriented Evaluations in the simulator.

GENERAL LINE OPERATIONAL EVALUATION PRACTICES AND PROCEDURES.

Before conducting Line Operational Evaluations, it is important that the Training Center Evaluator become familiar with the operating procedures and facilities used by XXXXX. The Training Center Evaluator will obtain such familiarization by reviewing pertinent sections of XXXXX manuals. The Training Center Evaluator is encouraged to comment on any procedure believed to be deficient or unsafe in the inspection report. The Training Center Evaluator must use good judgment, however, when debriefing crewmembers about procedures that may be specifically approved for XXXXX.

The Training Center Evaluator will request that the flightcrew present both their airman and medical certificates for examination. Also, the Training Center Evaluator will request that, the flightcrew present flight information such as weather documents, NOTAMs, planned route of flight, dispatch or flight release documents, and other documents normally used to verify the airworthiness of the aircraft.

The Training Center Evaluator must observe at least two flight segments. The flight must be over a typical route served by the operator and must allow the Training Center Evaluator to observe the PIC perform the duties and responsibilities associated with the conduct of a revenue flight. One of the flight segments shall contain strictly normal operating procedures from the ramp at one airport to the ramp at another airport. The second flight segment shall contain appropriate abnormal or emergency flight operations. At least two and one-half hours (2+30) shall be spent in flight segments. Times are not reducible when only one PIC is being evaluated. The Training Center Manager will approve Line Operational Evaluation scenarios will insure that these requirements are met.

It may be desirable to have the PIC fly two flight segments or to perform the duties of the pilot not flying (PNF) during a second segment while the second in command (SIC) performs the duties of the pilot flying. If two PICs are being evaluated during the same simulator period, each PIC will fly a separate flight segment.

After the Line Operational Evaluation Module has been completed, the Training Center Evaluator will debrief the PIC on any discrepancies observed and on any corrective actions that should be taken. The Training Center Evaluator is also required to comment on any procedure believed to be deficient or unsafe.

PHASE OF FLIGHT EVALUATION

Training Center Evaluators will observe and evaluate the PIC during each phase of flight. This will include an evaluation of the XXXXX crewmember's adherence to approved procedures and a proper use of all checklists. The Training Center Evaluator should also observe the PICs crew management techniques, delegation of duties, and overall conduct. All crewmembers must follow sterile cockpit procedures. Some of the areas that should be observed and evaluated during each flight phase are as follows:

(1) Predeparture: Training Center Evaluators will determine that the PIC has all the necessary flight information including the appropriate weather, dispatch, or flight release information; flight plan; NOTAMs; and weight and balance information. MEL items will be resolved in accordance with the operator's MEL and appropriate maintenance procedures. Training Center Evaluators will observe the flightcrew performing appropriate exterior and interior preflight duties in accordance with XXXXX procedures. The approved pictorial preflight will be used.

Part 135 operators who operate multiengine aircraft are required by FAR 135.63 to prepare a load manifest in duplicate for each flight conducted. The load manifest must contain the following information:

- * All crewmember names and position assignments
- * Total number of passengers
- * Total weight of the loaded aircraft
- * Maximum allowable takeoff weight for that flight
- * Center of gravity of the loaded aircraft or an entry on the manifest that the aircraft center of gravity is within limits according to an approved loading schedule or method
- * Aircraft registration number ("N" number) or flight number
- * Origin and destination of the flight

(2) Taxi: Training Center Evaluators will observe the flightcrew accomplishing all predeparture checklists, takeoff performance calculations, and required ATC communications.

The Training Center Evaluator will evaluate the following:

- * Accomplishment of checklists during taxi
- * Adherence to taxi clearances
- * Control of taxi speed
- * Compliance with hold lines
- * Flightcrew conduct of a pretakeoff briefing in accordance with XXXXX procedures

(3) Takeoff: The takeoff procedure will be accomplished as outlined in the XXXXX approved maneuvers and procedures document. Training Center Evaluators will observe and evaluate the following items or activities during the takeoff phase:

- * Aircraft centerline alignment
- * Use of crosswind control techniques
- * Application of power to all engines
- * Takeoff power settings
- * Flightcrew callouts and coordination
- * Adherence to appropriate takeoff or V speeds

- * Rate and degree of initial rotation
- * Use of flight director, autopilot, and autothrottles
- * Gear and flap retraction schedules and limiting airspeeds
- * Compliance with the ATC departure clearance

(4) Climb: The climb procedure will be conducted according to the outline in the XXXXX approved maneuvers and procedures document. Training Center Evaluators will observe and evaluate the following items and activities during the climb phase of flight:

- * Climb profile/area departure
- * Airspeed control
- * Navigational tracking/heading control
- * Powerplant control
- * Use, of radar, if applicable
- * Use of autoflight systems
- * Pressurization procedures
- * Sterile cockpit procedures
- * Vigilance
- * Compliance with ATC clearances and instructions
- * After takeoff checklist

(5) Cruise: Procedures used during cruise flight should conform to XXXXX procedures. Training Center Evaluators will observe and evaluate the following areas during the cruise phase of flight:

- * Cruise mach/airspeed control
- * Navigational tracking/heading control
- * Use of radar, if applicable
- * Use of turbulence procedures, if applicable
- * Monitoring fuel used compared to fuel planning
- * Awareness of mach buffet and maximum performance ceilings
- * Coordination with cabin crew
- * Compliance with oxygen requirements, if applicable
- * Vigilance
- * Compliance with ATC clearances and instructions

(6) Descent: Procedures used during descents will conform to XXXXX procedures. Training Center Evaluators will observe and evaluate the following areas during the descent phase of flight:

- * Descent planning
- * Crossing restriction requirements
- * Navigational tracking/heading control
- * Use of radar, if applicable
- * Awareness of Vmo/Mmo speeds and other speed restrictions
- * Compliance with ATC clearance and instructions
- * Use of autoflight systems
- * Pressurization control
- * Area/situational awareness
- * Altimeter settings
- * Briefings, as appropriate
- * Sterile cockpit procedures
- * Completion of appropriate checklist
- * Vigilance

(7) Approach: Procedures used during the selected approach (instrument or visual) will be accomplished as outlined in the XXXXX maneuvers and procedures document. Training Center Evaluators will observe and evaluate the following areas during the approach phase of flight:

- * Approach checklists
- * Approach briefings, as appropriate
- * Compliance with ATC clearances and instructions
- * Navigational tracking/heading and pitch control
- * Airspeed control, VREF speeds
- * Flap and gear configuration schedule
- * Use of flight director, autopilot, autothrottles
- * Compliance with approach procedure
- * Sinkrates
- * Stabilized approach in the full landing configuration
- * Flightcrew callouts and coordination
- * Transition to visual segment, if applicable

(8) Landing: Procedures used during the landing maneuver will conform to those outlined in the XXXXX maneuvers and procedures document. Training Center Evaluators will observe and evaluate the following areas during the landing phase of flight:

- * Before landing checklist
- * Threshold crossing height (TCH)
- * Aircraft centerline alignment
- * Use of crosswind control techniques
- * Sinkrates to touchdown
- * Engine spool up considerations
- * Touchdown and rollout
- * Thrust reversing and speedbrake procedures
- * Braking techniques
- * Diverting attention inside the cockpit while still on the runway
- * After landing checklist

(9) Arrival: Prearrival and parking procedures will conform to XXXXX procedures as outlined in the appropriate manual. Training Center Evaluators will evaluate crew accomplishment of after landing checklists, groundcrew parking, and passenger deplaning procedures. Training Center Evaluators will observe and evaluate the flightcrew complete postflight duties such as postflight checks, aircraft logbook entries, and flight trip paperwork completion and disposition.

SPECIAL PROCEDURES FOR XXXXX

The PIC being evaluated during a Line Operational Evaluation must have access to the same documents and manuals in the simulator as would be available in the aircraft to include:

- * AFM
- * MEL
- * XXXXX Operations Manual
- * XXXXX Operational Specifications

- * Navigation Maps
- * Approach Charts
- * Aircraft Log
- * XXXXX Weight and Balance Control System
- * XXXXX Dispatch or Flight Following Release Forms
- * Cockpit Checklist

It is XXXXX responsibility to provide and keep current these documents to the training center. It is the Training Center's responsibility to store the XXXXX documents and to make available for use by the XXXXX crewmembers. Line Operational Evaluation cannot be accomplished without the appropriate documents.

TRIP ASSIGNMENT

The PIC being evaluated will receive the trip assignment by whatever means the XXXXX would normally use to dispatch a revenue trip with the aircraft located away from the XXXXX base of operation.. The PIC will have access to FAX and telephone communication as well as computerized flight planning services at the training center. XXXXX will choose a trip assignment from a menu of FAA approved line operational evaluation scenarios. XXXXX may coordinate the trip assignment with its Principal Operations Inspector if special situations or areas of operation are to be selected for evaluation. An example of special situations or areas of operations would include:

- a. Foreign country
- b. High density airspace
- c. Uncontrolled airports
- d. Overwater Operations
- e. Land and Hold Short
- f. Tailwind Takeoff
- g. Airport Analysis
- h. Unusual Op Spec Approach Procedures
- i. Application of the MEL
- j. Incapacitate Crewmember
- k. Wake Turbulance Avoidance

WEATHER AND AIRPORT INFORMATION

The PIC will obtain and record weather and notam information in whatever manner would normally be used by XXXXX . Unless otherwise specified by XXXXX, the Training Center Evaluator will program the simulator with the existing and forecast weather conditions as received by the PIC.

CREW COMPLIMENT

When Line Operational Evaluation is being conducted, the Training Center will ensure that one of the following occupies each crewmember position:

1. A crewmember qualified in the aircraft category, class, and type, if a type rating is required.
2. A student who is enrolled in a Training Center course of training in the same type specific aircraft.

Two pilots from different Part 135 on-demand operations may be paired provided their respective training programs and operational procedures are the same. In particular, checklists, procedures, profiles, approach procedures and manuals must be those approved by the Principal Operations Inspector of each air carrier employing each trainee. MELs, Op Specs, and other features specific to the air carrier's operations must be appropriate and must be addressed during flight training, testing and checking. When operational differences between carriers are too pronounced or too numerous, in the discretion of the FAA, pilots may not be paired.

Pilots being checked Part 135 on-demand operations should not routinely be paired with pilots operating under Part 91. Such crew pairings are permissible if the following conditions are met:

- b. The 14 CFR Part 91 pilot must conform to the training program of the 14 CFR Part 135 on-demand pilot in every important respect. Specifically, checklists, profiles, approach procedures and callouts must be those used in the training program of the 14 CFR Part 135 on-demand pilot.
- c. The 14 CFR Part 91 pilot must have a workable familiarity with the operator-specific features of the 14 CFR Part 135 on-demand pilot's training program. That familiarity must include:
- the significant features of 14 CFR part 135 which set it apart from 14 CFR Part 91
 - the operator's certificate
 - the operator's operations specifications
 - the operator's flight dispatch and flight following procedures

TRAINING TO PROFICIENCY

When a Training Center Evaluator determines that an event is unsatisfactory, the Training Center Evaluator may conduct training and repeat the testing of that event. This provision has been made in the interest of fairness and to avoid undue hardship and expense for airmen and operators. Training may not be conducted, however, without recording the failure of these events. The quality control of a training program is accomplished, among other means, by identifying those events on Line Operational Evaluations which crewmembers fail. Training Center Evaluators will comply with the following guidelines when conducting training to proficiency.

1. Training and checking cannot be conducted simultaneously. When training is required, the Line Operational Evaluation must be temporarily suspended, training conducted.
2. When training to proficiency is required, the Training Center Evaluator must record the events which were initially failed and in which training was given. The Training Center Training Center Evaluator will record this training in the "T" column by the associated event.
3. When training to proficiency is conducted and the Line Operational Evaluation is subsequently completed within the original session, the overall grade for the Line Operational Evaluation may be recorded as satisfactory. When the training required to reach proficiency cannot be completed in the original checking session, the Line Operational Evaluation must be recorded as

unsatisfactory and the crewmember entered into requalification training. Training Center Evaluators will conduct training to proficiency on two events only.

4. When training to proficiency is required, it will be accomplished after the completion of the assigned trip. The training required may be of such a nature that a briefing rather than flight training is more appropriate.

5. If, after having received training, the airman fails an event again, the failure shall be recorded and the crewmember entered into requalification training.

CREWMEMBER PREREQUISITES FOR LINE OPERATIONAL EVALUATIONS

Pilot Certificates

All pilots must hold the specific certificates, ratings and medical certificates required to perform as Part 135 pilots in command.

Basic Indoctrination and General Subjects Training

Prior to enrolling in the Line Operational Evaluation Curriculum Segment, the PIC applicant must present training records showing completion of the XXXXX Basic Indoctrination Ground Training Curriculum Segment if the PIC is in the Initial New-Hire Category of Training (INH). For all other categories of training, the PIC applicant must present training records showing the completion of XXXXX General Subjects Training.

Principal Operations Inspector Approval

The XXXXX Principal Operations Inspector must have approved the Line Operational Evaluation Curriculum Segment for use by the Certificate Holder.

Competency and Proficiency Checks

The PIC must have completed a 135.293(b) and/or 135.297(a) check within the six months preceding the Line Operational Evaluation.

RECORDING LINE CHECKS

The Line Operational Evaluation will be recorded on Training Center developed form that has been approved by the Training Center Program Manager. The check airman will evaluate the following numbered events as Satisfactory or Unsatisfactory :

No. 1	Predeparture
No. 2	Taxi
No. 3	Takeoff
No. 4	Climb
No. 5	Cruise
No. 6	Descent
No. 7	Approach
No. 8	Landing
No. 9	Arrival

No. 10 Checklist Usage
No. 11 Conformance
No. 12 CRM

Each numbered event will have various sub-events. The sub-events will serve as a Line Operational Evaluation Job Aid to assist the Training Center Evaluator in forming an overall evaluation of the numbered event. In the case of an unsatisfactory numbered event (U), at least one of the appropriate sub-event will also be graded as unsatisfactory.

When a numbered event is graded as satisfactory (S), each sub-event will be evaluated as follows:

- T - Training required to reach proficiency
- N - Not Observed
- 3 - Within all PTS Standards
- 4 - Exceptional Performance

This Line Operational Evaluation Program can provide to XXXXX and the Principal Operations Inspector with the detection of deficiencies and adverse trends and establish the need for a revision of old procedures or an initiation of new procedures.

In summary, XXXXX submits that increased safety in Part 135 on-demand operations can be achieved through greater use of advanced simulation at professional FAA approved and certificated training centers. The use of a well structured and approved Line Operational Evaluation program that meets the conditions proposed in this petition will meet and exceed the level of safety as it is currently being maintained by accomplishing the line check in the aircraft.

Further information necessary for favorable consideration of this petition will be furnished promptly upon request.

Respectfully Submitted,

Director of Operations
XXXXX