U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Chief Counsel

800 Independence Ave., S.W.
Washington, D.C. 20591

APR 2 2009

Scott Nichols
[redacted]

Dear Mr. Nichols:

This responds to your November 24, 2008, request for a legal interpretation. In your letter you requested clarification concerning the use of a pilot designated as second-in-command (SIC) in a Cessna 525 CitationJet. Your letter sets forth two scenarios, one operation under Part 91 and one operation under Part 135. Because the regulations governing those operations differ in some ways, they will be discussed separately.

In your Part 91 operation example, the pilot-in-command (PIC) has the 525S type rating, which qualifies the pilot for a single-pilot operation and is current with the proficiency check required by 14 C.F.R. § 61.58. Additionally, the equipment required by the Kinds of Operations Equipment List (KOEL) for a single-pilot operation is installed and operable. Your question is whether an SIC, properly qualified according to 14 C.F.R. § 61.55, may be used even though all requirements for a single-pilot operation are met.

Section 61.55 prescribes the requirements that must be met by a person serving as SIC "of an aircraft type certificated for more than one required pilot flight crewmember or in operations requiring a second-in-command pilot flight crewmember." The requirements for logging flight time are prescribed in 14 C.F.R. § 61.51. Section 61.51(f) states, in relevant part, that a person may log SIC time only when more than one pilot is required by the aircraft's type certificate or by the regulations under which the flight is being conducted. Section 61.51(e) states, in relevant part, that a sport, recreational, private, or commercial pilot may log PIC time for the time during which that pilot is "the sole manipulator of the controls of an aircraft for which the pilot is rated or has privileges" or "is acting as pilot in command of an aircraft on which more than one pilot is required under the type certification of the aircraft or the regulations under which the flight is conducted."

The Cessna 525 type certification data sheet states:

> Minimum Crew for all Flights (see note 5 for cockpit equipment/arrangement restrictions):
> One pilot (in the left pilot seat) plus additional equipment as specified in the Kinds of Operations Equipment List (KOEL) contained in the Limitations Section of the FAA Approved Airplane Flight Manual
> OR

> One pilot and one copilot.

Note 5 states:

> NOTE 5. Approval for operation with a minimum crew of one pilot is based upon the cockpit equipment installation and arrangement evaluated during FAA certification testing. No significant changes may be made to the installed cockpit equipment or arrangement (EFIS, autopilot, avionics, etc.), except as permitted by the approved MMEL, without prior concurrence from the responsible Aircraft Certification Office.

In your example, the Cessna 525 CitationJet is properly equipped for a single pilot operation as required by the type certificate data sheet, the PIC is qualified for a single-pilot operation, and the regulations do not require more than one pilot for the operation. Although there is nothing in the regulations that would prevent the assignment of a second pilot to that operation, that second pilot would not be a required flight crewmember because only one pilot is required for the operation. Accordingly, under section 61.51(f), that second pilot may not log flight time as SIC for any part of the operation. However, that second pilot may be able to log PIC time for the portion of the operation during which the second pilot is the sole manipulator of the controls provided that pilot meets the requirements of section 61.51(e).

You then present a variation on the Part 91 operation scenario by stating that you have removed one of the items required by the KOEL so that an SIC would be required for the operation. You state that the only way "to have the safety benefit of two pilots" is to "remove safety-enhancing equipment."

The FAA does not recommend the removal of equipment listed on the KOEL to require a two-pilot operation under the type certification. However, if this equipment is removed in an approved manner as stated on the type certification data sheet, a two-pilot operation in this aircraft is a safe operation because it would have been a safe operation under the type certification even if that removed equipment had never been installed. The equipment listed on the KOEL, the "safety-enhancing equipment" referenced in your example, enhances the operational safety to a level to allow a single-pilot operation. Additionally, because the type certification requires a pilot and co-pilot when the equipment listed on the KOEL is not installed and operable, the PIC for a two-pilot operation must complete the pilot-in-command proficiency check required by 14 C.F.R. § 61.58, which is not required for a single-pilot operation. *See* Ortiz Interpretation (Nov. 24, 2008). Finally, the equipment listed on the KOEL must be re-installed in an approved manner prior to operating the aircraft in a single-pilot operation.

In your Part 135 operation example, you inquire whether an SIC may be utilized for an instrument flight rules (IFR) operation carrying passengers in an aircraft installed with an operative approved autopilot system. Specifically, you ask whether the operator may elect to conduct the flight as a one-pilot or a two-pilot operation.

As a general rule, under 14 C.F.R. § 135.101, "no person may operate an aircraft carrying passengers under IFR unless there is a second in command in the aircraft." Similar to the rule for a Part 91 operation, if the aircraft's type certification or the regulations under which the flight is being conducted do not require two pilots, a pilot designated as SIC for the Part 135 operation would not be a required flight crewmember and may not log SIC flight time. *See* Karch Interpretation (Mar. 9, 2000); Karch Interpretation (May 28, 1998).

Section 135.105 provides an exception to the general rule and states, in relevant part, that "unless two pilots are required . . . for operations under VFR, a person may operate an aircraft without a second in command, if it is equipped with an operative approved autopilot system and the use of that system is authorized by appropriate operations specifications." This provision also allows the certificate holder to apply "for an amendment to its operations specifications to authorize the use of an autopilot system in place of a second in command."

Under sections 135.101 and 135.105, two pilots are required when carrying passengers under IFR unless an operative and approved autopilot system is installed, in which case one pilot is required. Although section 135.105 allows single-pilot operations with the use of an operative approved autopilot system, it does not require that all future flights be conducted in that manner. *See* Tarsa Interpretation (Mar. 26, 1992). In other words, the operator can elect either to operate under IFR with one pilot using the autopilot system or with two pilots, with the second pilot acting as SIC, without using the autopilot system. *See id.* Provided the certificate holder elects before the IFR operation to not use the autopilot system, then two pilots are required by the regulations under which the flight is conducted, and the pilot designated as SIC may log SIC flight time. If the autopilot system is used, then the pilot designated as SIC is not a required flight crewmember and may not log SIC time.

This response was prepared by Robert Hawks, an Attorney in the Regulations Division of the Office of Chief Counsel and coordinated with the Certification and General Aviation Operations and the 135 Air Carrier Operations Branches of Flight Standards Service. We hope this response has been helpful to you. If you have additional questions regarding this matter, please contact us at your convenience at (202) 267-3073.

Sincerely,

Michael E. Chase

for Rebecca B. MacPherson
Assistant Chief Counsel for Regulations, AGC-200