April 28, 2005

William Szendrey
Safety Representative
Transport Workers Union of
America Local 542
1201 Airport Freeway, Suite
386 Euless, TX 76040-4171

Re: Interpretation of 14 CFR §

121.647 Dear Mr. Szendrey:

This letter responds to your December 15, 2004, request for interpretation of section 121.647 of Title 14 of the Code of Federal Regulations. You ask the following questions:

1. Whether § 121.647 mandates you consider a possible missed approach at the destination airport in your calculation of the fuel required for your aircraft. Specifically, you ask for the meaning of the word "consider" as used under § 121.647.

2. If an aircraft is dispatched without an alternate airport, prior to takeoff, does one have to factor a possible missed approach at the destination airport in your calculations of the fuel required for your aircraft?

3. If an operator does not consider the fuel required for a possible missed approach at the destination airport, would use of reserve fuel, as required under § 121.639, result in a violation?

Section 121.647 states that "Each person computing fuel required for the purposes of this subpart shall consider the following . . . one instrument approach and possible missed approach at destination" (emphasis added). In statutes, regulations and other legal documents, "shall" has the force of "must."[1] Thus, this rule by the explicit use of the word "shall" requires you consider all the factors listed under § 121.647 in your fuel calculations. Further, we do not believe that the ambiguity is created by the use of the term "consider" in this regulation. As used under this regulation, "shall consider" means you must take into account all the factors and circumstances listed.

See The American Heritage Dictionary of the English Language (1976).

Section 121.639 of Title 14 of the Code of Federal Regulations provides that no person may dispatch or takeoff an airplane in domestic air carrier service unless that airplane has enough fuel to fly to its dispatch destination airport, fly to and land at the most distant dispatch alternate airport (if required), and thereafter, fly for 45 minutes at normal cruising fuel consumption. Section 121.639 must be read in conjunction with §121.647, which recites the factors that must be considered in computing the fuel required to comply with § 121.639. *See* Letter to Joseph M. Schwind from Jonathan Howe, Deputy Chief Counsel (July 8, 1979). Under § 121.647, when computing the fuel supply required to comply with § 121.639, the dispatcher and the pilot-in-command must consider, among other things, how an instrument approach and possible missed approach at destination may delay landing of the aircraft thereby affecting its fuel supply. Regardless of whether you are dispatched without a designated alternate airport, you must consider a possible missed approach at the destination airport (note that the rule does not say missed approach at *alternate* destination airport) in your required fuel calculations.

Finally, if you fail to consider the missed approach at the destination airport factor listed under § 121.647(c) in your fuel computations, you are in violation of the Federal Aviation Regulations. On the other hand, there would be no illegality in using any or all of the 45-minute fuel supply required under § 121.639(c) provided that such use became necessary as a result of circumstances or events not reasonably foreseeable despite full compliance with §§ 121.639 and 121.647. *See* Letter to Schwind (July 9, 1979).

We trust this letter responds to your inquiry. Should you have additional questions, please do not hesitate to contact me or Komal K. Jain.

Sincerely,

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