

CHAPTER 1

INTRODUCTION

The purpose of the Southwest Florida International Airport (RSW) Federal Aviation Regulation (FAR) Part 150 Noise and Land Use Compatibility Study is to evaluate Airport operational procedures and to consider land use controls to reduce aircraft-related noise impacts on the communities surrounding the Airport. The Study provides the opportunity for the Lee County Port Authority, the aviation industry, affected political jurisdictions and Airport neighbors to work together in the evaluation of potential noise reduction and land use control measures.

A. AIRPORT LOCATION AND STUDY AREA

RSW is located within southwest Florida in an unincorporated area of Lee County. The City of Fort Myers is located about 10 miles northwest of the Airport and the City of Naples is situated about 30 miles to the south. Major regional access to the airport is provided by Interstate 75 through an interchange at Daniels Parkway. Treeline Avenue, which runs in a north-south direction parallel to Interstate 75 and the Airport's western border, is currently being extended to connect Daniels Parkway to Alico Road, and expanded into a four-lane divided roadway, as part of the new Midfield Terminal development project. Treeline Avenue will be the primary airport access road when the new terminal opens in 2005. The airport location is shown on Exhibit 1-1. The Airport is owned by Lee County and operated by the Lee County Port Authority.

B. HISTORY OF THE AIRPORT

Prior to the construction of RSW, Page Field, located northwest of RSW, offered local area residents and visitors a full-service air transportation facility. However, it was eventually recognized that Page Field possessed insufficient space to meet potential expansion requirements for commercial aircraft operations and increased passenger volumes, and in 1976, a decision was reached to construct a new airport facility in Lee County about 10 miles southeast of Fort Myers (the present site of RSW). In 1980, construction began on the new facility, then known as Southwest Florida Regional Airport, and the airport opened on May 14, 1983. In 1993, the Airport received its international designation and was renamed Southwest Florida International Airport.

C. PREVIOUS NOISE STUDIES

Various noise studies have been prepared at RSW since the Airport was opened in 1983. Two previous FAR Part 150 studies were completed with the first being in 1989 and the second in 1995. Both of these FAR Part 150 studies included operational control recommendations and land use control recommendations (primarily through overlay zoning) and both were approved

Airport Location Map



by the Federal Aviation Administration (FAA). Operational noise abatement procedures and land use management actions that have been implemented as a result of these studies are identified in Chapter 2.

D. NEED FOR THE PREPARATION OF A NEW FAR PART 150 STUDY

The most recent FAR Part 150 study was completed in 1995. Since that time, numerous changes have taken place at RSW that indicate the need for updated Noise Exposure Maps and Noise Compatibility Program, including:

- the Phase-out of Stage 2 aircraft completed in 2000 (that reduced the noise emanated from single aircraft events at RSW),
- new forecasts prepared for the Airport in the recently completed master plan,
- air space modifications currently being implemented by air traffic control that change some arrival routes into RSW,
- implementation of land development controls through incorporation into the Lee Plan (Comprehensive Plan) and the Lee County land development code that occurred following the approval of the 1995 FAR Part 150 study, and
- at the time of the most recent approval of the overlay zone in the comprehensive plan and land development code approval processes, the Lee County Commission requested that an update to the overlay zone be re-evaluated and recommendations made by the 2005/2006 time frame.

For these reasons, it is proposed to conduct a new FAR Part 150 study.

E. FAR PART 150 PLANNING PROCESS

The preparation of a FAR Part 150 Study involves a series of steps as identified in the following. First, an airport's existing operational activity is inventoried. This involves data collection efforts concerning the number of aircraft operating at the airport on an annual basis, the time of day in which the aircraft operate (day/night) and the types of aircraft fleet mix. Existing aircraft operational procedures are also inventoried (i.e., runway use, flight tracks, departure and arrival corridors). After collecting these data, a noise prediction computer model is used to produce noise contours (areas of equal noise exposure) for the existing condition

A forecast of aircraft operations for a period five years from the current year is used to produce noise contours for the projected five year noise exposure condition. The current and future five year noise contours are collectively known as an airport's Noise Exposure Maps (NEM). The NEMs serve as a basis for analyzing and comparing alternative operational and land use noise mitigation measures and for determining the extent of off-Airport compatibility. Existing/future land use and zoning plan data are also collected for the areas directly affected by aircraft noise. The NEMs are then overlaid on the land use plans to identify noise sensitive sites and land uses

that are incompatible with aircraft noise. Following the completion of the NEMs, measures to improve noise compatibility around the Airport are evaluated including possible changes in the aircraft operational procedures and possible changes to the affected jurisdiction's (Lee County's) future land use/zoning requirements.

A Noise Compatibility Program (NCP) is then prepared documenting all alternatives considered and presenting recommended changes. The NCP report is then submitted to the FAA for approval of recommendations and eligibility for funding.

Throughout this process, the study is coordinated with representatives of the affected agencies and aviation interests. Coordination also occurs with the interested citizens at public forums.