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Throughout the presentation, several important points were made regarding the analysis that was completed. These points are discussed below.

Mr. Seymour explained that the operational data for the existing conditions contour were gathered from several different places. The total number of operations was gathered from operational counts provided by the Air Traffic Control Tower at the Airport. A percentage of operations were added to this number to account for nighttime operations that occur when the control tower is closed. This information gave an overall number of operations for the year 2008. The fleet mix (aircraft type) information was gathered from several sources including Flightaware, records of based aircraft at the Airport, and analysis of fleet composition for the various flight schools that use the Airport. Flight track locations and runway usage were determined through discussions with local air traffic control personnel as well as filed observations.

Mr. Seymour also explained that in addition to an existing noise contour, a future contour was developed to determine the noise environment around the Airport for the year 2013. The operational numbers for this contour were derived from the 2008 Terminal Area Forecast (TAF) produced by the FAA. The remaining assumptions for development of the contour were derived from the data obtained for the 2008 operational numbers. Mr. Seymour explained that some additional analysis remains on the future operational numbers to determine what additional amount of operations need to be added in to account for the nighttime operations when the control tower is closed.

Once the contours are finalized, both the 2009 and 2014 contours will be used to determine the noise environment non-compatible impacts within the 65 DNL contour and higher. The contours will also be used as a basis to review potential noise mitigation measures in the second part of the Study known as the Noise Compatibility Program.

Throughout the presentation, questions were asked by the Committee members. These questions are listed below along with the responses given. Some of the questions are paraphrased to better capture the heart of the question being asked.

“How long does it take to complete a Part 150 Study?” The length of time it takes to complete a FAR Part 150 Study varies depending on the complexities of the noise concerns expressed by the local communities. FAR Part 150 Studies generally take between 12 to 24 months to complete. Once completed, the Federal Aviation Administration (FAA) has a review period of 180 days. It is anticipated the Study for New Smyrna Beach Municipal Airport will be completed in approximately 12 months from beginning to end and submitted to the FAA for review by the end of 2009.

“Why do certain airports have restrictions on operations, while others do not or are not allowed to implement restrictions?” In 1990, Congress passed the Airport Noise and Capacity Act (ANCA) which set a national standard for airports to address aircraft noise concerns. This national standard limited the types of restrictions individual airports are allowed to implement. In return for the standardization of how noise concerns are addressed, the airlines agreed to remove the older, noisier Stage 2 jet aircraft from their fleet. The removal of the noisier aircraft only applied to those aircraft weighing more than 75,000 pounds, which excludes virtually all general aviation aircraft. Those airports with operating restrictions in place today had them in place prior to the passing of ANCA and therefore had their operating restrictions grandfathered allowing them to continue.

“How much latitude is available for wind conditions related to arrivals and departures?” Aircraft must depart and arrive into the wind to ensure the aircraft maintains lift at these critical phases of flight. Most aircraft can depart or arrive with a crosswind and still maintain safe flight; generally 15 knots for departures and 10 knots for arrivals. Aircraft can also operate with a slight tailwind although it negatively impacts the performance of the aircraft and requires a longer takeoff and landing distance. The specific impacts will vary based on the individual aircraft types..

“How does SEL and DNL account for the noise level a person hears when a single aircraft flies over someone’s home at a really high noise level?” The building block of the DNL metric is the SEL metric. The SEL metric is developed for each individual noise event and takes into account the peak noise level of the event as well as the duration of the event. SELs are then combined into the DNL which represents the average noise level for a particular location accounting for the times when aircraft noise events occur as well as times when there are no aircraft noise events. The DNL metric is used by the FAA and other federal agencies to determine areas of significant noise impacts.

“How many planes are modeled in the training pattern at a time?” The Integrated Noise Model (INM) is used to develop the noise contours for the Study based on the average annual day operating conditions. Information used to develop the noise contours includes the number of operations by aircraft type, the flight patterns used by the aircraft, as well as the time of day the operations take place. To account for multiple aircraft in the

training pattern at the same time, several training pattern flight tracks are used to simulate the variability that takes place.

“Can you provide the A-weighted noise levels used in the modeling exercise?” A-weighted sound is used for noise measurements of aircraft noise because it most closely matches what the human ear actually hears. Individual noise levels are not an input placed in the model, but rather a component that is already in the noise model. Based on the aircraft type, the location of the flight track, and the operating conditions (temperature, humidity, etc.), the noise model determines the sound levels for each aircraft operation along its path.

“Shouldn’t the study just focus on departures since that is what bothers people the most?” While departures may be noisier than arrivals in general, there are communities at every airport that are concerned about arriving aircraft. To adequately study the noise environment around an airport, both arrivals and departures must be used.

“Why isn’t more time spent out in the communities measuring noise?” Noise measurements are not a requirement of the Part 150 Study Process. The City of New Smyrna Beach chose to include some noise measurement time in the Study to provide residents with some general knowledge of what noise levels are like around the Airport for aircraft operations. The data collected from noise measurements cannot be used in the development of the contours, based on FAA guidelines, and is only used to provide information. Noise measurements do not form the basis of the Part 150 Study. Noise measurements were conducted over a three day period with a goal to capture as many operating configurations of the Airport as possible. Information from the noise measurements will be presented at the public open house.

“How can the public provide comments to the Study?” There will be a Public Open House where the progress of the Study will be presented to the general public. Comment forms will be available at the Public Open House for use by the public to document their concerns. All written comments received will be included in the documentation submitted to the FAA for their review.

“Why does the FAA want to use modeled data versus measured data?” The FAA requires the use of modeled data because the criteria for determining significant noise impacts is based on the average annual day at the Airport versus a single overflight. The average annual day takes into account the times when aircraft are flying over a particular location as well as the times when there are no aircraft overflights. In addition, the modeling of aircraft noise considers only the noise made by aircraft. When noise measurements are taken at a resident, background noise sources are also recorded which many times increase the noise levels at a given location. Noise in the model is also three dimensional with nearly unlimited data points. Noise measurements generally only record the peak of the noise event at a single point and do not capture the noise influences on nearby surrounding areas sufficiently to model overall noise exposure.

“At what point do the consultants talk to the impacted public about their noise concerns?” There will be several public workshops held during the course of the Study that will provide the public an opportunity to discuss their noise concerns. These public workshops will allow impacted residents to discuss their concerns one-on-one with the consultants and to ask questions about the Study. In addition, the public can submit their concerns and comments about the Study in writing to be included in the documentation that will be sent to the FAA for their review.

“Where will the Study be submitted?” The Study will be submitted to the FAA Orlando Airports District Office (ADO). They will review the Study and distribute to other departments within the FAA that have an interest in FAR Part 150 Studies, including but not limited to, legal and air traffic control.

“Can you define itinerant operations and local operations?” Itinerant operations include those operations that arrive at the Airport from outside the local vicinity and depart to destinations outside the local vicinity. Local operations include the training aircraft that stay within the local vicinity and primarily conduct touch and go operations.

“Do the future contours presented take into account any airport expansion?” The future contours reflect the Airport as it is expected to look five years into the future. No airport expansion is expected within that five year timeframe; therefore the future contour is based on the Airport as it physically exists today.

“When will land use be addressed?” The Noise Exposure Map portion of the Study will identify the current and predicted land uses around the Airport. The Noise Compatibility Program portion of the Study will address any potential land use changes that can be made to be more compatible with aircraft operations.

“Does the noise study take into account the repetitive nature of the training aircraft?” The repetitive training operations are included in the development of the noise contours in the Study.

“Can we do more noise monitoring for this Study?” Any additional noise monitoring for the Study will have to be discussed with the Airport and the City.

“What is going to come out of this Study?” The Study takes place in two steps. The first step is the Noise Exposure Maps (NEMS) which identifies the current noise environment around the Airport. The second step is the Noise Compatibility Program (NCP) which identifies programs to address the noise concerns of the local communities. While many communities have ideas on how to address aircraft noise, the NCP portion of the Study reviews those ideas and provides data to quantify the benefits of implementing the programs. The FAA will use this analysis and data in their decision to approve or not approve the proposed noise abatement programs.