

Costs

The establishment of the proposed St. Thomas Class C airspace area would impose a one-time FAA administrative cost of \$600. For the aviation community (namely, aircraft operators and fixed-based operators), the NPRM would impose little, if any, operating or equipment cost. The potential costs are presented below.

For the proposed Class C airspace area, the FAA does not expect to incur any additional costs for ATC staffing, training, or facility equipment. The FAA is confident that it can handle any additional traffic that would participate in radar services through more efficient use of personnel at the current staffing level.

The FAA holds an informal public meeting at each proposed Class C airspace area location. These meetings provide pilots with the best opportunity to learn both how a Class C airspace area works and how it would affect their local operations. The expenses associated with these public meetings are incurred regardless of whether a Class C airspace area is ultimately established. Thus, they are more appropriately considered routine FAA costs. If the proposed Class C airspace area becomes a final rule, any subsequent public information costs would be strictly attributed to the proposal. For instance, the FAA would distribute a Letter To Airmen to all pilots residing within 50 miles of the Class C airspace area site. The Letter to Airmen would cost approximately \$600. This one-time negligible cost would be incurred upon the initial establishment of the proposed Class C airspace area.

The FAA anticipates that some pilots who currently transit the terminal area without establishing radio communications may choose to navigate around the proposed airspace. However, the FAA contends that these operators could navigate around, over, or, in certain cases, under the airspace without significantly deviating from their regular flight paths.

The FAA recognizes that delays might develop at St. Thomas following the initial establishment of the Class C airspace area. However, those delays that do occur are typically transitional in nature. The FAA contends that any potential delays would eventually be more than offset by the increased flexibility afforded controllers in handling traffic as a result of Class C separation standards. This has been the experience at other Class C airspace areas.

Aircraft operating in the vicinity of the proposed airspace already have a

requirement for two-way radio communications capability and, therefore, would not be expected to incur any additional costs.

If the proposed Class C airspace area becomes a final rule, operators would be subject to the Mode C Rule. That rule requires all aircraft to be equipped with an operable transponder with Mode C capability when operating in and above a Class C airspace area (up to 10,000 feet mean sea level (MSL)). Some aircraft operators may have to acquire (or upgrade to) a Mode C transponder as a result of the proposed airspace. However, the cost of acquiring a Mode C transponder for all aircraft in the U.S. was completely accounted for as a cost of the Mode C Rule.

The FAA has also adopted regulations requiring certain aircraft operators to install Traffic Collision Avoidance System (TCAS), which allows air carriers to determine the position of other aircraft from the signal emitted by Mode C transponders. TCAS issues conflict resolution advisories as to what evasive actions are most appropriate for avoiding potential midair collisions. The TCAS Rule would not contribute to the potential costs of the proposed Class C airspace area, but it would contribute to the potential safety benefits. The benefits of the proposed St. Thomas Class C airspace area are discussed below.

Benefits

The primary benefit of the proposed St. Thomas Class C airspace area would be enhanced aviation safety for the increasing number of passengers carrying aircraft transiting through this airspace. The volume of passenger enplanements at St. Thomas has risen dramatically. Enplanements in 1995 are projected to be 648,000, up from 491,000 in 1990; by the year 2000, enplanements are projected to be 810,000. This high volume of passenger enplanements has made St. Thomas eligible to become a Class C airspace area. The complexity of aircraft operations at St. Thomas has also increased. Complexity refers to air traffic conditions resulting from a mix of controlled or uncontrolled aircraft (pilots that are not in contact with ATC) that vary widely in speed and maneuverability. As this mix increases, so does the potential for midair collisions.

To study the effect that Class C airspace areas has on reducing this risk of midair collisions, the FAA looked at the occurrences of near-midair collisions (NMAC). In a study of NMAC data, the FAA's Office of Aviation Safety found that approximately 15

percent of reported NMAC's occur in airspace similar to that at St. Thomas. This study found that about half of all NMAC's occur in the 1,000- to 5,000-foot altitude range, which is closely comparable to the altitudes where aircraft operate around airports that qualify for Class C airspace areas. This study also found that over 85 percent of NMAC's occur in visual flight rules (VFR) conditions when visibility is 5 miles or greater. Finally, the study found that the largest number of NMAC reports are associated with instrument flight rules (IFR) operators under radar control conflicting with VFR traffic during VFR flight conditions below 12,500 feet. The mandatory participation requirements of the Class C airspace area and the radar services provided by ATC to VFR as well as IFR pilots would help alleviate such conflicts.

Ordinarily, the benefit of a reduction in the risk of midair collisions from establishing a Class C airspace area would be attributed entirely to establishing the proposed Class C airspace area. However, an indeterminate amount of the benefits has to be credited to the interaction of the proposed Class C airspace area (and the Class C airspace area program in general) with the Mode C Rule, which in turn, interacts with the TCAS Rule. The proposed Class C airspace area, as well as other designated airspace actions that require Mode C transponders, cannot be separated from the benefits of the Mode C and TCAS Rules. These four actions would share potential benefits totaling \$4.4 billion.

Comparison of Costs and Benefits

The proposed rule to establish a Class C airspace area at St. Thomas, VI, would impose a negligible cost of \$600 on the agency. When this cost estimate of \$600 is added to the total cost of establishing the other Mode-C-dependent airspace classes and the Mode C Rule and TCAS Rule, the costs would still be less than their total potential safety benefits. The proposal would also generate some benefits in the form of enhanced operational efficiency while imposing little, if any, additional operating costs on pilots who choose to remain clear of the proposed airspace. Thus, the FAA believes that the proposed rule would be cost-beneficial.

International Trade Impact Assessment

The proposal would only affect U.S. terminal airspace operating procedures at and in the vicinity of St. Thomas, VI. The proposal would not impose a competitive trade disadvantage on foreign firms in the sale of either foreign