

In addition to seasonal passenger traffic peaks in both the summer and winter, Caribbean air routes are subject to severe capacity shorthauls prior to Christmas, during the Carnival, and over the March break.

Except for the cabotage services by Air France to Martinique and Guadeloupe, there are no wide body all-cargo or combi services to the Caribbean. These aircraft require large volumes of dependable, long-range traffic, as well as a ground infrastructure that includes the relatively expensive main-deck loader. A few small carriers operate all-cargo scheduled and charter services using second-hand aircraft. These flights are threatened by the relatively poor economics of narrow-body freighters, low northbound rates from the Caribbean, and the growing concern over aircraft noise.

Air cargo services are heavily dependent on the availability of containerized capacity. While narrow body aircraft can only accommodate loose shipments bulk-loaded in belly holds, subject to severe limitations on piece weights, wide body and freighter flights allow shippers to use containers. Not only do these "Unit Load Devices" vastly simplify cargo handling, they also provide the basis for attractive high volume rates charged to shippers who load the equipment themselves. Any project to promote higher volumes Canada-Caribbean air trade will depend heavily for its success on the critical availability of containerized space.

While a huge number of container types are in use, two Unit Load Devices are of greatest interest. The LD-3 is carried on virtually all wide body aircraft and sees worldwide use for cargo and checked baggage. It is a metal, fiberglass or plastic container 200 x 152 x 163 centimeters that is contoured to match the curvature of the belly hold. Two LD-3's are loaded side-by-side. Use of these containers on the Boeing 767 entails a stowage loss because of the relatively narrow belly floor. The 223.5 x 317.5 pallet can be used on the upper deck of a narrow body freighter if the height is less than 204 centimeters, and the device is contoured to the aircraft fuselage. Occasionally, a fiberglass cover is provided. When loaded to a maximum height of 158 centimeters, the unit can be placed in the belly hold of a 767, L-15, 747 or DC-10. An LD-9 is similar in base footprint to this pallet, but has a rectangular non-structural cover.

B. Scheduled Flight Data Base

Data bases of scheduled passenger services to the Caribbean were extracted from the International and North American editions of the Official Airline Guide. The Air Cargo Guide provides a list of scheduled all-cargo services. A data base was developed for the summer (July 10, 1988) scheduled period. The data base includes all flights from Canada, Western and Eastern Europe to the Caribbean nations under study. The summer period is used because winter schedules are