AMERICAN AIRLINES, INC.
Flight Office
New York

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TO: B-727 International Pilots - Caribbean
FROM: Manager, Flight - New York
SUBJECT: St. Thomas and St. Croix Flights

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Harry S. Truman Airport (MIST/STT) a t Charlotte Amalie, St. Thomas Island, U.S. Virgin Islands, is located at 18" 20.3' N., 64" 58.1' W, sixty-two NM East of San Juan International Airport.

The total length of runway 09-27, and overrun is 5150 feet. The full width runway is 200 feet wide and 4650 feet long, with a 100 feet wide, 500 feet long overrun on the east end. This overrun is only half the runway width and extends on the north side.

The approach plate for St. Thomas indicates that runway 09-27 is grooved. Actually, the first 1000 feet of runway 09 is not grooved but the remainder is grooved in the center 140 feet, although the runway is 200 feet wide.

The runway is located on the Southwest side of the island, in a pocket of hills. This location gives St. Thomas its own peculiar wind conditions. With other nearby airports reporting winds from the East or North of East, St. Thomas can have winds from the Southeast. The normally gentle trade-winds increase in velocity and change direction, locally, as the winds curl around and over the island's hills.

A mini-mountain wave exists on the approach to and over the airport when the winds exceed 15 knots from a Northeasterly direction. Turbulence increases as the winds increase above the 15 knot level. The cause for the mountain wave is a WNW-ESE oriented ridge that rises to 1709 feet approximately two miles Northeast from the runway. Turbulence from rotors is present below 1000 feet and a downdraft exists between approximately 1000 feet and the hilltop elevation over the airport and to the East when wind direction and speed are at or above values that establish a wave.

An exception has been made to Flight Manual Part One (FM2 C-1, March 14, 1971), "in that DAY VFR approaches are authorized at STT provided ..... THE STT WEATHER CLOUD BASE IS REPORTED AT 3000 FEET OR MORE AND THE VISIBILITY IS 3 MILES OR MORE AND THE FLIGHT HAS RECEIVED APPROVAL TO MAKE A VFR APPROACH. When approaching STT, from DUTCH or CULEBRA, and having received authorization for a VFR approach -- the course shall be altered so as to pass over Savana Island, thence turning left for a straight-in approach to runway 9. This exception to Part One is not to be construed as endorsing unwise or imprudent operating practices."

All St. Thomas take-offs and landings will be made by the Captain.

For landing at St. Thomas, the use of 40 degrees flaps is the standard practice. With strong, gusty winds, use of 40 degrees, or 30 degrees flaps for landing, is at the Captain's option. With a wind component of 20 knots

or more, landing with 30 degrees flaps is recommended. When the airport analysis permits a tailwind landing, use of 40 degrees flaps is required. Refer to the airport analysis for flap usage and authorized wind components.

It is required that pilots make 40 degree flap landings at other airports, prior to a St. Thomas entry, to become more familiar with the different characteristics of the aircraft between 30 degrees and 40 degrees flap landing.

Jet landings are permitted only to the East on runway 09. Landings are PROHIBITED on runway 27.

The St. Thomas VASI system consists of two single box displays on either side of runway 09 and are located at 550 feet and 1050 feet from the approach end.

Approaching the airport, on the VASI, be alert to the possibility of a "sinker" at approximately 500 feet and another at approximately 100 feet on the glide slope.

The VAS1 slope (2.5 degrees) intersects runway 09 at 800 feet from the approach end.

Your aiming point should be 1000 feet down the runway and an immediate decision to go-around must be made if the touchdown will be appreciably beyond this point. If a bounce occurs on the initial touchdown, a go-around should be initiated. There is NOT enough room for a go-around following a second touchdown.

If the airplane is landed long (beyond the 1000 feet point), the airplane will tend to float, as the winds pass through the "venturi effect" of the hill where the control tower is located, and the hill to the North of the runway.

The target touchdown aim point is 1000 feet, $\pm$ zero, for all approaches. The ever present "sinker" could cause an early touchdown from a low approach. There is no apron to the runway, the end of the runway is the water.

The aircraft must be landed on target, on airspeed. If you are not in the "slot", execute a go-around.

During the Caribbean Airport Qualification Film for St. Thomas, the VOR missed approach procedure is narrated immediately after a visual approach is made to runway 09. This procedure is for the VOR and should not be confused with the normal go-around procedure if the landing is rejected. Refer to your approach plate and Operating Manual for further clarification.

Using the recommended procedure of adding to Reference speed, one-half the steady wind component, and all the gust factor, up to a maximum of 20 knots, the V_{ref} at St. Thomas will be 116-120 knots. (Refer to B-727 Operating Manual, Section 3A, Page 13.)

With a target IAS on the approach of 120-125 knots, the aircraft is passing up runway at the rate of 200 feet per second. The airplane must be flown onto the ground. Do not hold it off!

Maintain Bug speed until arresting the rate of descent, then start reducing the thrust levers to idle just prior to touchdown. Touchdown may occur as low as 5 knots below Bug speed.

The following modified technique for reversing should be used. It will effectively shorten landing distances and the amount of braking required (AAL Bulletin 132-71).

After the main gear is firmly on the ground, the speed brakes should be raised as the nose wheel is being lowered to the runway. Also, prior to nose wheel contact, reverse levers should be brought to the reverse IDLE position. After positive nose wheel contact (to assure nose wheel steering), reverse power should be increased immediately as required. Under no circumstances should power be applied above IDLE, until the nose gear is firmly on the ground.

> NOTE: Both reverse thrust and speed brakes pitch the airplane up. It is important, therefore, that the nose is started down prior to speed brake application. This also insures that the airplane is not pulled off the ground inadvertently prior to speed brake extension.

Reverse thrust has its greatest effect at higher speeds so that full reverse should be used as soon as possible after touchdown.

Brakes should be applied almost simultaneously with speed brakes and reverse thrust application.

Take-offs are permitted in either direction, on runway 09 or runway 27.

When take-offs are made on runway 27, DO NOT apply maximum take-off power while on any portion of the 500 feet overrun. The take-off roll may commence on the overrun, but maximum power is not to be applied until reaching the actual beginning of runway 27. This is very important to avoid blast problems to buildings across the road from the East end of the airport.

When take-offs are made on runway 09, we will use the Red Hook Standard Instrument Departure. For noise abatement, climb as rapidly as possible to 2500 feet. Upon passing the end of runway 09, a 15 degree banked right turn to a heading of 120 degrees is required for obstacle clearance. (The First Officer will call out passing the end of the full length runway.)

The Red Hook SID and the STT 120 radial is the noise abatement climb-out route, but for your information, for noise abatement, pilots are to remain on the 120 heading until Southeast of Water Island. No aircraft may pass directly over the City of Charlotte Amalie, or Water Island below 2500 feet, unless otherwise directed by ATC. American Airlines will avoid flying directly over the City of Charlotte Amalie or Water Island.

Fuel is available if needed, but we do not normally fuel at St. Thomas. The fuel that is available from PAA is obtained by defueling inbound PAA aircraft. When inbound to St. Thomas consider your fuel requirements. Too much fuel on board could reduce your departure pay load and, of course, you know the pitfalls of insufficient fuel, one runway airports, strong winds, rain showers, disabled aircraft on the runway, etc.

For short segment operations (i.e., St. Thomas - St. Croix, St. Thomas - San Juan), the minimum fuel required for take-off may be reduced to 10,000 pounds. This in no way negates the requirement for prudent planning that considers all factors involved, with safety being the paramount feature (AAL Bulletin 132-71).

For routings airway information, frequencies, position reports, etc., refer to current Jepco charts, the AAL Flight Planning Manual, the International Flight Information Manual and International NOTAMS.

It is most important that you read all of the notes on the charts, approach plates, etc. (airspace restricted areas, airway directional altitudes, transition levels, transition altitudes, etc.).

Know your route, INS, Loran inoperative, HF out routings and emergency airports.

Flight Assistance Service. New York radio operates an Air/ground radio service on 6568 KHz along with other stations, coordinating the relay of weather and position reports, air traffic control information and offering flight assistance to pilots in flight by radio contacts. A PIREP reporting service concerning weather conditions encountered in flight is offered to enroute pilots as an aid to navigation in areas of severe weather.

JFK to MIST Routing

Loran check should read 3190 on Station 3H5 at the AAL JFK gates.

New York to St. Thomas flights will normally fly the JFK Porpoise SID to Tuna (XTU), then A-20 to Kraft, Direct STT.