

## FINDINGS

1. The aircraft was certificated and maintained according to approved procedures.
2. All crewmembers were certificated and qualified for the flight.
3. The airport was properly certificated under 14 CFR 139 and was without exemptions.
4. Harry S Truman Airport is capable of B727-100 operations under requirements of 14 CFR 121.
5. The certification of B727-100 aircraft into the airport was accomplished properly.
6. The additional restrictions imposed by the company augmented the required FAA safety margins.
7. The captain did not follow the company procedures in landing at St. Thomas. The company's intent was to require a 40 degree flap landing configuration for all landings at St. Thomas whenever the headwind component did not exceed 20 knots and no gusty wind conditions were present.
8. The use of 30 degree flap instead of 40 degree flap increased the landing roll, provided lower drag, lessened the decelerative capability of the aircraft, and made the aircraft more susceptible to atmospheric or aerodynamic factors which could produce a float.
9. The float probably resulted from either an updraft encounter, or, from an increase in lift resulting from the rotation of the aircraft, or an increase in airspeed as a result of a rapid change of headwind; or a combination of any two or all of these factors.
10. A successful go-around was possible immediately upon the onset of the float, after the wing dropped, and most probably after the wings were leveled. This capability became more and more marginal as the float and engine spool-down continued.
11. The aircraft touched down about 2,500 to 3,000 ft beyond the runway threshold. Based on these distances, it could have been stopped within the confines of the remaining runway, but a safe go-around could not be made.
12. Although the captain realized the remaining runway was critical with regard to stopping the aircraft, he did not know that the remaining runway was even more critical with regard to the execution of a go-around.
13. With adequate training as to the aircraft's performance capability and with training environment exposure to similar situations, the captain may have reacted immediately to stop the aircraft instead of attempting a go-around.
14. The first airport rescue vehicle began to apply extinguishing agent on the aircraft from the west side within 2 to 2-1/2 minutes after the accident.
15. Wind reporting at St. Thomas is often inaccurate because of the topography surrounding the airport.