BRIEFING MEMORANDUM
AIRWAY FACILITIES

January 26, 1998

ISSUE Minimum Safe Altitude Warning (MSAW) alert altitude settings for Houston Intercontinental (IAH) Airport, TX

On January 13, 1998, a Learjet 25 crashed approximately 2.3 miles from the runway while flying an Instrument Landing System (ILS) approach to runway 26 at IAH Airport. In the aftermath of the aircraft accident Operational Support (AOS) specialists determined that the MSAW approach monitor alert altitudes for runway 26 and other ILS runways at Houston were set incorrectly.

The National Airspace System (NAS) Management Document (MD) 633 specifies the parameters for establishing and maintaining the Automated Radar Terminal System (ARTS) IHA. MD 633 requires the approach monitor alert for runways with multiple instrument approach procedures to be set at an altitude equal to the lowest non-precision approach Minimum Descent Altitude (MDA), minus 100 feet.

A review of the ARTS IIIA parameters for IAH Airport revealed that the approach monitor limits for three runways which have ILS and non-precision approach procedures, were set at the ILS decision height minus 100 feet. As a result, the monitor alert altitude for runway 26 at Houston was set at 100 feet above ground level (AGL) when it should have been set at 402 feet AGL. The approach monitor alert altitudes were corrected at Houston and were checked using an FAA flight Inspection aircraft on January 23. AOS is reviewing the results.

The National Transportation Safety Board (NTSB) is aware of the situation at Houston and received a briefing on January 22 on the nature and extent of the incorrect monitor alert altitude settings. At the request of the NTSB we will conduct a test of the recorded radar data from the accident aircraft in order to determine when the MSAW would have provided an alarm if the correct altitude had been set for the runway 26 approach monitor. This test will be conducted at the Technical Center on January