



National Transportation Safety Board

Tallahassee Runway 09 Precision Approach Path Indicator (PAPI)

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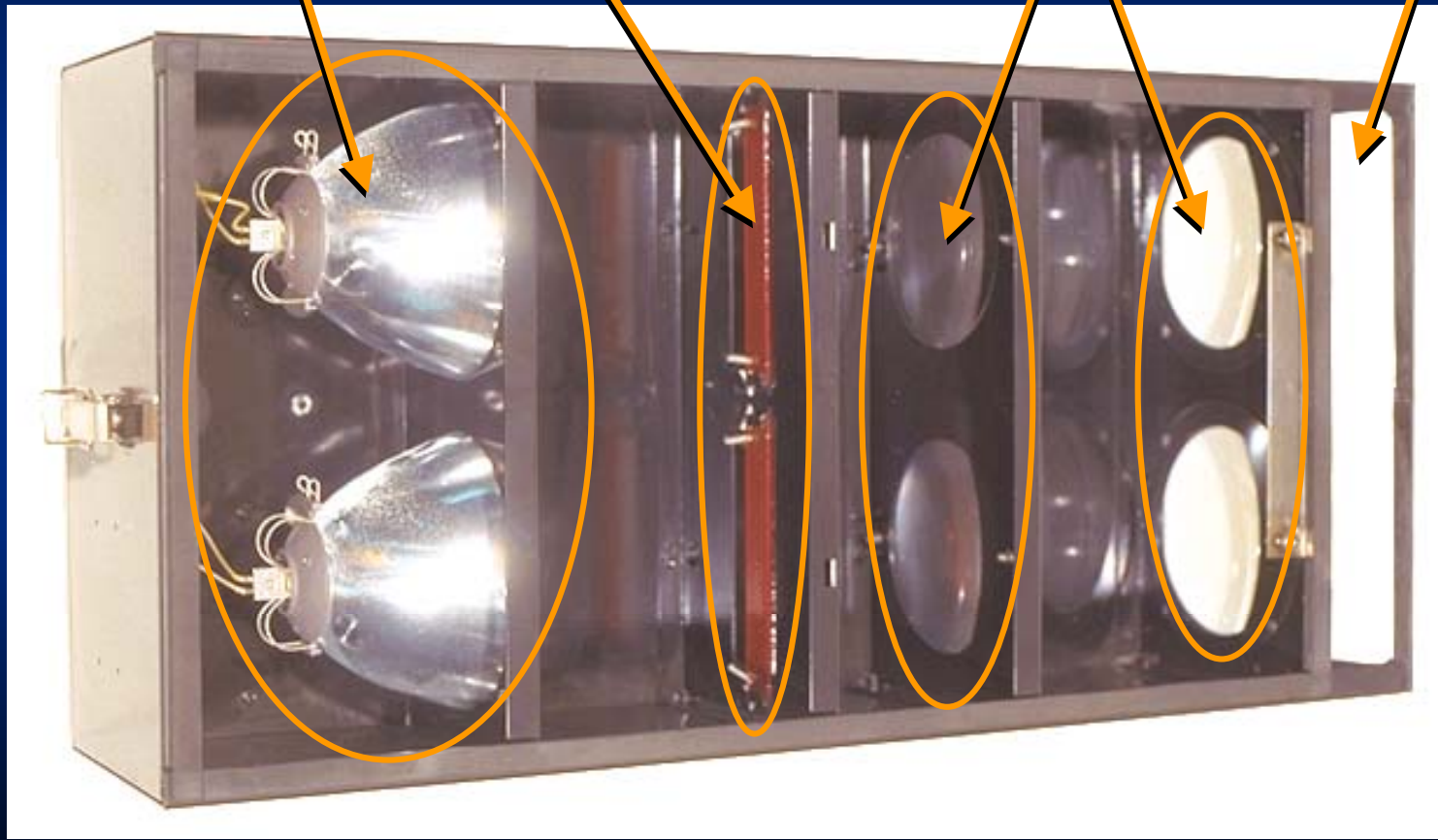
PAPI Components

Lamps

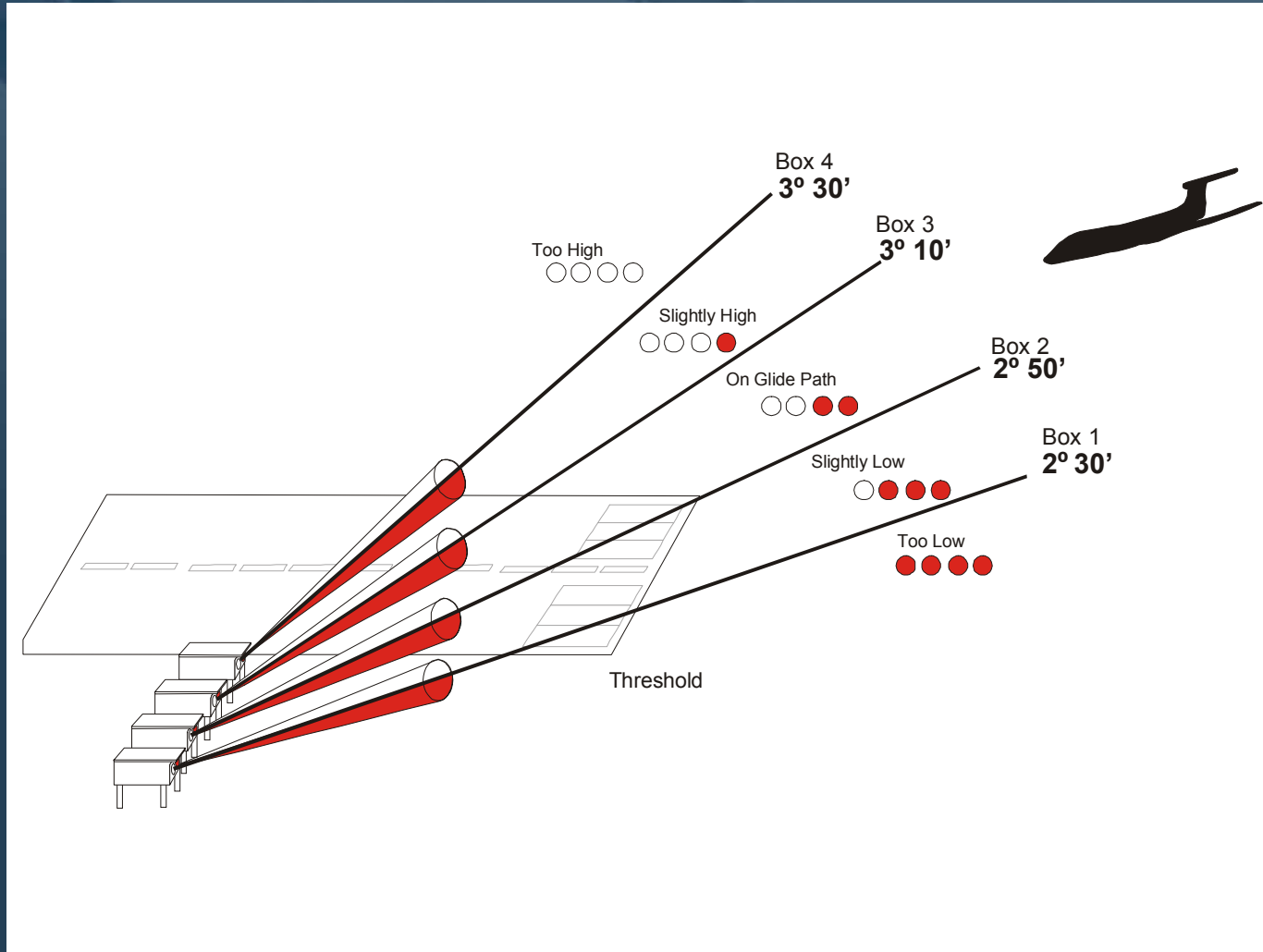
Red Filters

Lenses

Protective
Lens Shield



Precision Approach Path Indicator (PAPI)



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FedEx Flight 1478, Boeing 727-232 (N497FE)

Investigation of Tallahassee Runway 09 PAPI

- FAA flight inspection
 - “Glide path well clear of terrain..”
 - Consistent with 3-degree glideslope
- Ground Inspection
 - TLH representatives and FAA Airways Facilities
 - Checked settings with aiming tool – no adjustment needed



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Environmental Factors Affecting PAPI Operation

- Dew contamination:
 - Enlarges and blurs red/white transition zone
 - Transition zone appears as a broad “pink” signal
 - Evaporates within minutes after lamps are turned on
 - Does not alter transition zone angles
 - Cannot cause red signals to appear white, or vice versa



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Investigation of Tallahassee Runway 09 PAPI

- All crewmembers saw white and red PAPI signals during approach
- Crew descriptions consistent with normal PAPI operation
- Pink signals occur normally at white/red transition zones

Conclusions:

- PAPI was operating normally at the time of the accident
- Had the crew flown the entire approach with white and red PAPI signals evident, the airplane would have landed in the approach zone and would not have impacted trees.



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