



NTSB National Transportation Safety Board

Office of Aviation Safety

Customs and Border Protection

Predator B Accident

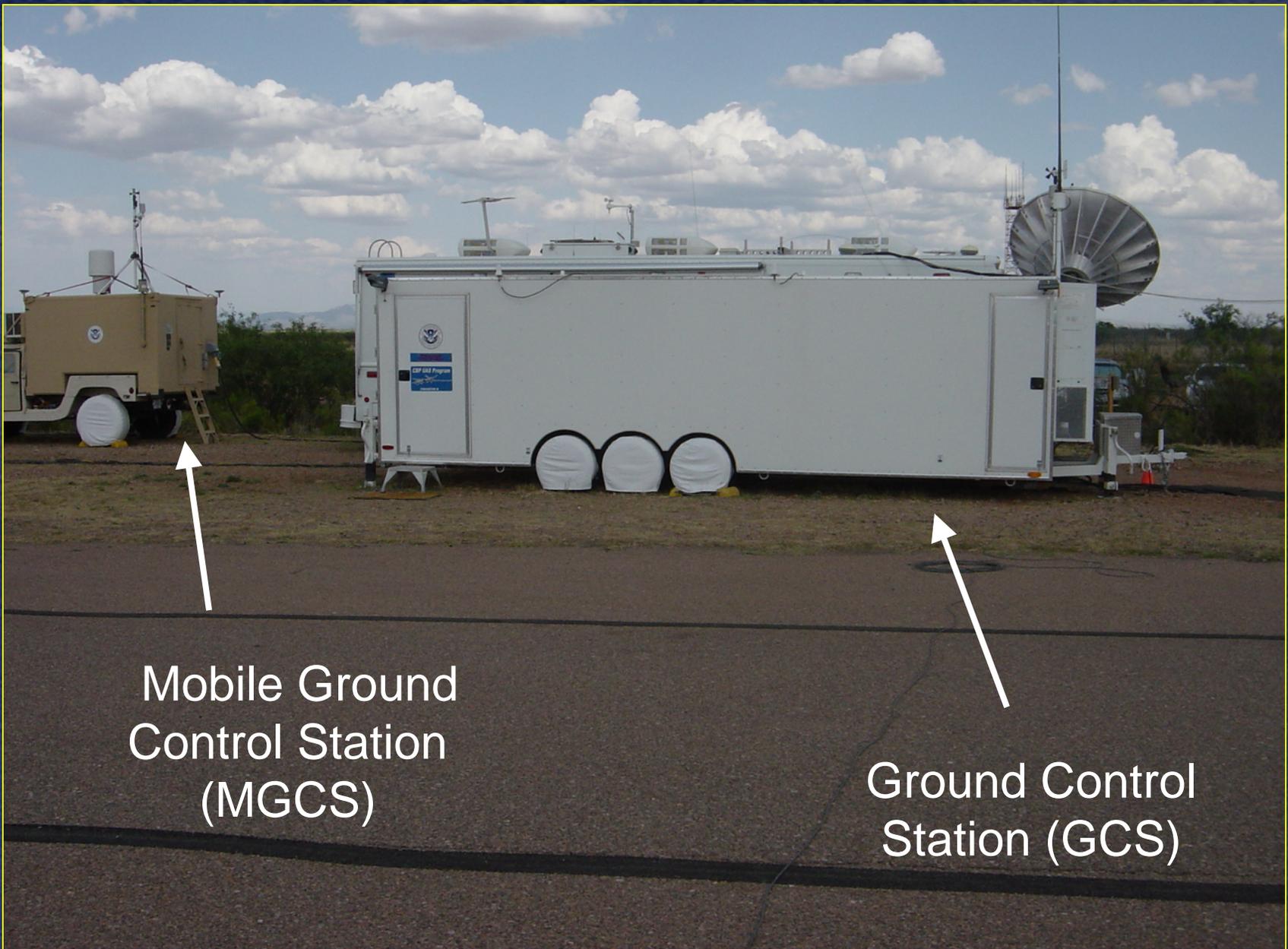
Nogales, Arizona

April 25, 2006







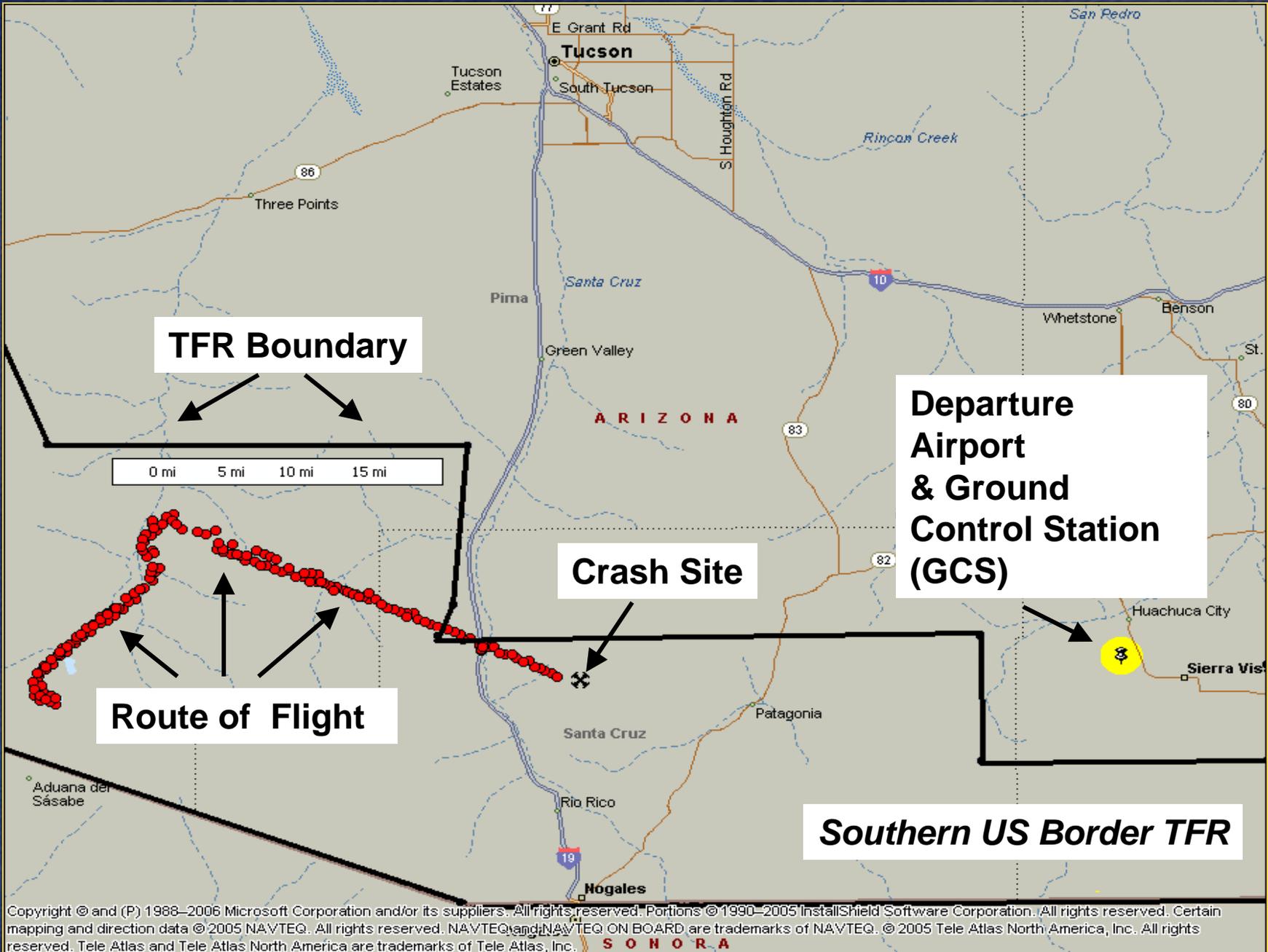


Mobile Ground
Control Station
(MGCS)

Ground Control
Station (GCS)



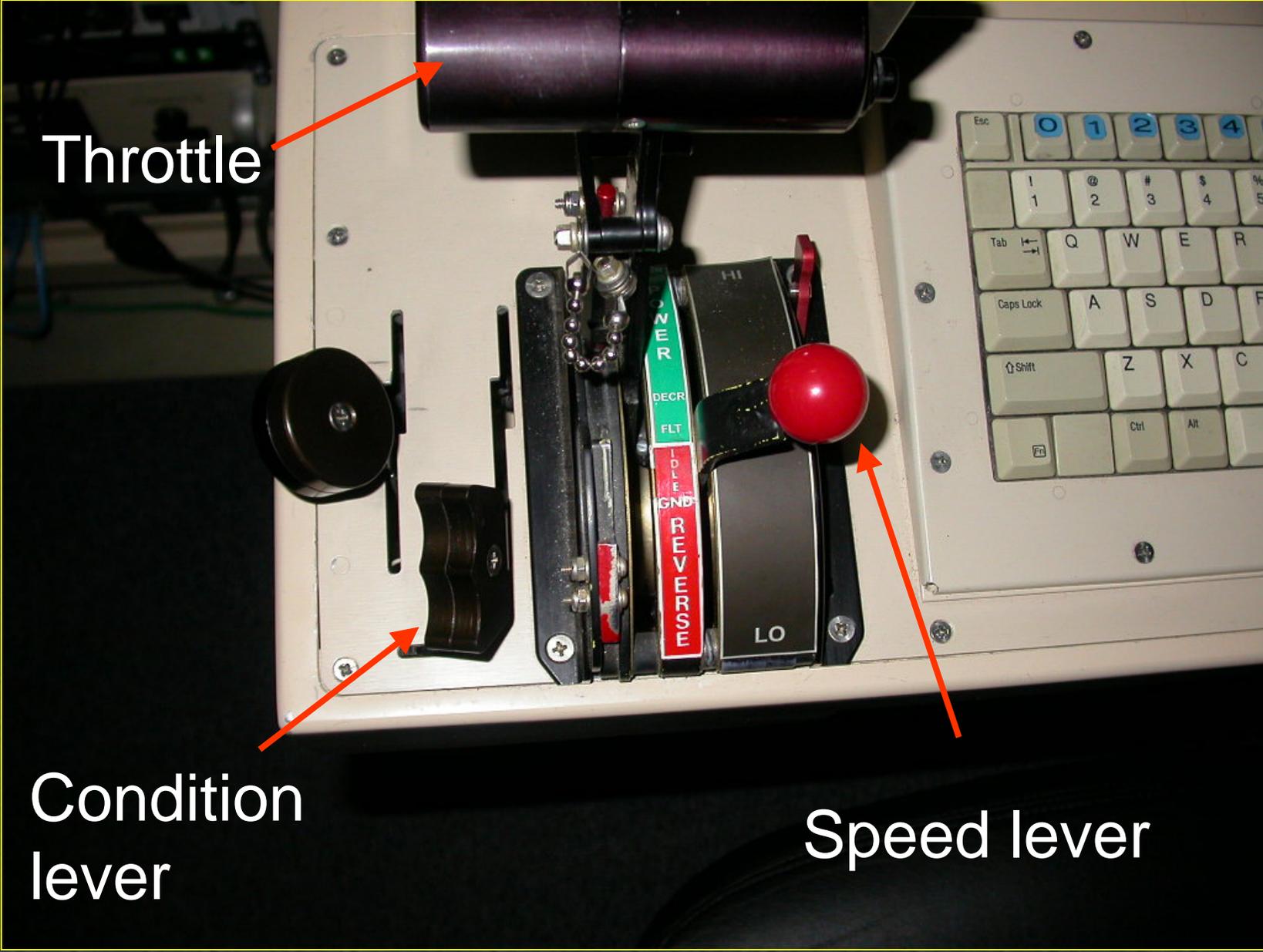
PPO-1 PPO-2



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Accident Sequence

- 6:51 pm - Aircraft departs
- 3:32 am - PPO-1 locks up
- 3:33 am - Switches control to PPO-2
 - Fuel cut off to aircraft
- 3:35 am - Sends aircraft to lost link
- Aircraft descends below LOS and impacts terrain



Throttle

Condition
lever

Speed lever

Field of view

Focus

Iris control



Pilot Qualification Review

- CBP requirements
 - Commercial/Instrument pilot
 - 200 hours manned aircraft
 - 200 hours UAS
- Pilot experience
 - 3,035 hours – manned aircraft
 - 519 hours – Predator A
 - 27 hours – Predator B

Pilot Training Review

- Pilots were General Atomics employees
- General Atomics provided training
- No CBP government flight representative
- Verbal agreement

UAS Lock-ups

- 4 Months
 - 16 lock-ups
 - 2 prior to accident flight
- GCS maintenance plans were inadequate
- No spare parts

Accident Findings

- Pilot had minimal Predator B experience
- Pilot met flight time requirements
- Instructor pilot not present in GCS
- Pilot failed to use checklist
- Pilot did not identify engine status

Accident Findings

- Unresolved console lockups
- Maintenance procedures
- Inadequate oversight by CBP

Staff

- Daniel Bartlett ATC
- John Clark Chief Scientist
- Bill English Facilitator
- Steve Magladry Systems
- Ed Malinowski Structures/Powerplant
- Dana Schulze System Safety
- Pam Sullivan IIC/Operations
- Michelle Wright Editor



Parties to the Investigation

- Federal Aviation Administration
- Customs and Border Protection
- General Atomics Aeronautical Systems, Inc.
- Honeywell



NTSB