

GREATER HOUSTON  
ASSOCIATION  
OF  
FLIGHT INSTRUCTORS

**Presented at the  
Flight Instructor Renewal Clinic  
January 2000**

**by**

**David Svedberg**

**ATC Controller**

**Plans/Procedures Specialist**

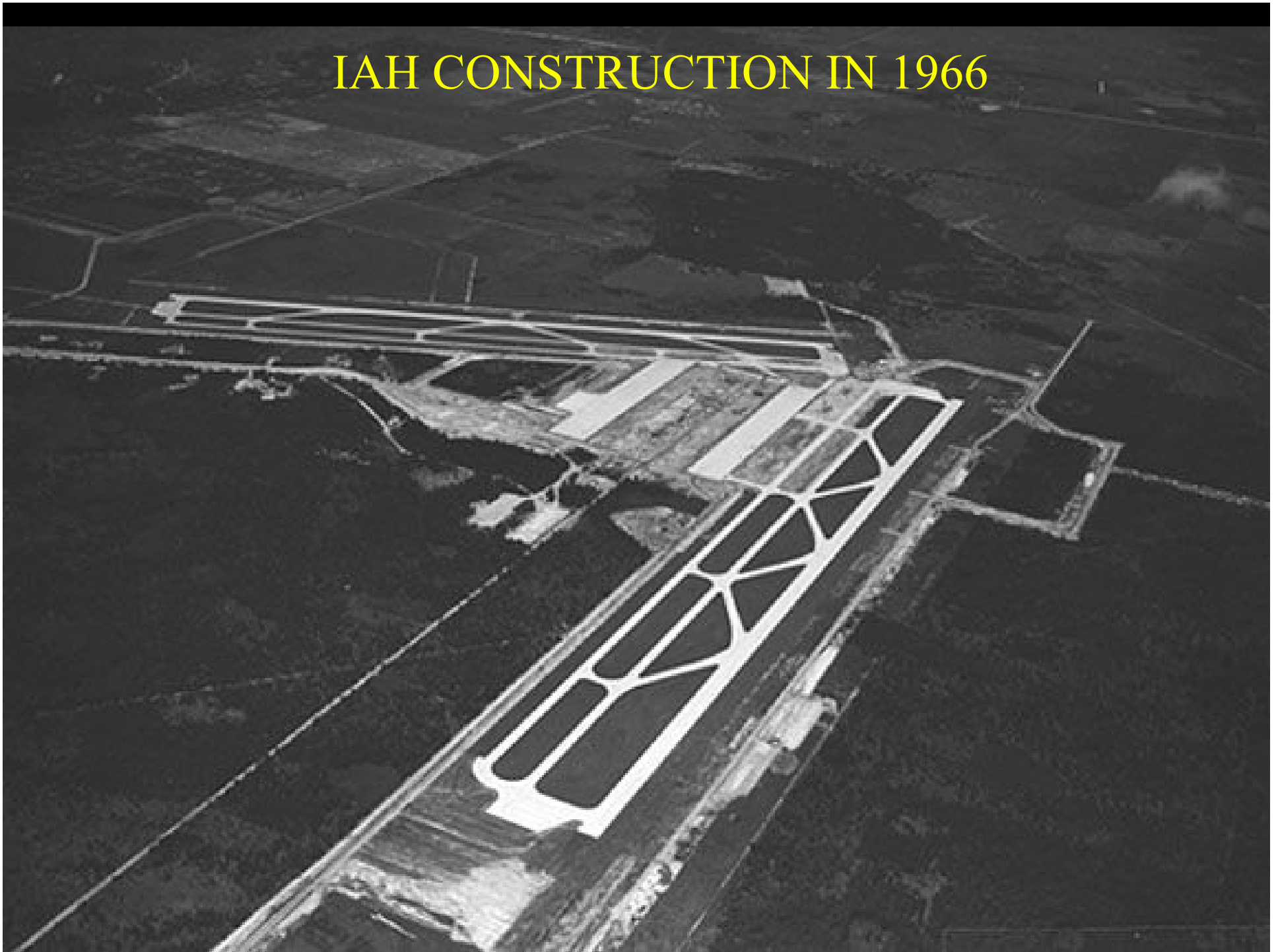
**Bush Intercontinental Airport**

**Houston, Texas**

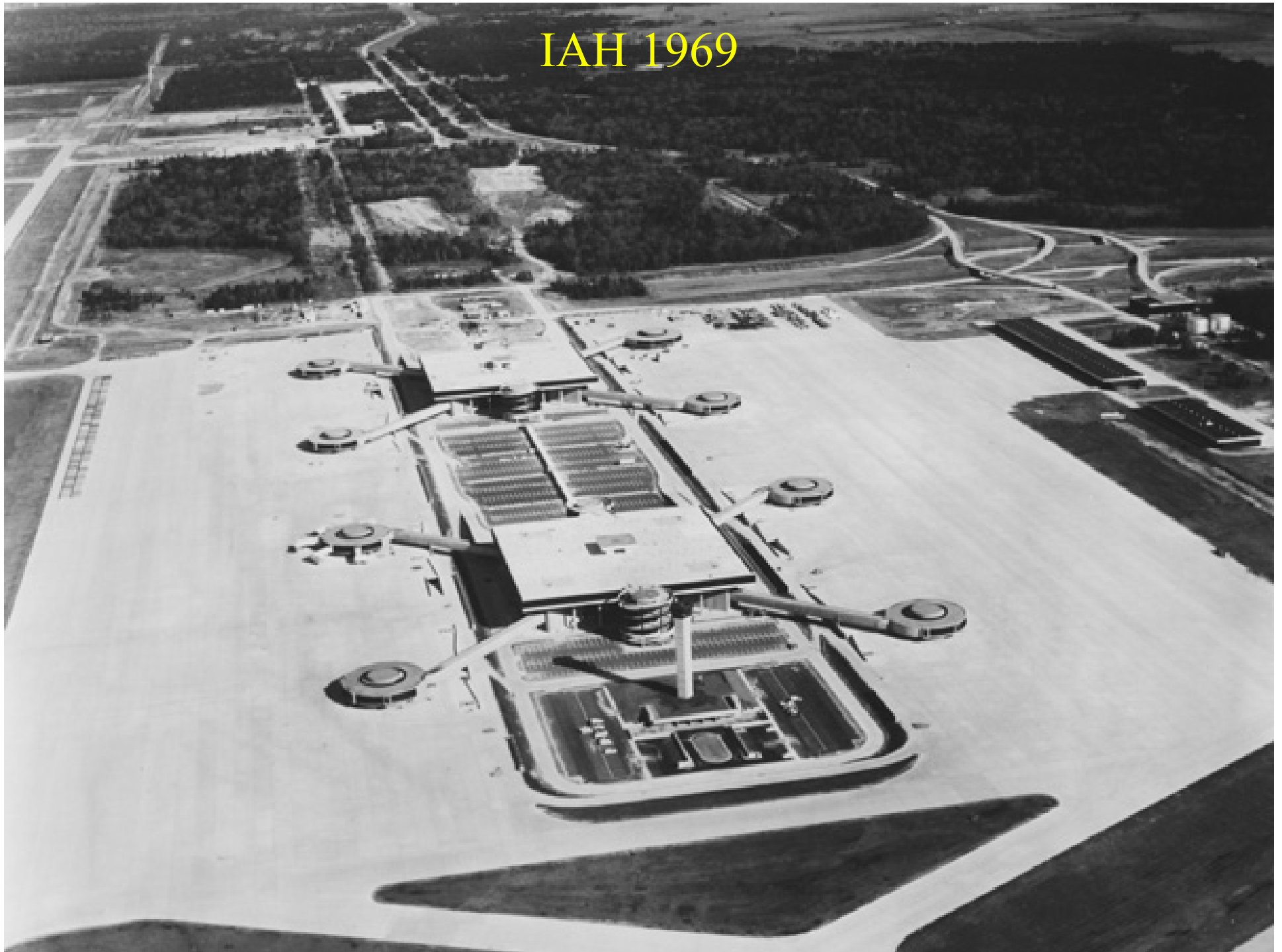


**BUSH INTERCONTINENTAL  
TOWER**

# IAH CONSTRUCTION IN 1966

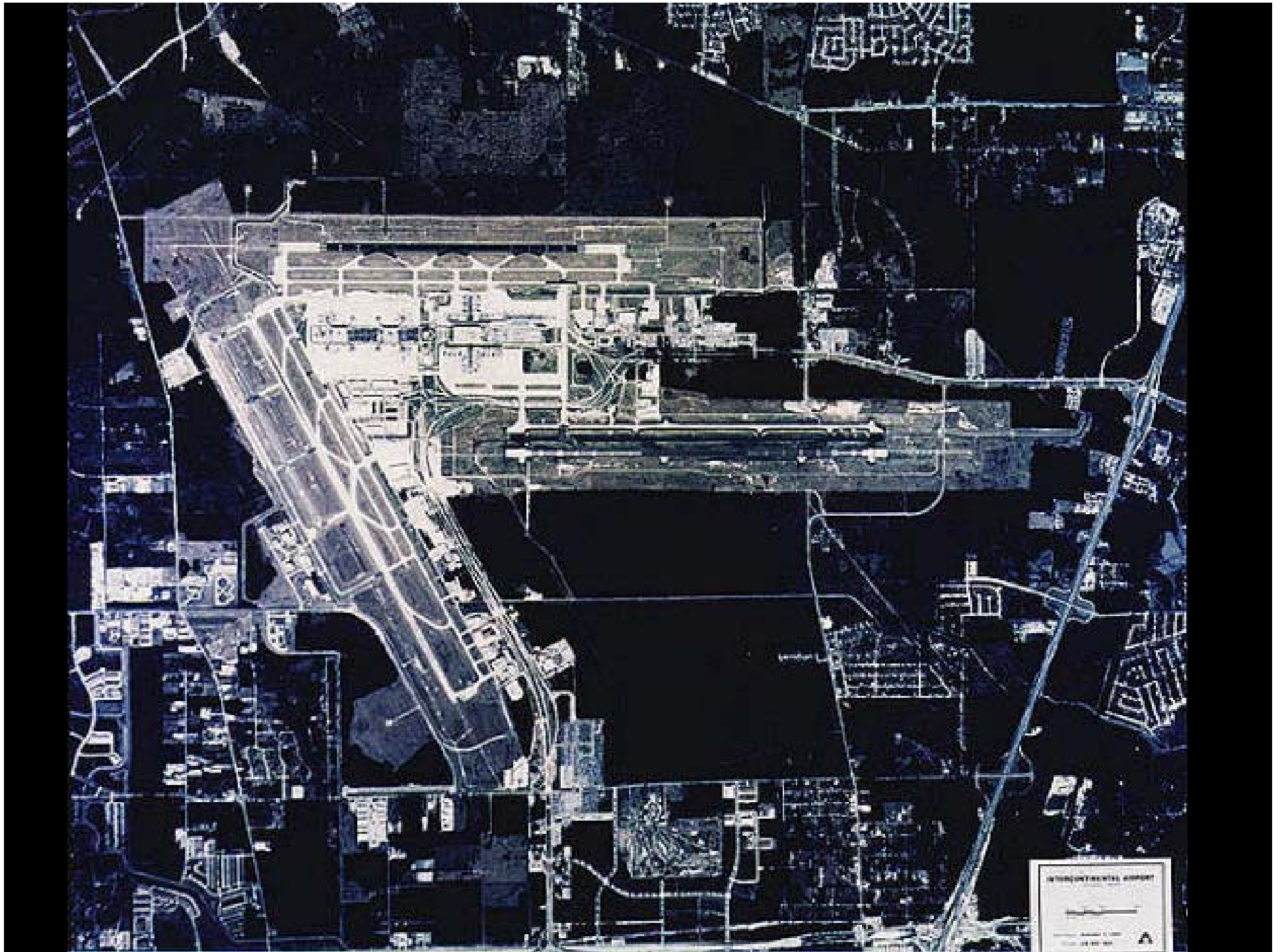


IAH 1969



# MID 1980'S APPROACH TO RUNWAY 15L





ENVIRONMENTAL GROUP

—

1



**FIRST LANDING RUNWAY 9/27 IN 1987**



# Artist's Rendering of Future Terminal A and AB Parking Garage at IAH

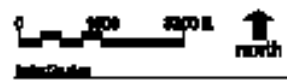
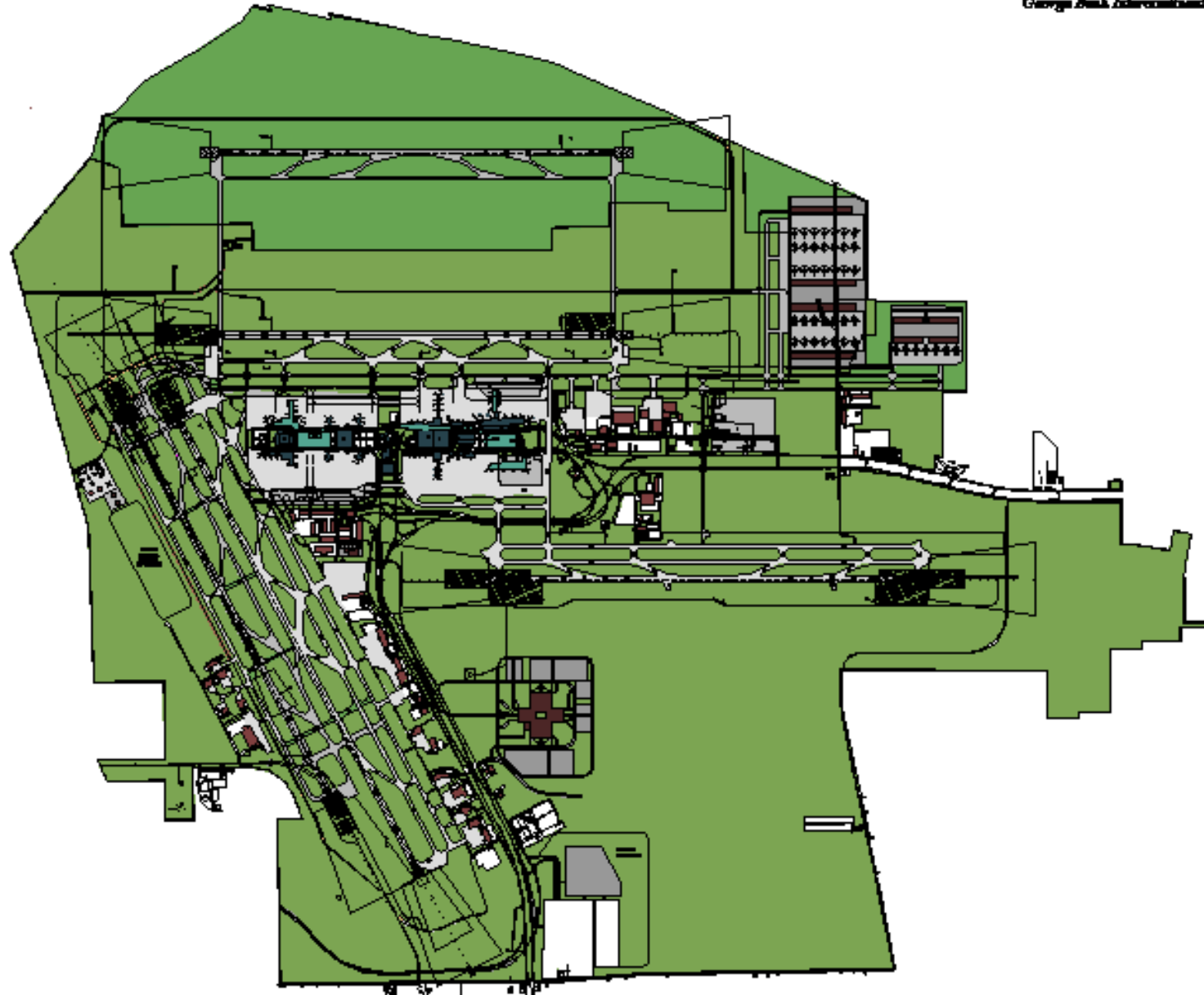


# GROWTH PROJECTIONS

- IN 1997 IAH 14TH BUSIEST PASSENGER U.S. AIRPORT AND 21ST IN THE WORLD
- BY 2017 BOTH PASSENGER AND AIRCRAFT OPERATIONS ARE EXPECTED TO DOUBLE
- HOUSTON AIRPORT SYSTEM IN AGGRESSIVE EXPANSION PROJECT
- \$200,000,000+ SPENT DURING 2000

# IAH & THE FUTURE

- RUNWAY 15R/33L EXPANSION COMPLETE ABOUT MARCH 2002
- RUNWAY 8L/26R OPERATIONAL ABOUT MARCH 2003
- IAB NOW TERMINAL “D”
- HARDY TOLL ROAD CONNECTOR OPENS JANUARY 28th at 10:00 AM



Development Program

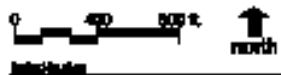
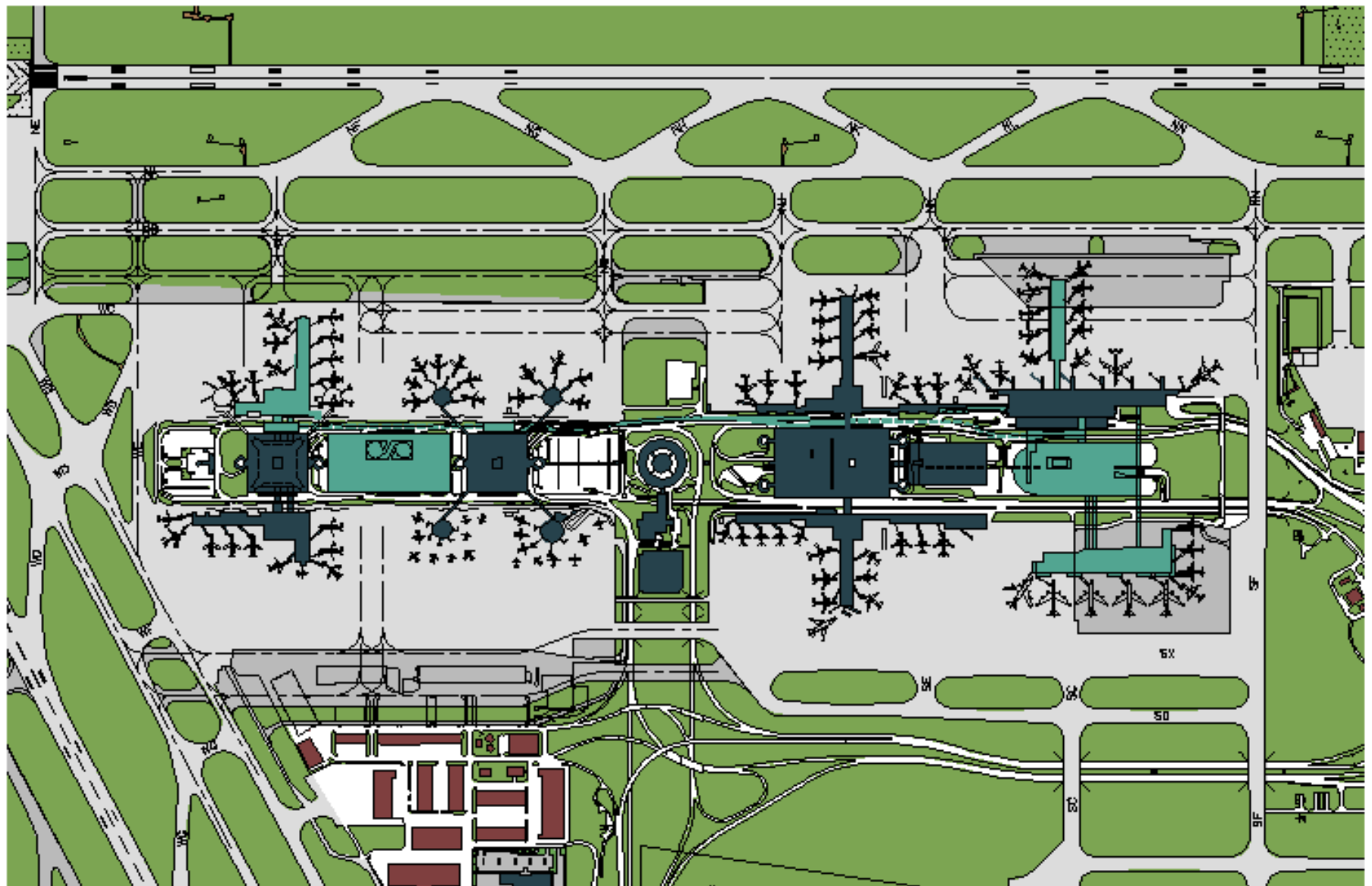
June, 1998

# IAH & THE FUTURE

- TAXIWAY/RUNWAY CONSTRUCTION, TERMINAL CONSTRUCTION, CARGO RAMP CONSTRUCTION WILL CREATE NUMEROUS TAXIWAY CLOSURES
- WHEN RUNWAY 8L/26R OPENS EXISTING RUNWAY 8/26 THEN KNOWN AS RUNWAY 8R/26L CLOSES FOR 6-8 MONTHS FOR COMPLETE REHAB

# IAH & THE FUTURE

- NEW RENTAL CAR FACILITY
- NEW MAIL FACILITY
- SECOND TAXIWAY BRIDGE ON SOUTH SIDE OF TERMINALS



**Terminal Area Improvements**

# IAH TOWER

- RECORD TRAFFIC DAY 1,433
- 1999 TOTAL 467,250
- 1999 TRAFFIC TRAFFIC UP 3.17%  
OVER 1998
- OUT/OFF TIMES 8.88 FOR 1999 A  
DECREASE OF 1.88% FROM 1998  
WHILE TRAFFIC INCREASED

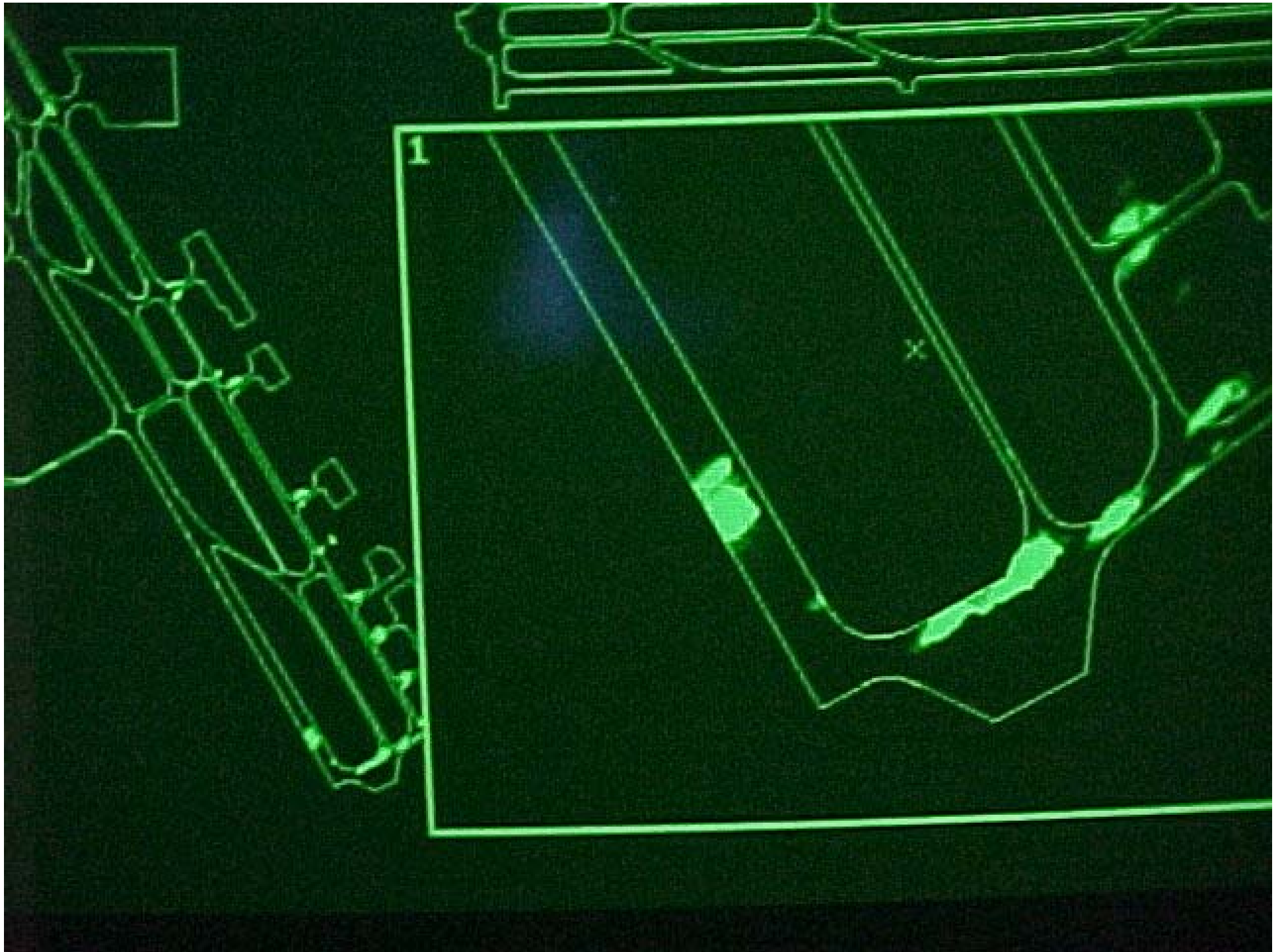


# TOWER POSITIONS

- 3 LOCAL CONTROLLERS
- 2 GROUND CONTROLLERS
- CLEARANCE DELIVERY/FLIGHT DATA
- TRAFFIC MANAGEMENT
- SUPERVISOR
- 2 COORDINATOR POSITIONS

# CONTROLLER TOOLS

- DIGITAL ATIS (281-443-1744)
- PRE-DEPARTURE CLEARANCES
- AIRPORT SURFACE DETECTION EQUIPMENT (ASDE)





# CONTROLLER TOOLS

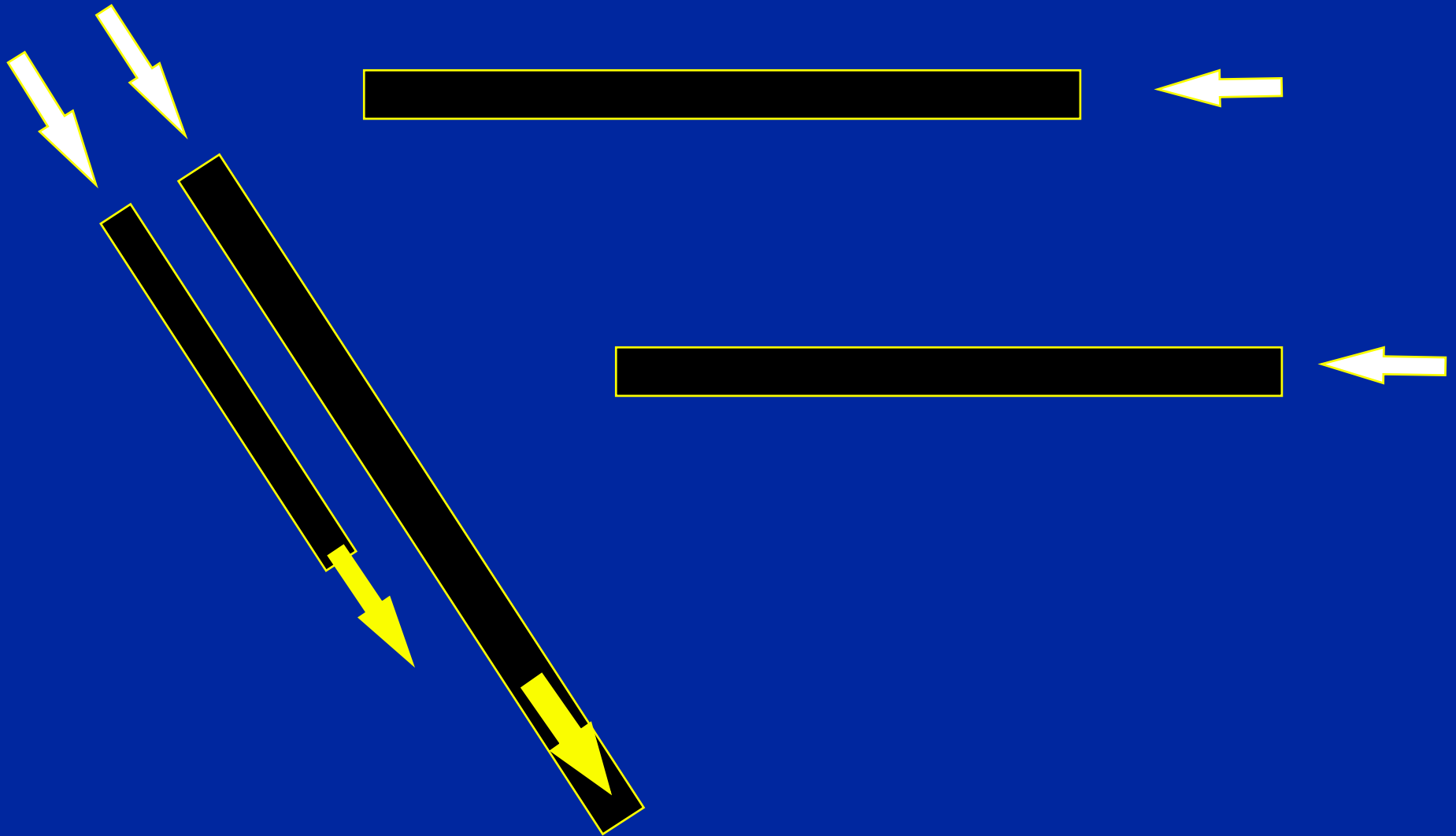
- NORTH AND SOUTH RAMP TOWERS  
SOUTH RAMP 131.27
- PILOT REPORTS VERY HELPFUL IN  
AREAS NOT VISIBLE FROM THE  
TOWER!!!!



# AIRPORT CONFIGURATIONS

- LANDING RUNWAYS 15L/R  
RUNWAYS 26/27  
DEPARTURE RUNWAYS 15L/R
- ARRIVAL TRAFFIC FROM EAST AND  
SOUTHWEST USES RUNWAYS 26/27
- ARRIVAL TRAFFIC FROM THE  
NORTHWEST USES RUNWAYS 15L/R

**LANDING RUNWAYS 15L/R**  
**RUNWAYS 26/27**  
**DEPARTING RUNWAYS 15L/R**

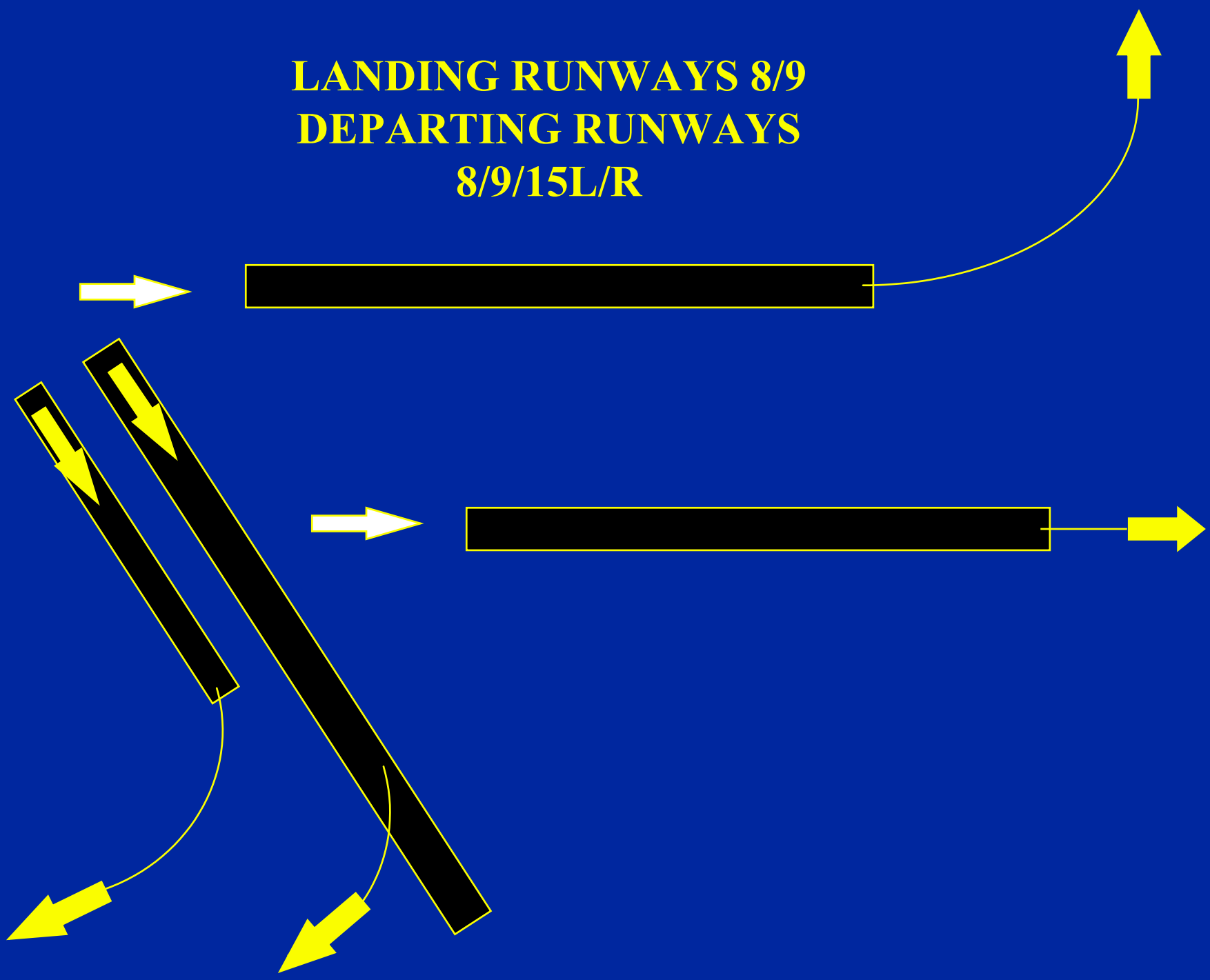




# EAST FLOW

- LANDING RUNWAYS 8/9  
DEPARTING RUNWAYS 8/9 & 15L/R
- NORTHBOUND RUNWAY 8
- EASTBOUND RUNWAY 9
- WESTBOUND RUNWAY 15L/R
- RUNWAY CENTERLINE CROSSINGS  
CREATE UNIQUE SITUATIONS

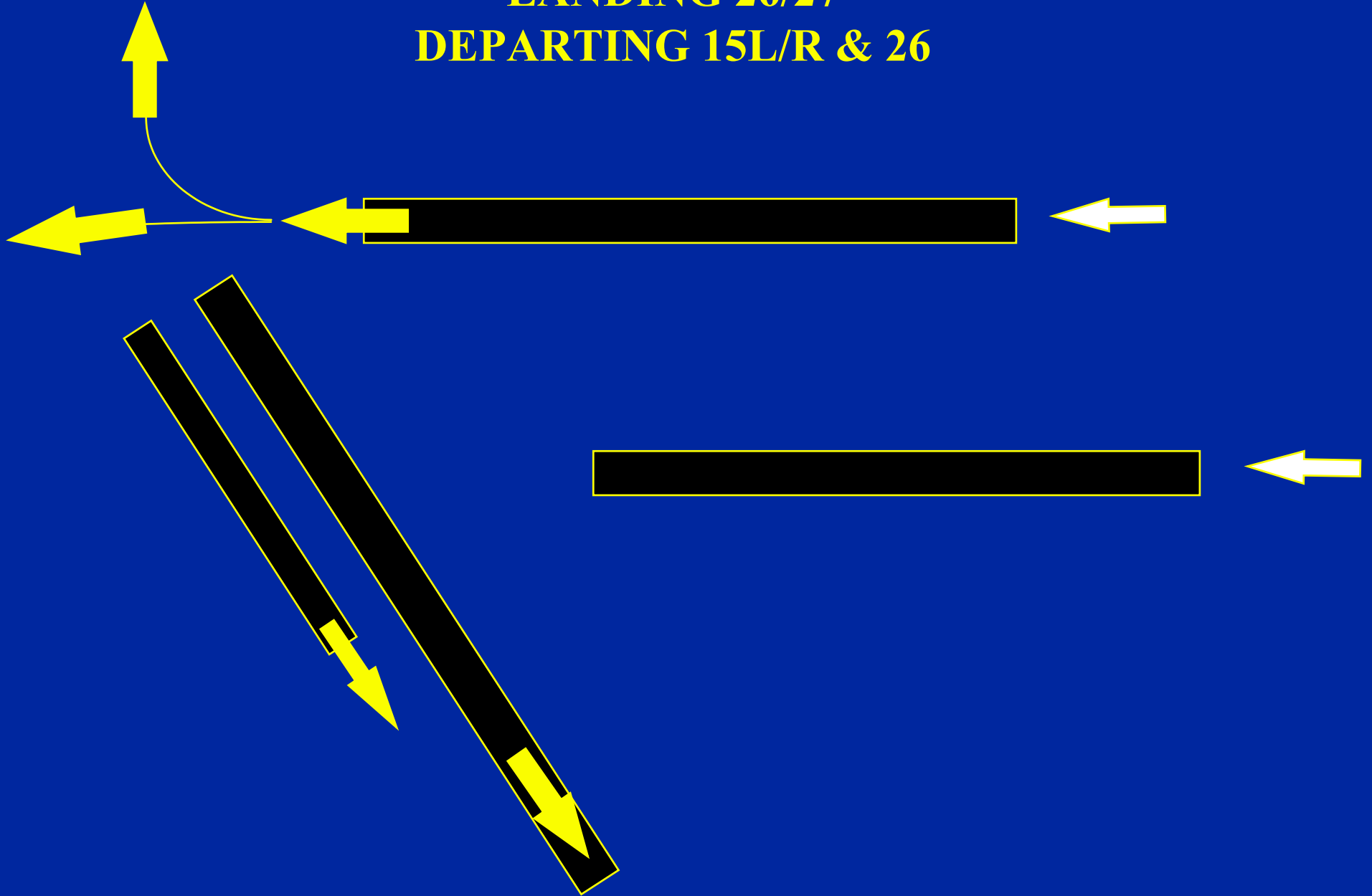
**LANDING RUNWAYS 8/9  
DEPARTING RUNWAYS  
8/9/15L/R**



# DEPARTURE PUSHES

- LANDING RUNWAYS 26/27
- DEPARTURE RUNWAYS 15L/R  
RUNWAY 26
- RUNWAY 26 USED PRIMARILY FOR  
NORTHBOUND OR WESTBOUND  
TRAFFIC
- RUNWAYS 15L/R ALL OTHERS

**LANDING 26/27**  
**DEPARTING 15L/R & 26**



# ARRIVALS

- SIMULTANEOUS AND PARALLEL APPROACHES TO RUNWAYS 26/27
- CONTROLLERS ARE AWARE GENERAL AVIATION PILOTS DESIRE TO LAND RUNWAYS 15L/R
- RUNWAY 27 BEST LANDING RUNWAY CURRENTLY DUE TO CONSTRUCTION ON NORTH SIDE
- FBO'S LOCATED ON WEST COMPLEX BOTH SIDES OF RUNWAYS 15L/R

# ARRIVALS

- ADVISE GROUND CONTROL IF UNFAMILIAR/CONSTRUCTION
- NO GENERAL AVIATION PARKING ALLOWED AT TERMINALS
- QUALITRON AND GARRETT BOTH HAVE COURTESY TRANSPORTATION TO THE TERMINALS
- READBACK ALL HOLD SHORT INSTRUCTIONS

# DEPARTURES

- HAVE CURRENT ATIS WHEN YOU CONTACT CLEARANCE DELIVERY
- ADVISE CLEARANCE DELIVERY OF LOCATION ON AIRPORT
- VFR'S ADVISE DIRECTION OF FLIGHT AND REQUESTED ALTITUDE
- IFR'S EXPECT IAH DP IF LEAVING TERMINAL AREA AND A PDR THAT TIES INTO FILED ROUTE

# DEPARTURES

- ADVISE CLEARANCE WHEN READY TO TAXI
- MONITOR GROUND CONTROL, THEY WILL KNOW YOU ARE WAITING
- IF RUN-UP IS REQUIRED ADVISE GROUND CONTROL
- READBACK ALL HOLD SHORT INSTRUCTIONS



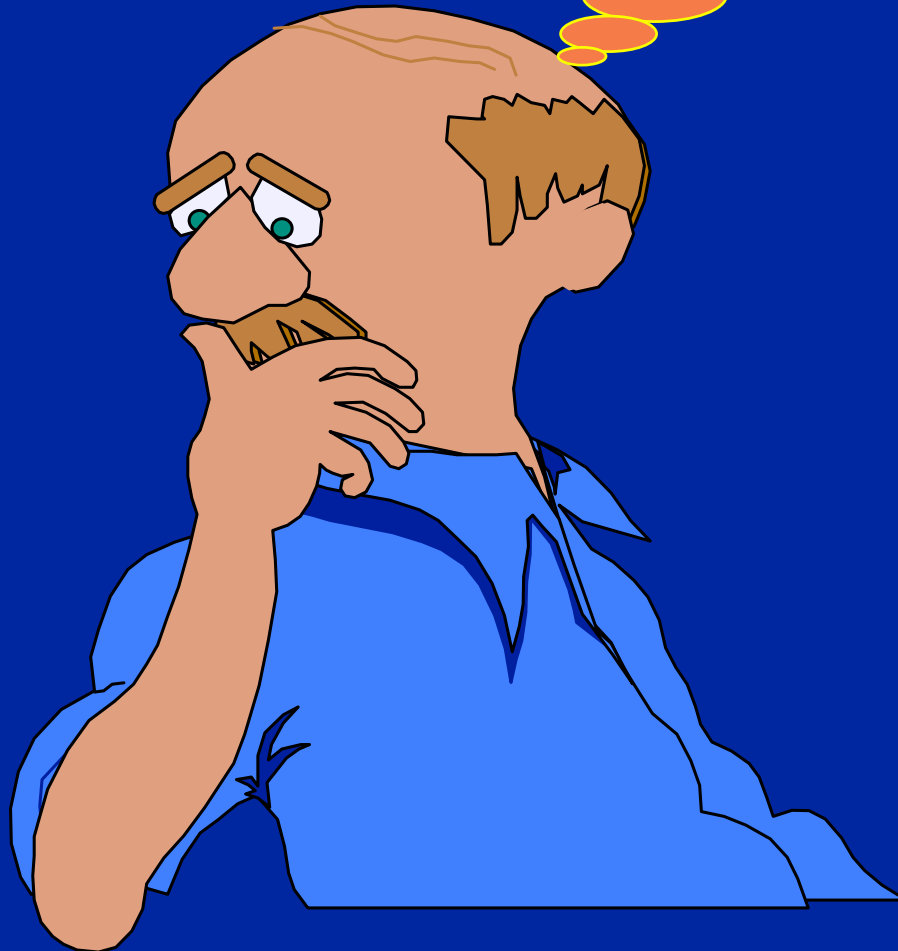
# DEPARTURES

- GROUND CONTROL WILL ASSIGN THE CORRECT TOWER FREQUENCY
- IF YOU DESIRE MORE THAN STANDARD WAKE TURBULENCE SEPARATION ADVISE THE CONTROLLER PRIOR TO TAXIING ONTO THE RUNWAY
- AOPA VIDEO "OPERATIONS AT TOWERED AIRPORTS"

# **IAH TOWER ON THE INTERNET**

**<http://web.wt.net/~iahi90/>**

WONDER IF I CAN  
GET A TOUR??



# FACILITY TOUR

**281-209-8600**

MONDAY- FRIDAY  
7:30 AM - 4 PM



# HOUSTON INTERCONTINENTAL TRACON

# HOUSTON APPROACH CONTROL

- RANKS 8TH IN THE COUNTRY WITH 845,214 OPERATIONS IN 1999
- TRAFFIC INCREASE OF 4.55% OVER 1998
- SERVE 5 AIRPORTS WITH CONTROL TOWERS

# AIRPORTS WITH CONTROL TOWERS

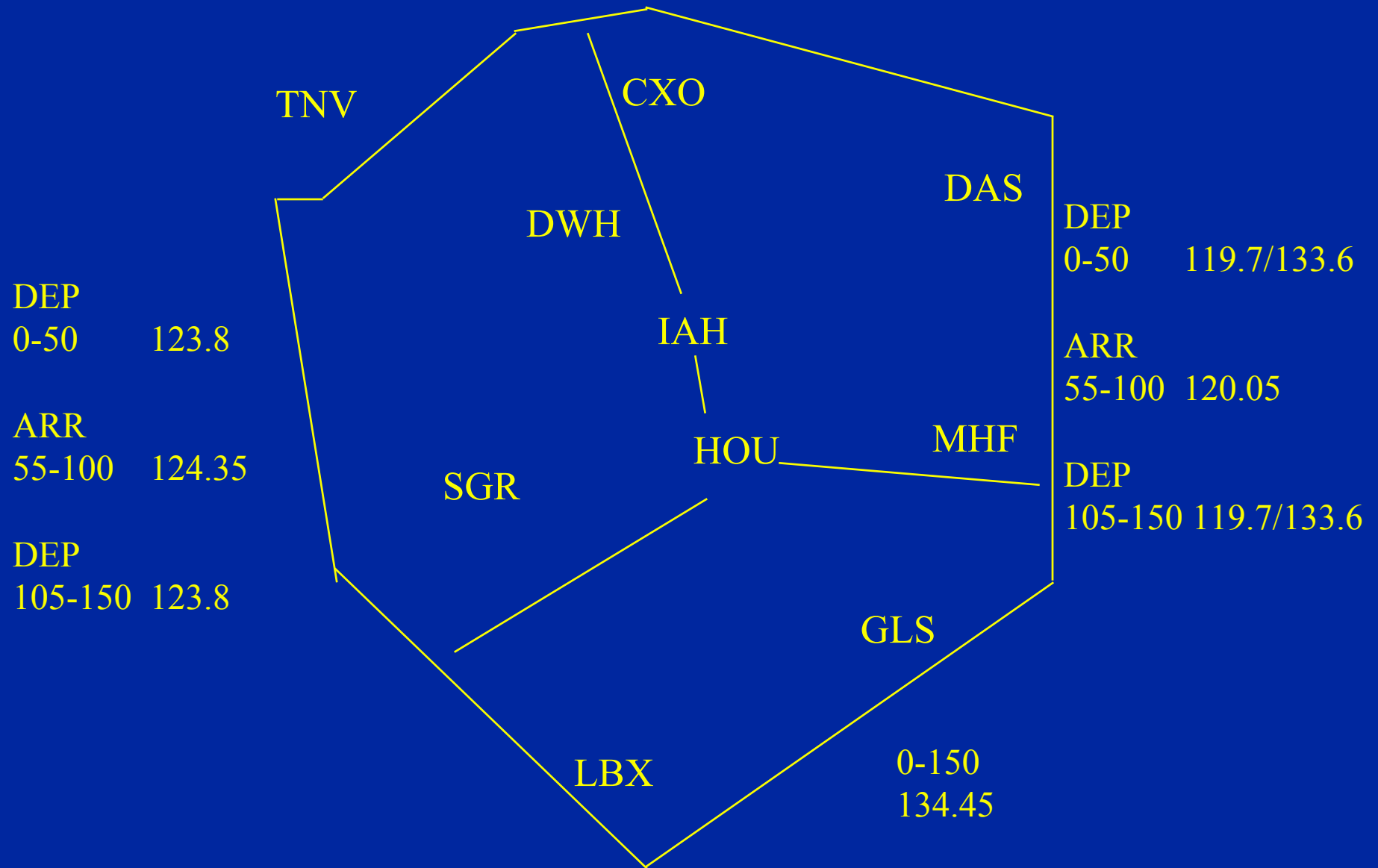
- GEORGE BUSH INTERCONTINENTAL AIRPORT/HOUSTON
- HOBBY AIRPORT
- DAVID WAYNE HOOKS AIRPORT
- ELLINGTON FIELD
- SUGAR LAND MUNI/HULL FIELD

# HOUSTON APPROACH CONTROL AIRSPACE

- CONTROL OVER 40 THOUSAND MILES OF AIRSPACE
- SURFACE TO 15,000 FEET
- MORE THAN 22 AIRPORTS WITH INSTRUMENT APPROACH PROCEDURES

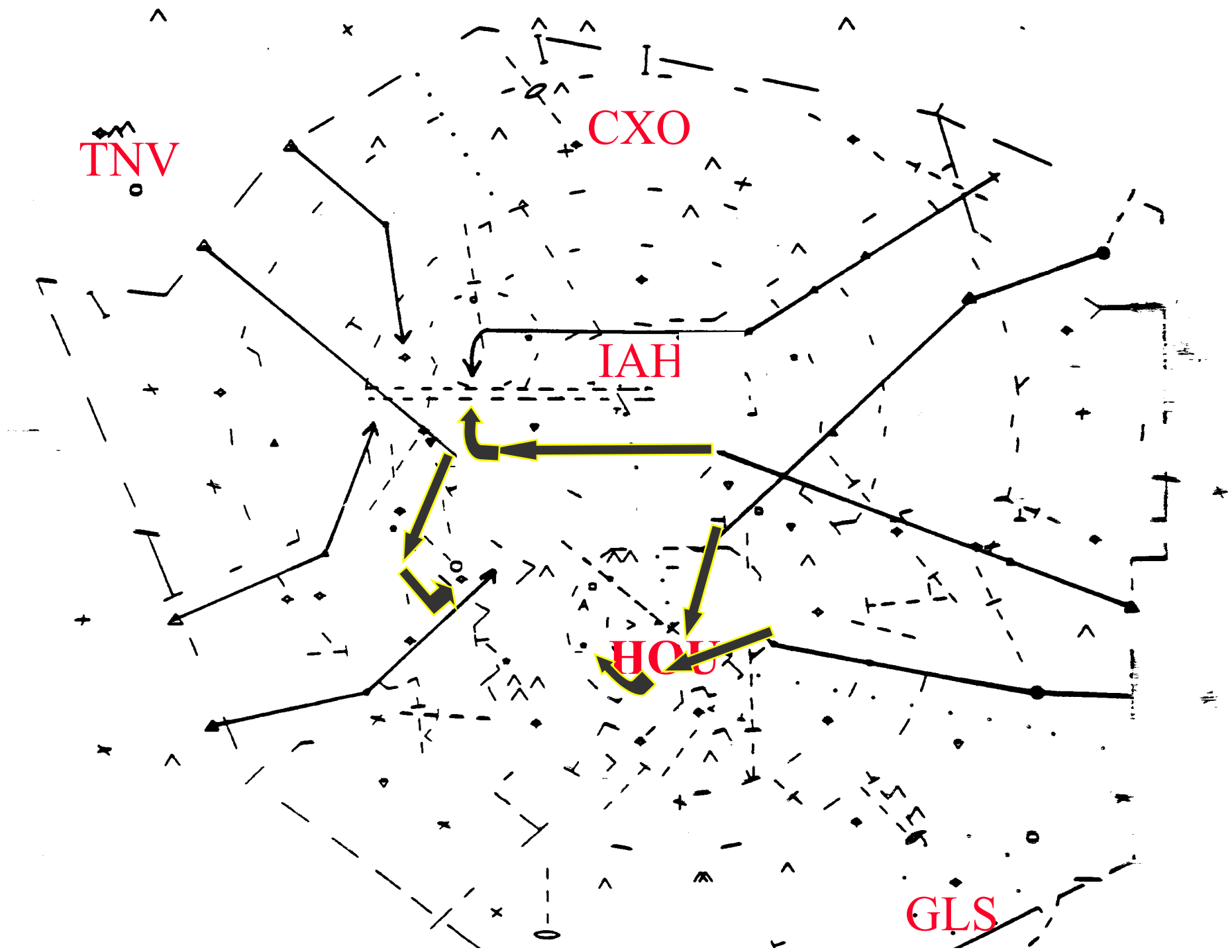


# HOUSTON APPROACH AIRSPACE



# OPERATIONS DISCUSSION

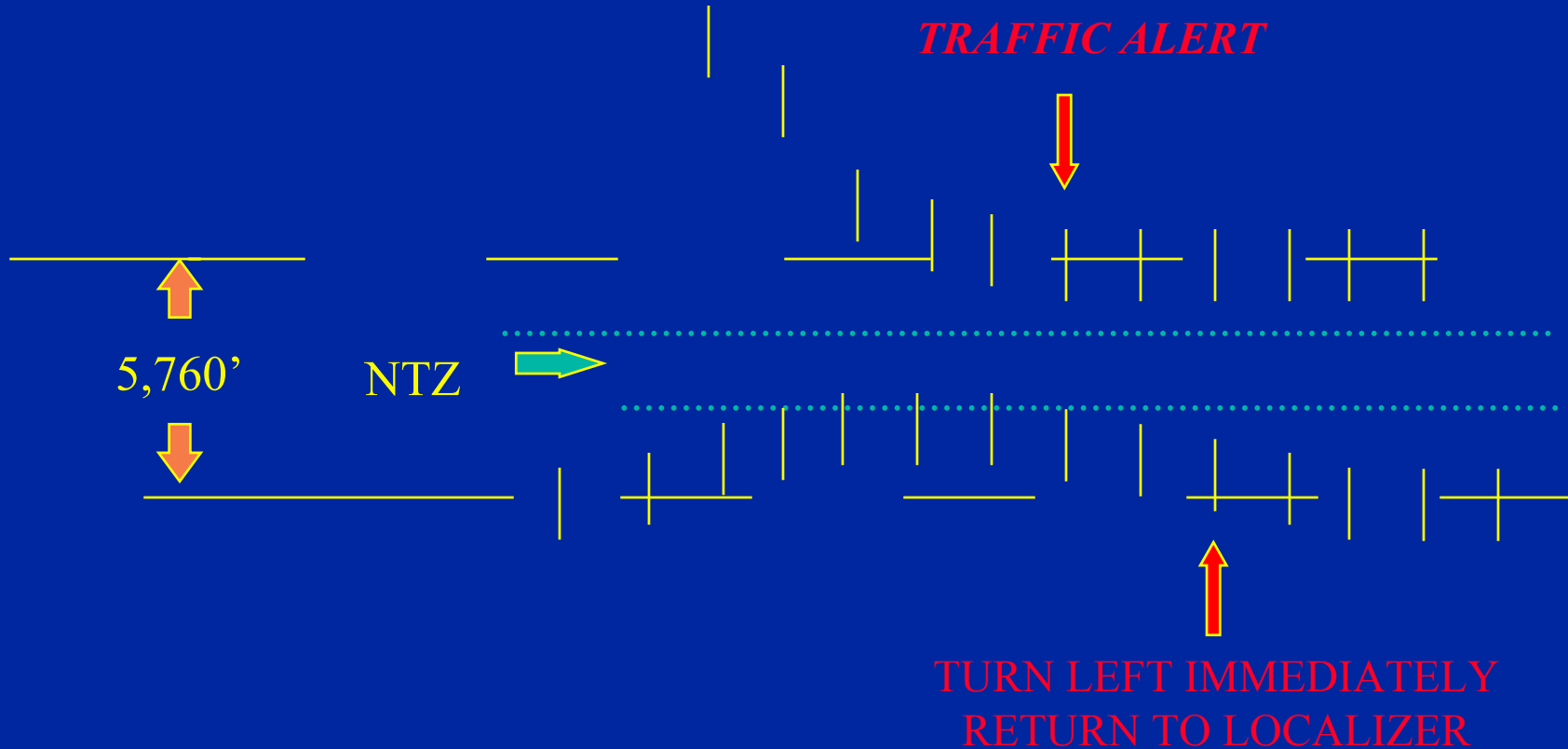
- AIRSPACE CONFIGURATIONS
- IAH SIMULTANEOUS APPROACHES
- AREA CONSTRUCTION PLANS
- WEATHER DELAYS AND ROUTINGS
- AIRSPACE REDESIGN COMING
- UPDATES
- PRACTICE APPROACHES
- CLASS B AIRSPACE



# SIMULTANEOUS APPROACHES

- VERTICAL SEPARATION USED WHEN INTERCEPTING THE LOCALIZERS
- EARLY FREQUENCY CHANGE TO TOWER
- RUNWAYS TREATED AS SEPARATE AIRPORT
- WAKE TURBULENCE APPLIED TO THE SAME RUNWAY ONLY

# FINAL MONITORS

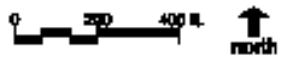
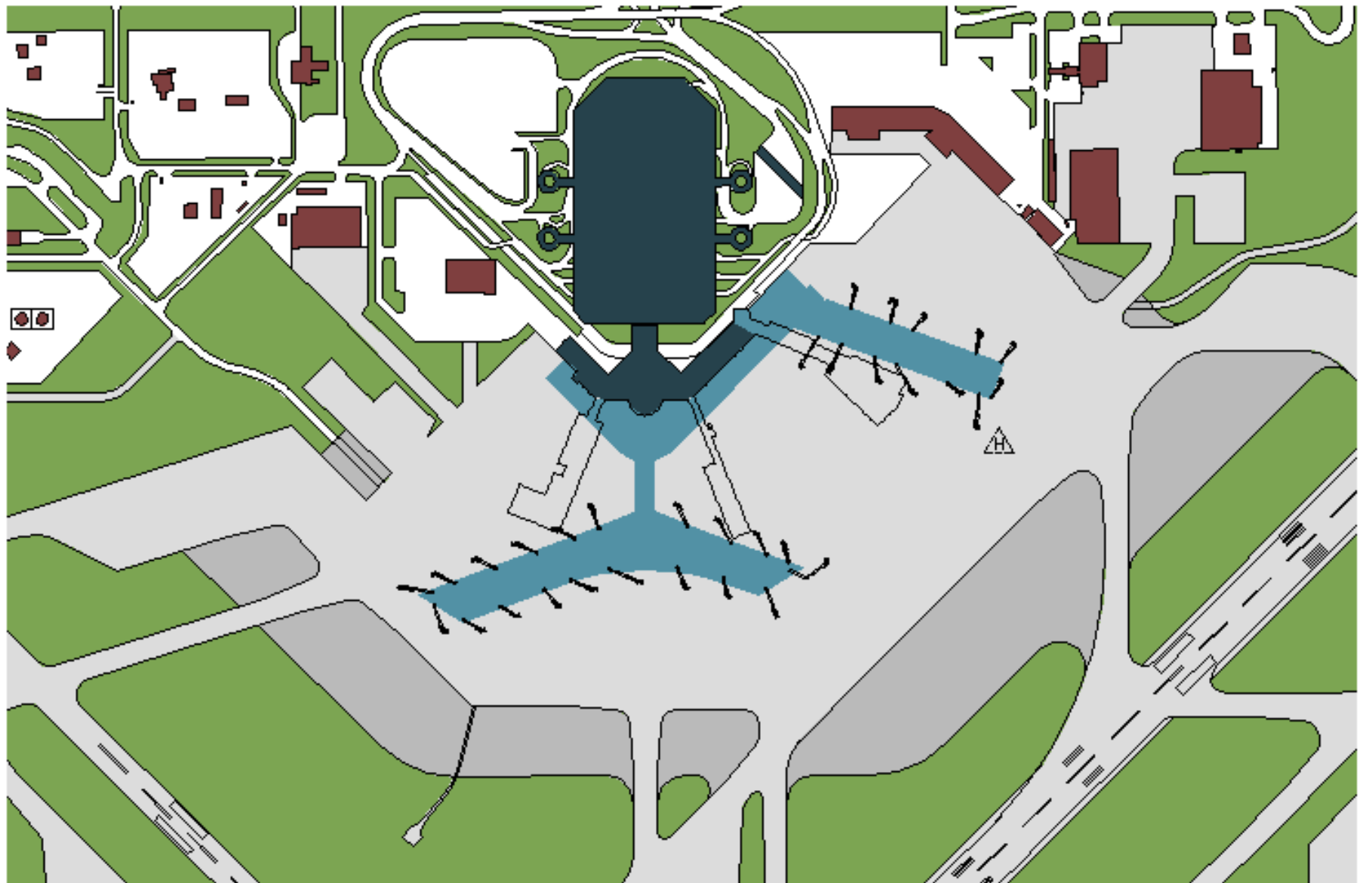


CONTROLLER VIDEO MAP FOR “NO TRANSGRESSION ZONE”

AIM 5-4-12 THROUGH 5-4-16

# AIRPORT CONSTRUCTION

- HUB VOR MOVING TO ROOF OF PARKING GARAGE WORKING 2001



**Terminal Area Improvements**

# AIRPORT CONSTRUCTION

- NO VOR APPROACHES TO THE SOUTH RUNWAYS 12R/17/22
- EFD RUNWAY 17R/35L REHAB PROJECT TO CLOSE RUNWAY FROM LATE OCTOBER 2000-MARCH 2001
- ONLY APPROACHES TO RUNWAY 4 DURING CLOSURE TACAN OR GPS



# **WEATHER DELAYS AND ROUTINGS**

**LENGTHY PROCESS TO COORDINATE**

**HOUSTON CENTER**

**APPROACH CONTROLS**

**CUSTOMERS**

**NATIONAL FLOW PROGRAMS**

**OTHER CENTERS**

# NEW DEPARTURE PROCEDURES

- DP WILL BE NAMED FOR THE NAVAID IT SERVES SUCH AS ROUTE OVER PALACIOS VORTAC NAMED PSX ONE DEPARTURE
- DP'S WILL HAVE ATC ASSIGNED TRANSITIONS BACK TO FILED ROUTE FOR WEATHER REROUTES
- PUBLISHED ABOUT OCT/NOV 2000

# AIRSPACE REDESIGN

- REVIEW AND DESIGN AIRSPACE TO EXCEED THE PROJECTED GROWTH
- HOUSTON APPROACH, HOUSTON CENTER, ADJACENT CENTERS & CONTROL TOWERS
- EXPAND TRACON POSITIONS AND NEW TRACON

# AIRSPACE REDESIGN

- NEW RADAR SITES, NAVAIDS, FREQUENCIES
- BASED ON SATELLITE NAVIGATION WITH GROUND BASED BACKUP SYSTEMS
- POSSIBLE CLASS B AIRSPACE REDESIGN
- CUSTOMER MEETINGS

# PRACTICE APPROACHES

- AVAILABLE AIRPORTS
- AXH, IWS, SGR, LBX, GLS, EFD, SPX, CXO, DWH, RWJ, T41, AND 6R3
- NORMALLY APPROVED ON WORK PERMITTING BASIS 0800-2000 CDT
- CALL TRACON SUP AT 281-230-8441

# APPROACH CONTROL UPDATES

- NO SPEED LIMIT CONTINUES
- SGR CLASS D SURFACE AREA IN EFFECT WITH CHARTING SCHEDULED FOR MARCH 25, 2000
- LAHSO AT HOBBY

# APPROACH CONTROL UPDATES

- GPS APPROACHES SOON TO BE NAMED RNAV APPROACHES  
CONTROLLERS NORMALLY VECTOR TO INTERCEPT FINAL OR CLEAR DIRECT TO A WAYPOINT OUTSIDE THE FAF ON FINAL TO FLY INBOUND
- USE OF GPS AND PITFALLS  
“DON'T RELY ON THE MAGIC”

# CLASS B AIRSPACE

- DOES FLIGHT FOLLOWING PROVIDE FOR ENTRY INTO CLASS B AIRSPACE?
- DOES A VECTOR OR ALTITUDE ASSIGNMENT PROVIDE FOR ENTRY INTO CLASS B AIRSPACE?
- ENTRY INTO CLASS B AIRSPACE IS *NOT* AUTHORIZED WITHOUT A CLASS B CLEARANCE



# ONLY PLACES TO GET CLASS B CLEARANCE

- IAH TOWER
- HOUSTON APPROACH CONTROL
- HOBBY TOWER

# CLASS B AIRPSACE

- WHEN ISSUED HEADINGS AND OR ALTITUDES PILOT MUST ADVISE IF UNABLE TO COMPLY WITH THEM
- CAN YOU LEGALLY OPERATE JUST BELOW THE FLOOR?

**TRAFFIC TRAFFIC TRAFFIC**



# CONCERNS

- DISORIENTED? SEEK ASSISTANCE
- DON'T WAIT UNTIL YOU ARE OUT OF OPTIONS (FUEL, ALTITUDE, OR WEATHER ALL AROUND YOU)
- WHY WOULD I BE ASKED TO CALL A SUPERVISOR WHEN I LAND?
- WHAT HAPPENS WHEN I CALL OR DON'T CALL?