

# Los Angeles International Airport Modernization

***Tomorrow is Now***

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# Who is ALPA?

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- Over 60,000 professional airline pilots flying for 40 airlines in the United States and Canada
- ALPA members fly 32 different aircraft types in and out of more than 700 airports worldwide
- We operate at LAX 365 days per year
- “Schedule with safety” has been our motto for 76 years
- We are the “conscience of the airline industry”



# Overview – LAX Needs to be a World-class Facility

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- The airfield was designed in 1956 during the piston-engine aircraft era
- Those design standards are outdated for new large aircraft (e.g., A380, B-747-8)
- Several non-US aircraft operators expect LAX to be able to handle new large aircraft soon
- Ongoing runway incursion and other safety problems demand a better runway/taxiway design



# ALPA Policy

## Airport Site Selection/Improvement Procedures

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“Since any site selection, or improvement (modernization, modification or upgrade) location considerations involving real estate acquisition, political considerations, ecological problems, and other aspects not directly associated with the capability of the airport to function efficiently, it is the opinion of the Executive Council that ALPA's participation should be limited to the evaluation of safety, technical, and operational considerations.”

SOURCE - Executive Committee August 1973; AMENDED - Executive Board May 1986; Executive Board November 1999; Executive Board May 2005

# ALPA Noise Policy

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“ALPA maintains that aircraft noise should be reduced by engineering and design and not by marginally safe flying techniques.”

SOURCE - ALPA Administrative Manual, Section 80 – Engineering and Air Safety, Part IV. A. Noise Abatement Policy, Source – Board 1980



# They're coming – is LAX ready?

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- Tomorrow is here today. The first A380 delivery is to take place this year
- We expect virtually every B747-400 to be replaced with an A-380 or B747-8 in the next ten years
- LAX is expected to safely and efficiently accommodate many new large aircraft landings daily in the foreseeable future



# South Side Airfield

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- The improvements on the south airfield, including the center taxiway, were implemented to address runway incursions
- The design limits operations to Group V and smaller aircraft
- Severe operational penalties, restrictions, and human factors issues will occur if the south field is used for Group VI aircraft operations



# South Side Airfield (cont'd)

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- Every Group VI aircraft landing RWY 25L must exit to the left, away from the terminal environment, due to clearance conflicts with aircraft on the center taxiway
- Unrealistic to expect ATC will issue a special exit clearance for Group VI aircraft – when would it be issued?
- Who will be responsible for ensuring that Group VI aircraft turn in the correct direction?
- Will controllers make mistakes in directing traffic off the runway when LAX operates in east flow?
- Human factors errors will likely increase



# North Side Airfield

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- Because of South Side problems, Group VI aircraft must be accommodated on the North Side
- However, with the current North Side configuration, A-380 and B747-8 aircraft will cause major disruptions
- Unless Option 2 of the master plan is implemented, the airport will come to a virtual standstill whenever one of these jumbos moves on the airfield
- These operations will cause safety issues, flight schedule disruptions, and passenger delays and crowding
- Aircraft engine and noise emissions will increase due to excessive idling and taxiing



# Human Factors

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- Group VI aircraft must be able to operate on the airport exactly like any other aircraft on the field
- Without standardization of operating procedures, the potential for incidents and accidents increases
- These events will be caused by ATC controllers and pilots alike
- Air traffic flows at an airport are similar to an assembly line. If one machine (aircraft) slows or stops, the line does likewise



# Language

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- No U.S. carrier has orders for the A-380
- English is aviation's official, but a second, language for A-380 pilots
- Communications confusion is a primary cause of runway incursions
- South field limitations will lead to non-standard communications with controllers and non-standard aircraft movement on the airfield
- Lack of standardization will lead to mistakes, be exacerbated by the language barrier, and place our crews and passengers at greater risk

# Impact of Fatigue

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- Since 9/11, many air carriers have used the bankruptcy courts to erode pilot work rules (example NRT-LAX)
- On such long haul flights, pilots' quality of rest is poor at best, subject to substantial noise as well as bursts of turbulence
- Science shows that fatigued flight crews are challenged to function at 100% of their capabilities



# Impact of Fatigue (cont'd)

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- When landing after a long international flight, it can be very difficult to remember whether the tower cleared to land (personal experience)
- Easy to imagine a fatigued crew, who watched the three preceding aircraft turn to the right, also turning right when instructed to turn left
- Again, who will issue that instruction and when will that instruction be given?



# Runway Incursion, 5/6/07

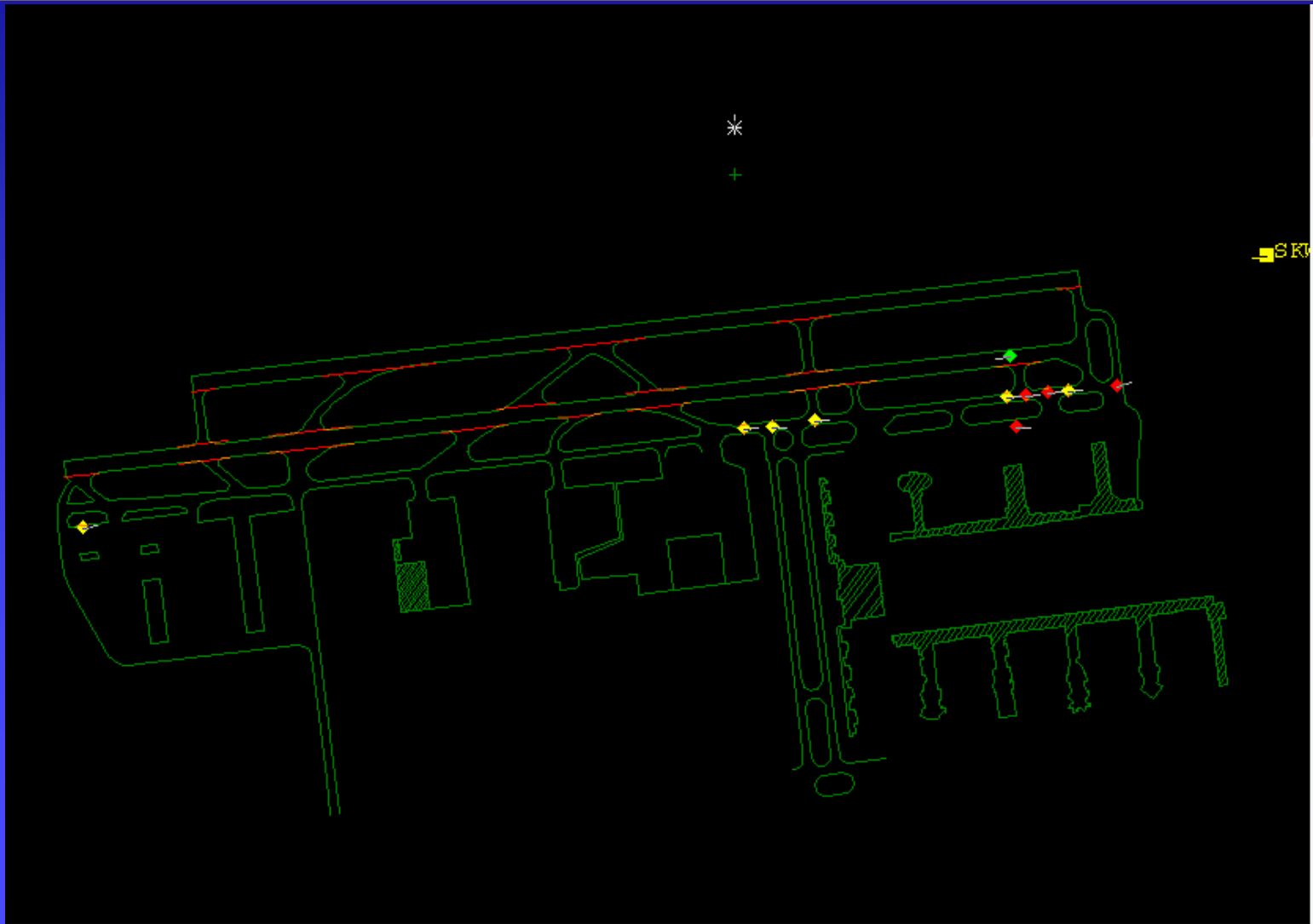
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Skywest #1006 landed on runway 24R and rolled out to taxiway Y. Aircraft could not complete the turn to taxiway Y and corrected by turning towards taxiway Z while Virgin Atlantic #23 was landing on runway 24R.

Resulted in a Lander vs. Exiting Taxi alert because SKW #1006 was within 110 foot holdline distance of runway 24R. A "WARNING: RUNWAY 24R, OCCUPIED, LANDING" alert was voiced at 01:38:24Z with an accompanying alert text message "W:VIR23 RWY 24R, OCCUPIED, LDG" displayed on the ODU's.



# AMASS Tape of Incursion

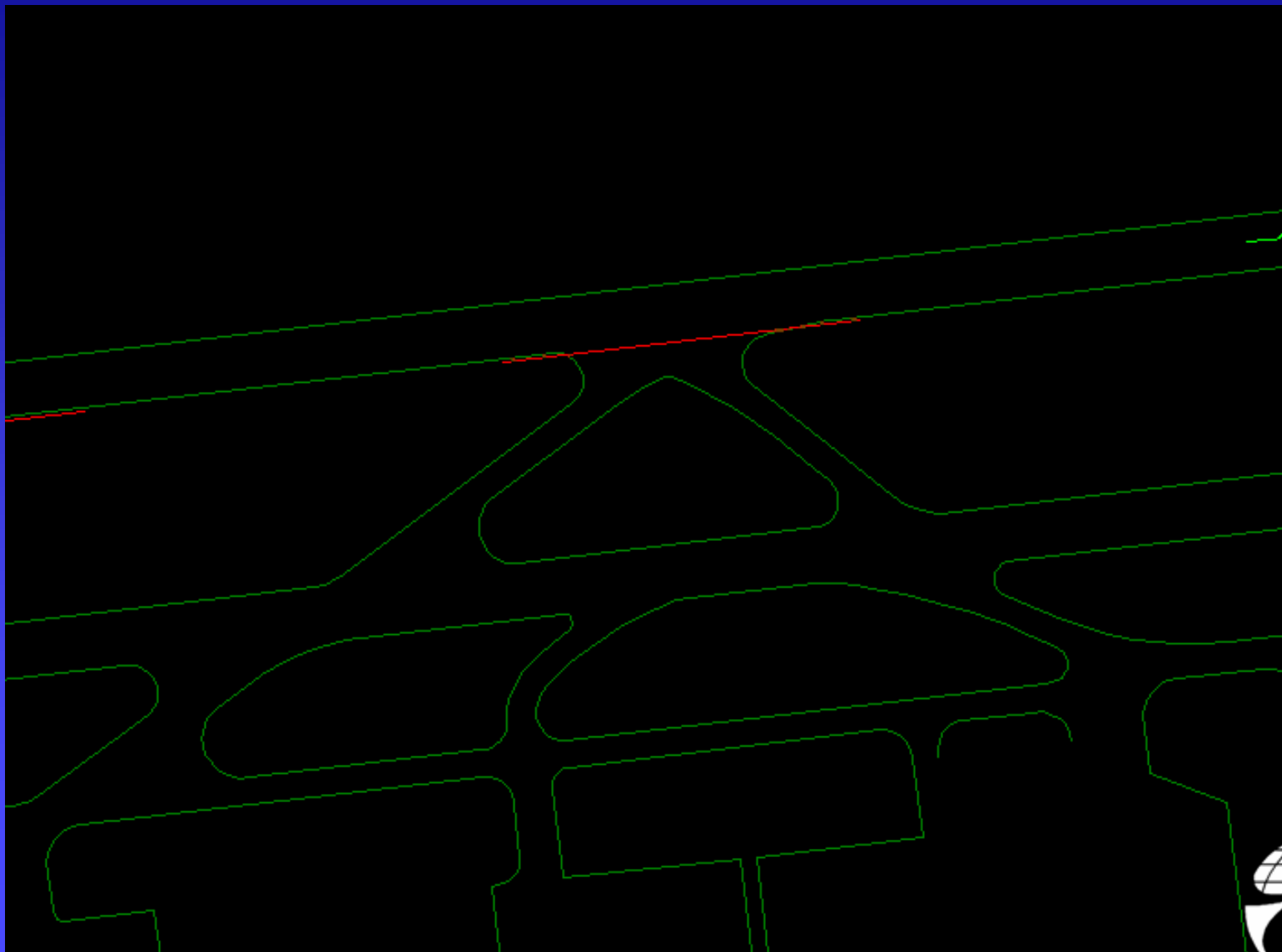


Current Log Time: 01:37:16



# Runway Incursion of 5/6/07

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Current Log Time: 01:37:48



# Runway Incursions Can be Prevented

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- Many runway incursions occur on landing, and relate to fatigue and human errors
- A center taxiway on the North Side could have been used by Skywest crew to taxi well clear of 24R and landing traffic



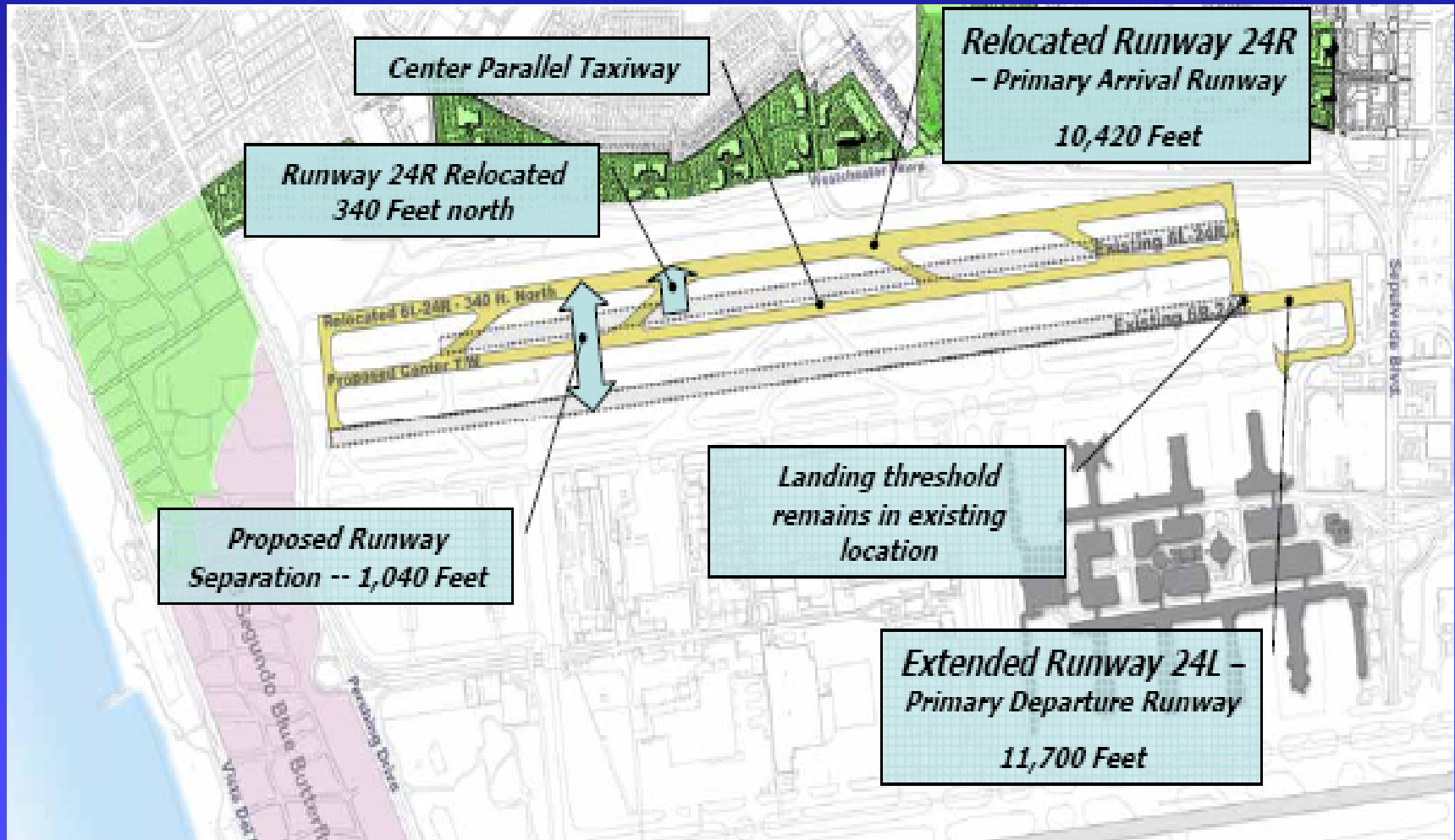
# Airport Design Standards

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- ICAO recommends runway-taxiway separation of 190 meters (623 feet) for Group VI aircraft
- FAA minimum separation between a runway and taxiway serving Group VI is 550 feet
- LAX proposes a 520 foot separation between RWY 24R and the center taxiway, with a waiver
- ALPA strongly recommends 623 feet separation, but not less than 550 feet separation
- Moving RWY 24R 100 feet north is NOT an option



# Master Plan Option 2 - Shift Runway 24R to North 340 Feet



# ALPA Recommendation

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- ALPA strongly recommends implementation of Option 2 with 623 feet, but not less than 550 feet, of runway-taxiway separation
- Moving Runway 24R 100 feet north is NOT an option
- Airport property to the North extends beyond Westchester Parkway – sufficient land is available
- Impact on noise will be negligible
- Noise-impacted Westchester residences have been sound insulated at LAX expense



# Questions?

