

A-CDM and Airlines

A Perspective From Gulf Air



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Gulf Air



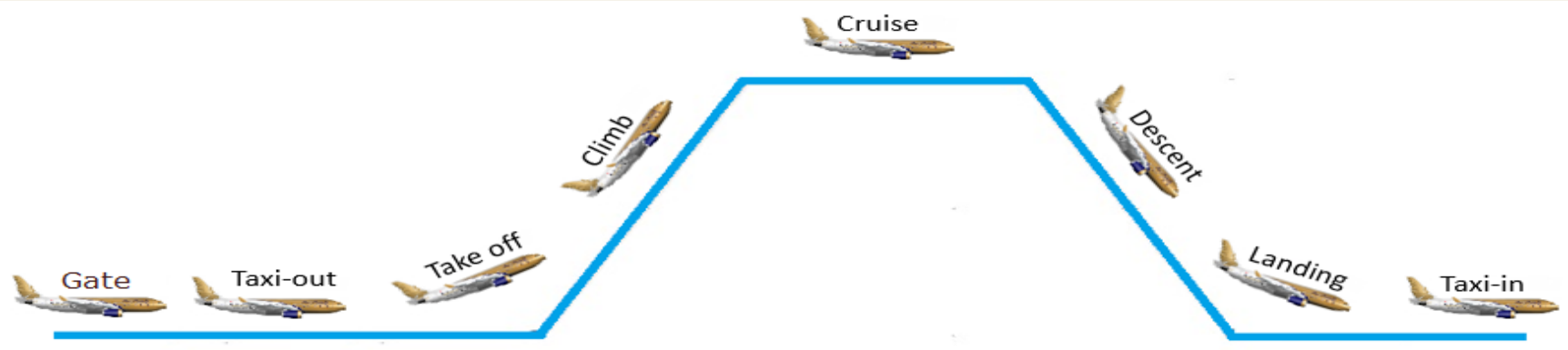
Presentation Overview

- Safety
- Benefits from A-CDM
- Phases of Flight
- Ground Vs. Onboard Power Source
- Holding and Taxiing
- Take-off Priority Arrangement
- Climb, Speed Control and Head Vectoring
- Descent

Safety

- Safety management is one of our core business processes and is intended to prevent accidents and protect persons and property
- All our business partners, suppliers and contractors are equally responsible to share our primary safety goal, which is to have zero accidents or injuries.

Different Phases of Flight



Perceived Benefits from A-CDM

- Increased operational efficiency
 - Timely departures and arrivals
 - Efficient Disruption Management
 - Better use of modern aircraft technological capabilities
- Reduce Airline Operational Cost
 - Meeting Emissions targets
 - Fuel costs
 - Maintenance costs
 - Satisfied customers

Statics From Overall Operations

- Five month study on 2015 activity
 - Airport Facilities
 - Resource constraints cost was approximately US \$1.4 million
 - Reactionary delay was approximately US \$500,000
 - Ground Services
 - Initial cost of issues US \$600,000
 - Reactionary cost was \$300,000

Ground Vs. Onboard Power Source

- Aircraft power requirements when engines are off

- Electric power
- Bleed (air-conditioning/



- Timely notification through efficient ground communication channels of time to push-back will allow the planning of most cost efficient power source

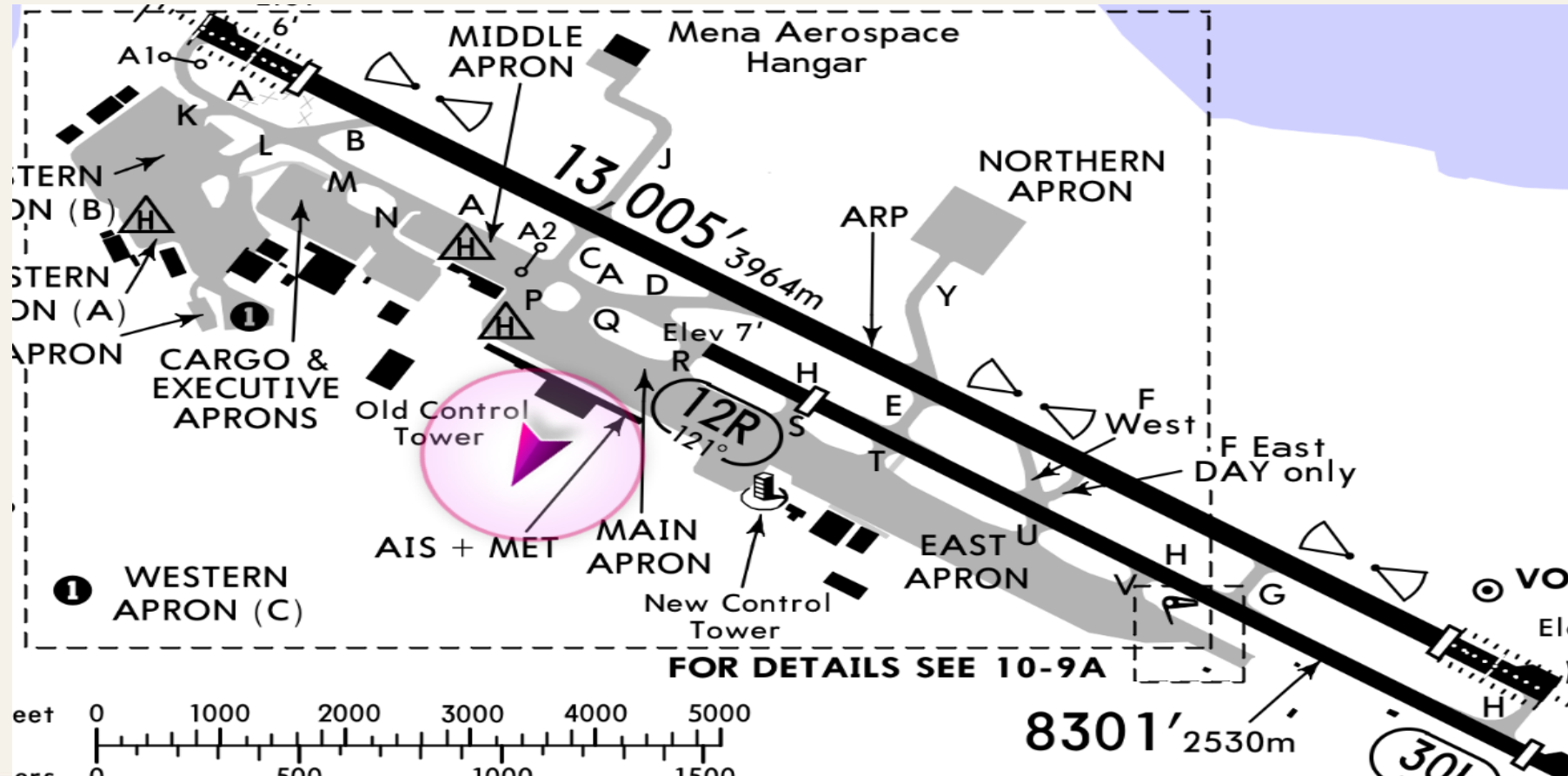
Holding and Taxiing

- Gulf Air use the single engine taxi procedure
 - Emphasis on keeping taxiway moving



- Reducing engine run time on the ground.
 - Efficient sequencing of aircraft on ground

Take-off Priority Arrangement



Climb, Speed Control and Head Vectoring

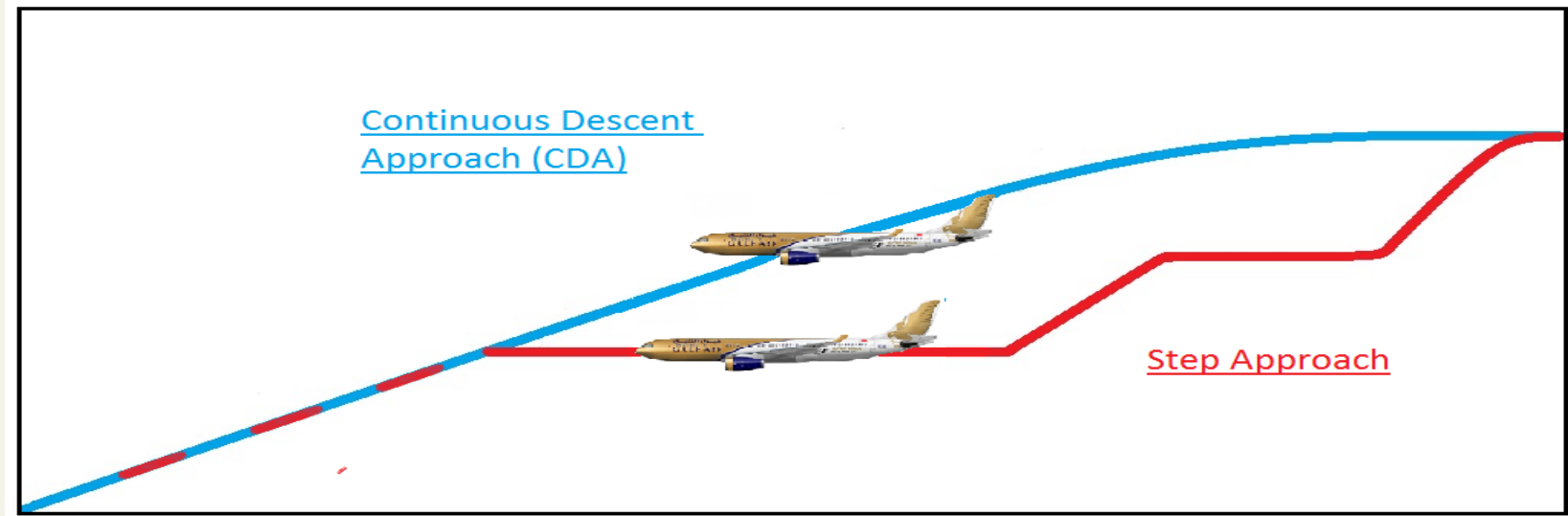
- Optimum flight level = minimum operating cost

$$\frac{\text{Time cost \$/min (Delay, Crew, Maintenance etc...)}}{\text{Fuel Cost \$/kg}}$$

- ATC should be mindful of the impact of assigned altitudes
- If holding is expected at arrival airport advise Pilot as early as possible
- Communication with pilot over preferred speed when possible
 - Clear maneuver speed
 - Green dot speed

Descent

- Constant Descent Approach is favoured due to its effect on reduced fuel consumption.



- An increase in fuel burn and inconvenience for customers will result when descent is initiated too early or too late.

Thank You!