KINGDOM OF BAHRAIN

Ministry of Transportation and Telecommunications

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CDO Operations' Overview Bahrain

MTT-BCAA

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Bahrain CDO operations Status

- Bahrain TMA CDO operations, (implemented since March 2015)
- Introduction of 4 RNAV1 STARs

- LADNA 1
- KOBOK 1
- SOGAT 1
- DENVO 1

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Constrains

Challenges

CDO operations within the Bahrain TMA are constrained due to:

- Close proximity of adjacent TMAs
- Complexity of arrival/departure patterns
- LoAs requirements & limitations
- Military Operations

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ASBU Cost Benefit Analysis Highlights

The example is based on the ASBU Working document, Module B0-CDO, Appendix B, Cost Benefit Analysis; CDOs LADNA 1, KOBOK 1, SOGAT 1 and DENVO 1 STARs (RNAV1) for runway 12L/30R, rewarded the following:

- About 150 - 160 aircraft per day fly LADNA 1, KOBOK 1, SOGAT 1 and DENVO 1 STARs
- Representing approximately 80% of all jet arrivals into Bahrain, 80% per cent reduction in radio transmissions
- Significant fuel savings – average 125 pounds per flight, 150 flights/day * 125 pounds per flight * 365 days = 6.85 million pounds/year
- More than 1 million gallons/year saved = more than 20.5 million pounds of CO2 emission avoided

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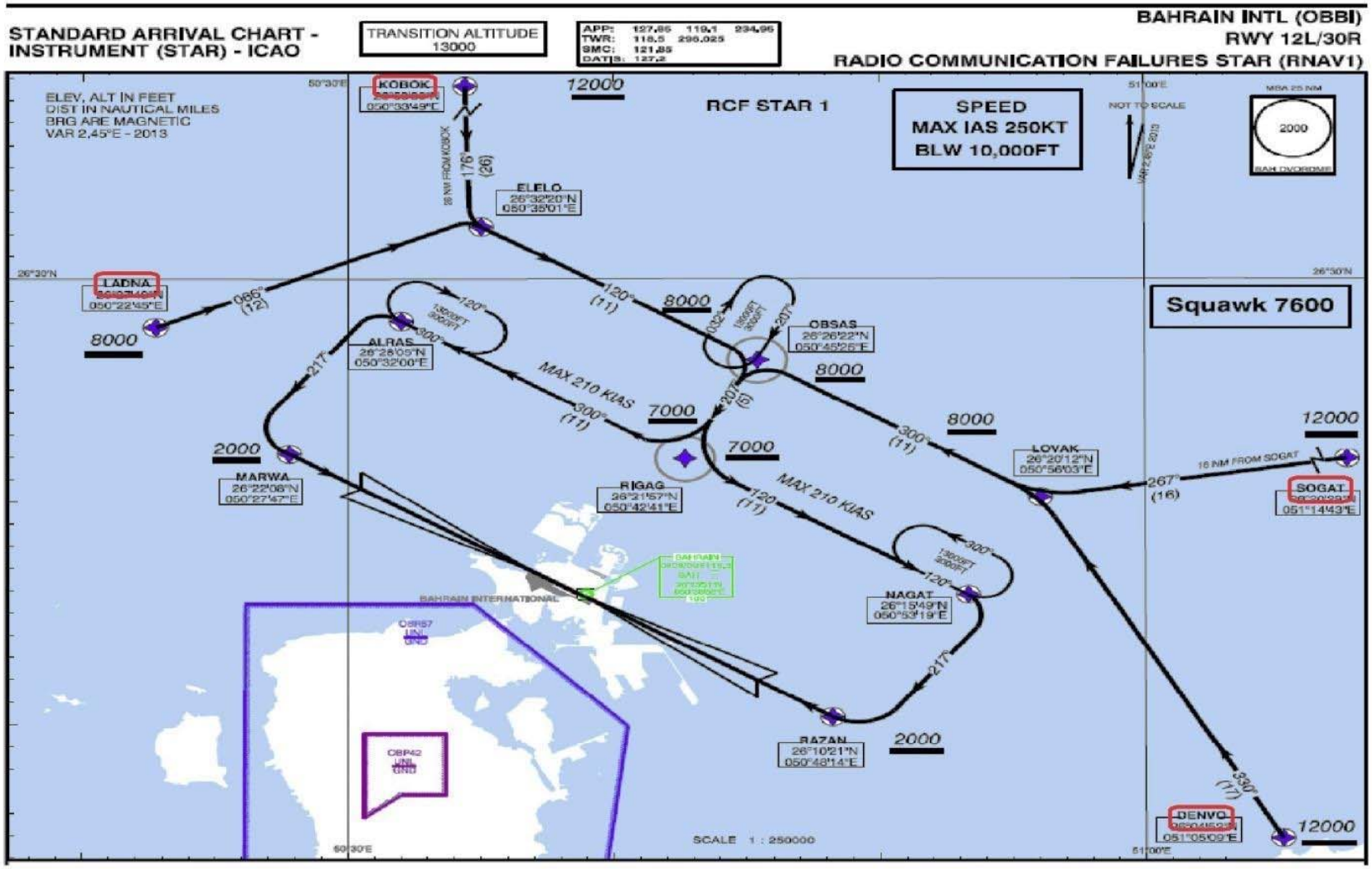
RNAV1 STARs chart



Bahrain runway 12L/30R RNAV1 STARs Chart

Thank You/Questions?