



# STATE OF KUWAIT

## AVIATION SAFETY DEPARTMENT

### Guidance Material Calculation of declared distances

Issue-1, Rev 0  
April 2017



## LIST OF EFFECTIVE PAGES

Number	Effective Date	Entered Date	Entered by

## Forward

The Aviation Safety Department guidance material is published to keep pace with the guidelines prescribed by ICAO documents and publications. The objective of this guidance material is to assist Kuwait International Airport's staff towards safety and fulfil the obligations to comply with the published KCASRs.



Ref.: MEMO / ACS / 27/ 2017		<b>INTERNAL MEMO</b>			20/04/2017	
<b>Recipient</b>	Aviation Safety Director					
<b>CC.</b>	DIR <input checked="" type="checkbox"/>	SUPDT-I <input checked="" type="checkbox"/>	OPS <input type="checkbox"/>	AW <input type="checkbox"/>	LIC <input type="checkbox"/>	ACS <input type="checkbox"/>
	SUPDT-R <input type="checkbox"/>		TDF <input type="checkbox"/>	S&R <input type="checkbox"/>	Other <input type="checkbox"/> :	
<b>Attachment</b>	Application <input type="checkbox"/> Document <input type="checkbox"/> Other <input type="checkbox"/> :					
<b>Subject</b>	Aerodrome Guidelines Materials					

Dear Sir,

With reference to the above mentioned subject, please find enclosed herewith the below mentioned Guidance Materials which is self-explanatory.

- 1) Aerodrome Certification Procedures (Issue-1, Rev 0, April 2017)
- 2) Airport Emergency Planning (Issue-1, Rev 0, April 2017)
- 3) Apron Management Services (Issue-1, Rev 0, April 2017)
- 4) Calculation of declared distances (Issue-1, Rev-0, April 2017)
- 5) Pavement Surface Condition (Issue-1, Rev-0, April 2017)
- 6) Prevention of Runway Incursion (Issue-1, Rev-0, April 2017)
- 7) Rescue Fire Fighting (Issue-1, Rev-0, April 2017)
- 8) Safety Management System (Issue-1, Rev-0, April 2017)
- 9) Surface of Movement Guidance & Control System (Issue-1, Rev 0, April 2017)
- 10) Visual Aids (Issue-1, Rev-0, April 2017)
- 11) Wildlife Reduction & Control (Issue-1, Rev-0, April 2017)

This is for your approval and necessary action.

Thanking you.

Approved  
  
Engr. Shaheen M. Al-Ghanim  
Aviation Safety Director

<p><b>Sender :</b> Engr Fahad Sh Al-Anzi Head of Aerodrome Certification and Security Division</p>	<p><b>Signature:</b>  Engr. Fahad Sh. Al-Anzi Head of Aerodrome Certification and Security Division</p>
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## Calculation of declared distances

1. The declared distances to be calculated for each runway direction comprise: the take-off run available (TORA), take-off distance available (TODA), accelerate-stop distance available (ASDA), and landing distance available (LDA).
2. Where a runway is not provided with a stopway or clearway and the threshold is located at the extremity of the runway, the four declared distances should normally be equal to the length of the runway, as shown in Figure A-1 (A).
3. Where a runway is provided with a clearway (CWY), then the TODA will include the length of clearway, as shown in Figure A-1 (B).
4. Where a runway is provided with a stopway (SWY), then the ASDA will include the length of stopway, as shown in Figure A-1 (C).
5. Where a runway has a displaced threshold, then the LDA will be reduced by the distance the threshold is displaced, as shown in Figure A-1 (D). A displaced threshold affects only the LDA for approaches made to that threshold; all declared distances for operations in the reciprocal direction are unaffected.
6. Figures A-1 (B) through A-1 (D) illustrate a runway provided with a clearway or a stopway or having a displaced threshold. Where more than one of these features exist, then more than one of the declared distances will be modified — but the modification will follow the same principle illustrated. An example showing a situation where all these features exist is shown in Figure A-1 (E).
7. A suggested format for providing information on declared distances is given in Figure A-1 (F). If a runway direction cannot be used for take-off or landing, or both, because it is operationally forbidden, then this should be declared and the words “not usable” or the abbreviation “NU” entered.

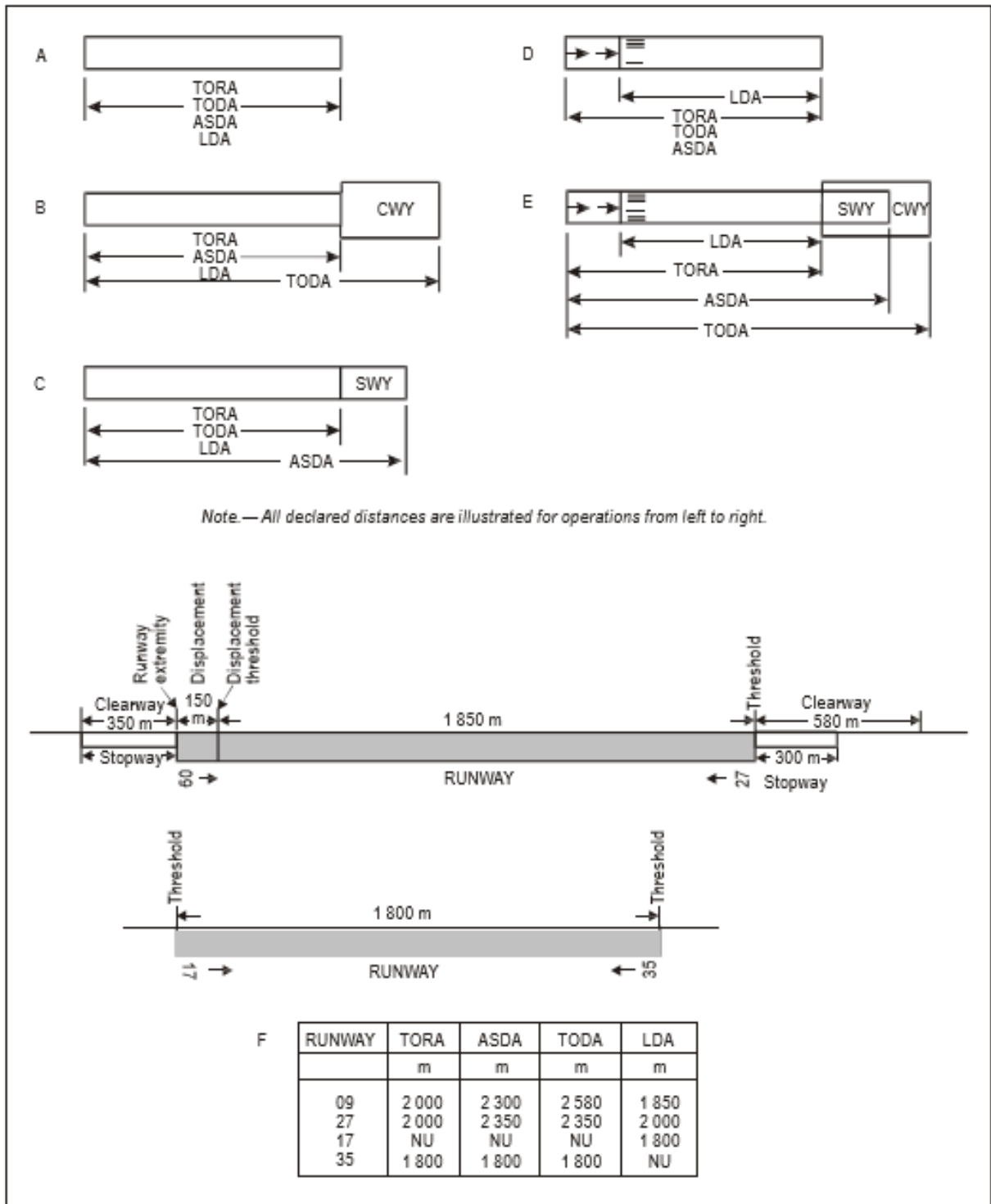


Figure A-1. Illustration of declared distances