CERTALERT

ADVISORY CAUTIONARY NON-DIRECTIVE

AIRPORT SAFETY AND OPERATIONS DIVISION AAS-300

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DATE: **03/06/09** **No. 09-05**

TO: **Airport Operators, FAA Airport Certification Safety Inspectors, and FAA Project Managers**

TOPIC: **Reporting Declared Distances to Aeronautical Information Services**

Purpose:

This CERTALERT provides guidance to airport operators, Airport Certification Safety Inspectors (ACSI), and FAA Project Managers for the electronic submission of declared distances data to FAA Aeronautical Information Services (AIS) for certificated Part 139 airports. Declared distances are the distances the airport owner declares available for use in meeting an airplane's takeoff run, takeoff distance, accelerate-stop distance, and landing distance requirements. At Part 139 airports declared distance data must be listed for all runway ends that are specified as Part 139 use. An example of a runway with declared distances is provided in the attached Appendix.

ACSI and Project Managers:

1. At Part 139 airports declared distance data must be listed for all runway ends that are specified as Part 139 use. Please note that data element numbers 60-63 will be equal to element 31 (Length) in cases where a runway does not have displaced thresholds, stopways, or clearway, and have standard runway safety areas, runway object free areas, and runway protection zones.

2. When the runway(s) distances available for takeoff and landing (i.e., takeoff run available (TORA), takeoff distance available (TODA), accelerate-stop distance available (ASDA), and landing distance available (LDA) are not the same as the paved runway length, the ACSI will ensure the accuracy of the declared distance data by coordinating with the appropriate regional or ADO project manager. This information should be available from the Airport Layout Plan.

Airport Operator:

1. Airport operators are responsible for ensuring that the airport information published in the A/FD is accurate and current. The mailing address, telephone number, fax number, and email address of Aeronautical Information Services is provided on the inside cover of the A/FD. If the declared distances data is not correct, incomplete, or missing, the airport operator may contact the regional ACSI, who will coordinate with the ADO/Regional project manager and transmit changes electronically to AIS on your behalf.

Background:

Several years ago, FAA Form 5010-1 was modified to include declared distance elements 60 through 63. These elements are TORA, TODA, ASDA, and LDA. Once electronically submitted to AIS, these elements are published in the A/FD on a 56 day cycle.

In some cases, an airport operator may use declared distances to satisfy the requirement for a runway safety area off a particular runway end. This in effect would shorten the runway length available to be used for ASDA and LDA. (TORA and TODA are never reduced in this situation.) In other cases, an airport operator may use declared distances different than the paved runway length to satisfy runway protection zone (RPZ) or runway object free area (ROFA) requirements, or to reflect a displaced threshold, clearway, or stopway. See the definitions in AC 150/5300-13 Appendix 14, except note that declared distances are to be listed for all runways at certificated airports, not limited to those cases where it is impracticable to provide the required RSA, ROFA, or RPZ as stated in the AC. Additionally, the contents of CERTALERT 00-03 (Stopway), as amended in accordance with this CERTALERT, is attached as a reminder of the criteria to use for designating a stopway.

Pilots and airplane operators' performance engineers need this information for calculating their allowable takeoff and landing weights and speeds. Therefore, this information needs to be readily available.

The TODA does not take into account obstacles (other than those considered in meeting the RPZ, ROFA, and clearway requirements) that may be off the departure end of the runway. Therefore, the pilot is responsible for determining if the aircraft can clear those obstacles according to the applicable airplane operating regulations and airplane performance data.

The use of declared distances for runway design purposes shall be in accordance with the guidance provided in AC 150-5300-13, Airport Design except that declared distances are to be listed for all runways at certificated airports, not limited to those cases where it is impracticable to provide the required RSA, ROFA, or RPZ.

Action:

If as a result of the application of this guidance, any of the declared distances recorded in elements 60 through 63 is a value other than the value recorded in element 31 (Length) of the FAA 5010-1 Form, then the declared distance(s) to be recorded should be validated by the FAA project manager to ensure accuracy and then be transmitted electronically to the Aeronautical Information Services.

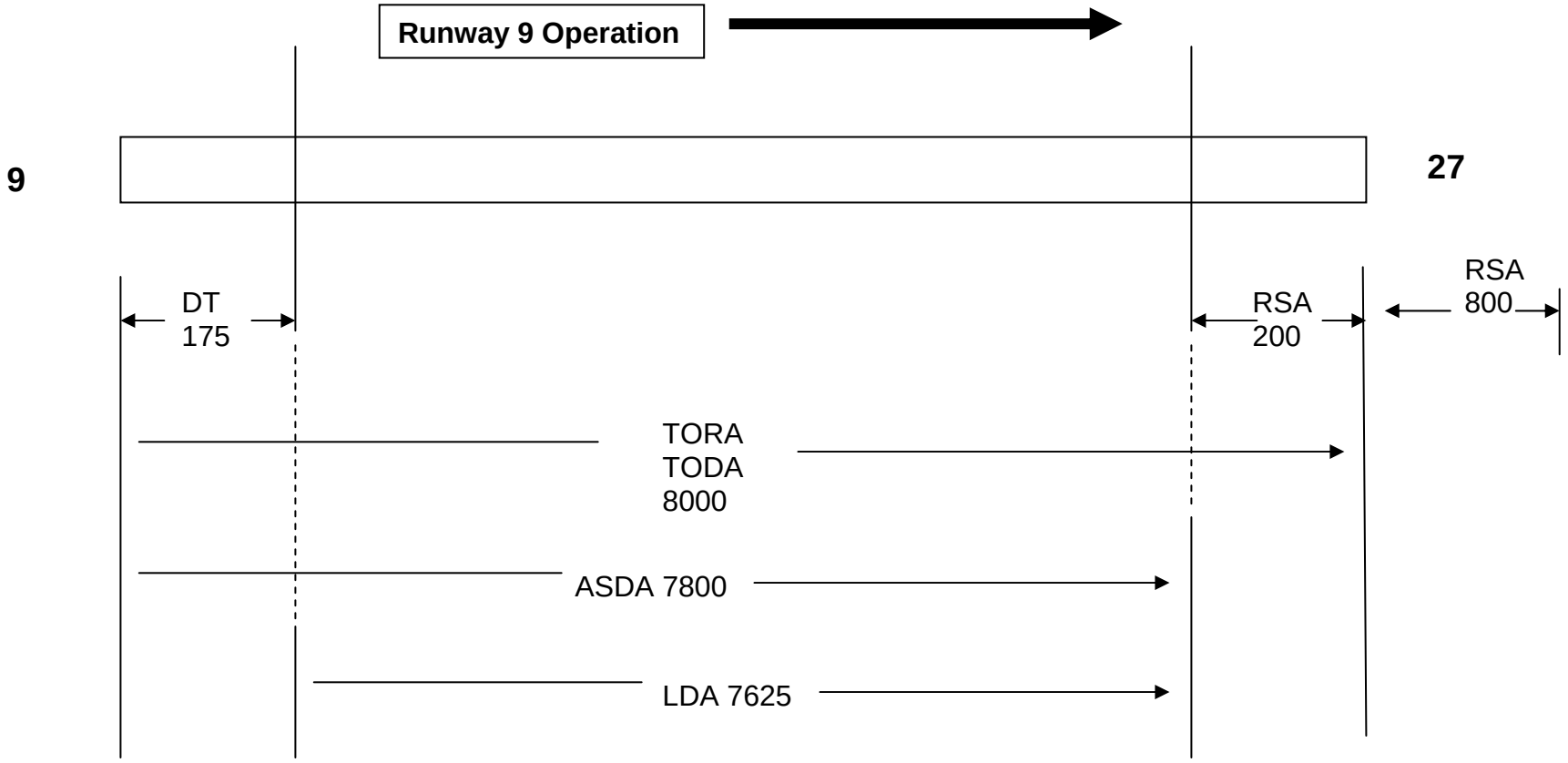
APPENDIX

For declared distance definitions and further information on these concepts, see AC150/5300-13.

EXAMPLE Runway 9 - 27 is 8000 feet: (In calculating declared distances, always use one runway end at a time, never try to figure both ends together, since that will only confuse the situation. Also use arrows to show the direction of operation.)

Runway 9: Runway 9 has a displaced threshold of 175 feet. The departure end of the runway is used to gain a 200 foot safety area needed to complete the 1000 foot required RSA for this runway.

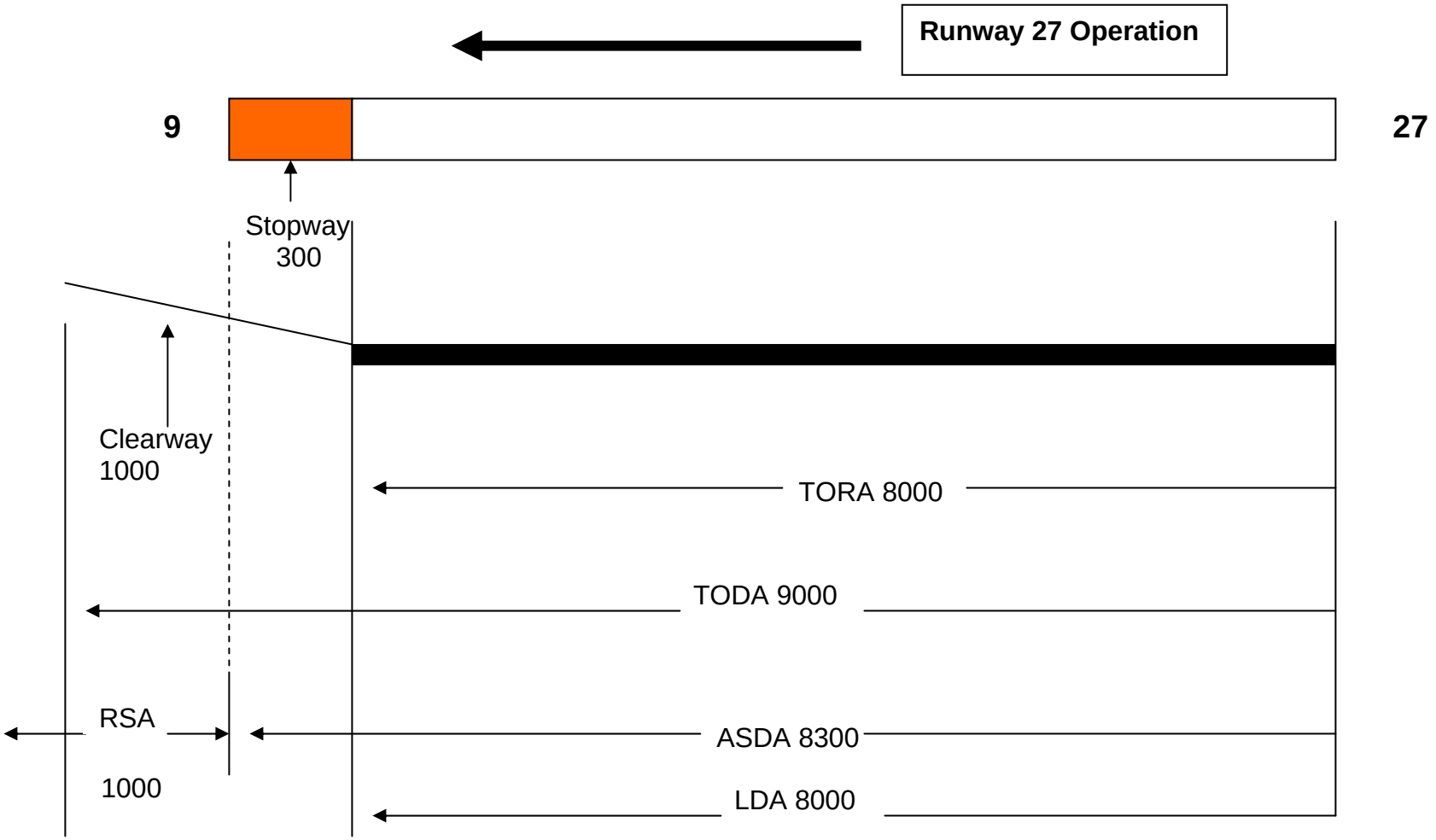
TORA 8000 TODA 8000 ASDA 7800 (8000-200) LDA 7625 (8000-175-200)



Runway 27:

Runway 27 has a clearway of 1000 ft and a Stopway of 300 ft. There is no displaced threshold. The approach to runway 27 has a full safety area before the runway threshold for the landing operation. The RSA on the departure side is a full 1000 feet beyond the 300 foot Stopway.

TORA 8000 TODA 9000 (8000+1000) ASDA 8300 (8000+300) LDA 8000



The term Stopway is defined in 14 CFR part 1 as follows:

> *Stopway means an area beyond the takeoff runway, no less wide than the runway and centered upon the extended centerline of the runway, able to support the airplane during an aborted takeoff, without causing structural damage to the airplane, and designated by the airport authorities for use in decelerating the airplane during an aborted takeoff.*

There are three important points in the above definition to bear in mind.

- First, a Stopway is an area beyond the runway, with sufficient strength to support a decelerating aircraft *in all-weather conditions*. It is *not* Runway Safety Area (RSA) and may not be used in lieu of RSA. The RSA begins at the end of the Stopway, and RSA may not be shortened to accommodate a Stopway.

- Second, it is *designated* as Stopway. This means the airport owner/operator determines that a Stopway can be designated and *commits* to maintaining the area as Stopway, including the appropriate lighting. For an airport certificated under 14CFR part 139, the designation will be included in the ACM/ACS.

- ~~Third, the existence of a Stopway means that the runway has a declared accelerate/stop distance, even though it may not be published.~~ [Note: This bullet point is no longer in effect. All runways at certificated Part 139 airports will have declared distances under CERTALERT 09-01, and these declared distances will be published in the A/FD.

Who can designate a Stopway?

An airport owner/operator has the responsibility for designating a Stopway. This designation must be in writing. For certificated airports, this usually involves a revision to the ACM/ACS, which must be submitted for FAA approval. At non-certificated airports, the designation must be submitted in writing to the appropriate FAA office. Once accepted, information about a Stopway is recorded on the Airport Master Record ("5010") under the remarks section. The FAA publishes the information, which then becomes available to users in the Airport/Facility Directory.

How is a Stopway used?

This calculation, along with other factors, is used by the pilot to determine aircraft loading and performance requirements. A pilot can compute an accelerate/stop distance by summing the available runway length and the Stopway length.

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