



Advisory Circular

Subject: Displacement of PAPI Axis for Offset Approaches

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1.0 INTRODUCTION

- (1) This Advisory Circular (AC) is provided for information and guidance purposes as a result of numerous queries from stakeholders looking for clarification on the application of the standard. It may describe an example of an acceptable means, but not the only means, of demonstrating compliance with regulations and standards. This AC on its own does not change, create, amend or allow deviations from regulatory requirements, nor does it set up standards.

1.1 Purpose

- (1) This AC discusses the installation of PAPI/APAPI units when displacing the axis of the system under TP312 standard 5.3.16.30 (c) to support offset approaches.

1.2 Applicability

- (1) This document applies to all aerodrome operators. This information is also available to the aviation industry for information purposes.

1.3 Description of Changes

- (1) Not applicable

2.0 REFERENCES AND REQUIREMENTS

2.1 Reference Documents

- (1) It is intended that the following reference materials be used in conjunction with this document:
 - (a) Transport Canada Publication, TP 312 – Aerodrome Standards and Recommended Practices, 5th edition;

2.2 Cancelled Documents

- (1) Not applicable.
- (2) By default, it is understood that the publication of a new issue of a document automatically renders any earlier issues of the same document null and void, unless an earlier issue remains valid under coming into force provisions by regulation.

2.3 Definitions and Abbreviations

- (1) The following **abbreviations** are used in this document:
 - (a) **AC**: Advisory Circular
 - (b) **APAPI**: Abbreviated Precision Approach Path Indicator
 - (c) **MEHT**: Minimum Eye Height over Threshold
 - (d) **OLS**: Obstacle Limitation Surface
 - (e) **OPS**: Obstacle Protection Surface
 - (f) **PAPI**: Precision Approach Path Indicator
 - (g) **TCCA**: Transport Canada Civil Aviation

3.0 BACKGROUND

- (1) Standard 5.3.16.30 (c) of TP312, 5th edition, provides for the displacement of the axis of a PAPI or APAPI system and their associated OPS by no more than 5° as one of the measures to be taken when an object or terrain protrudes above the OPS beyond the length of the approach OLS. While TP312, 5th edition, provisions include location and characteristics of un-displaced systems, none exists for displaced systems that support offset approaches under the provisions of standard 4.1.2.3.

4.0 DISPLACING THE PAPI/APAPI AXIS

- (1) When displacing the axis of a PAPI or APAPI system to support offset approaches, the displacement of the axis of the system can be achieved by rotating individual units or by rotating the entire system around one unit.
- (2) Rotation of individual units: Figure 1 shows a displacement of the axis of the system by rotating the individual units by no more than 5 degrees away from runway axis. The longitudinal alignment of the units remains as per standard 5.3.16.9 where the units are within +/-15 cm of a line perpendicular to the runway axis located at a distance from the threshold according to the standard.

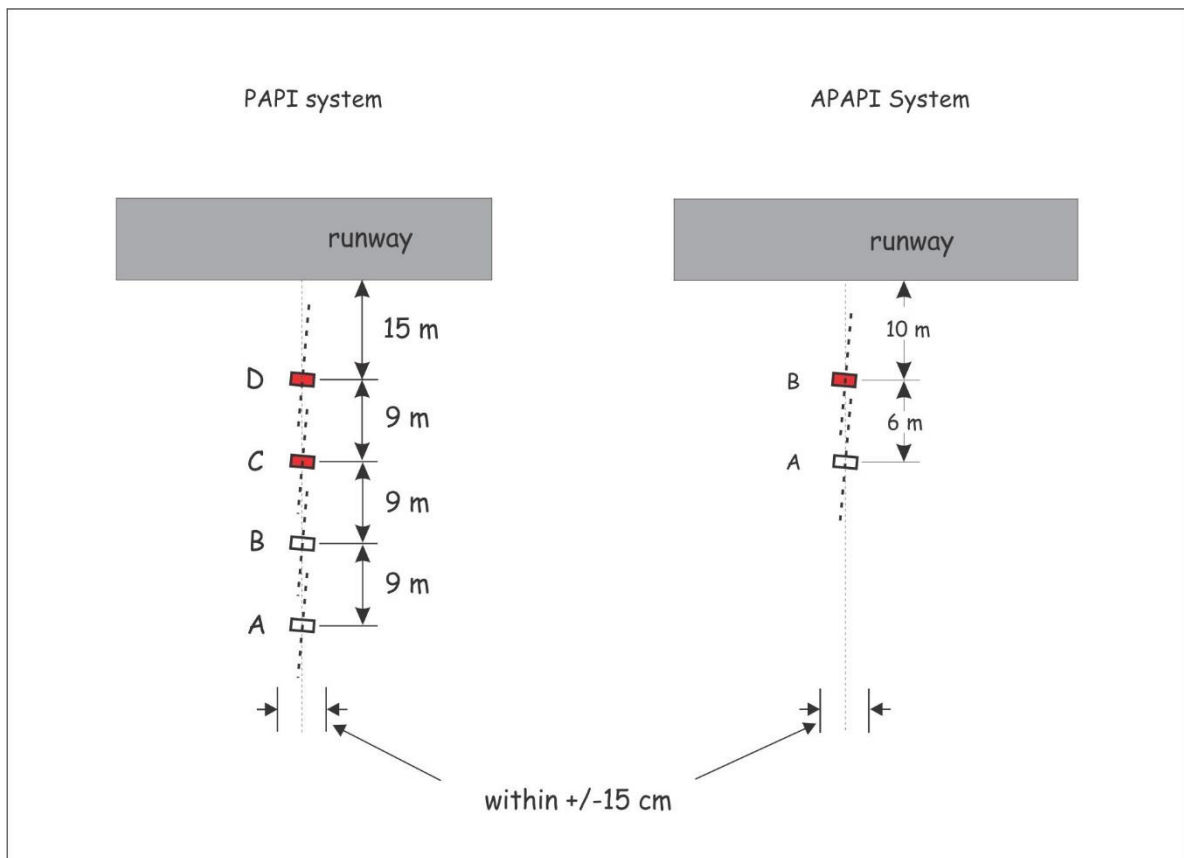


Figure 1 – Rotation of individual units

- (3) Rotation of entire system: Figure 2 shows a displacement of the axis of the system by rotating the entire system by no more than 5 degrees away from runway axis. The rotation is accomplished around unit B of a PAPI system and unit A of an APAPI system to preserve the MEHT calculations. The longitudinal alignment of unit B of a PAPI system and unit A of an APAPI remains as per standard 5.3.16.9 where those units are within +/-15 cm of a line perpendicular to the runway axis located at a distance from the threshold according to the standard, and the remaining units of each system are aligned within +/-15 cm of that offset line.

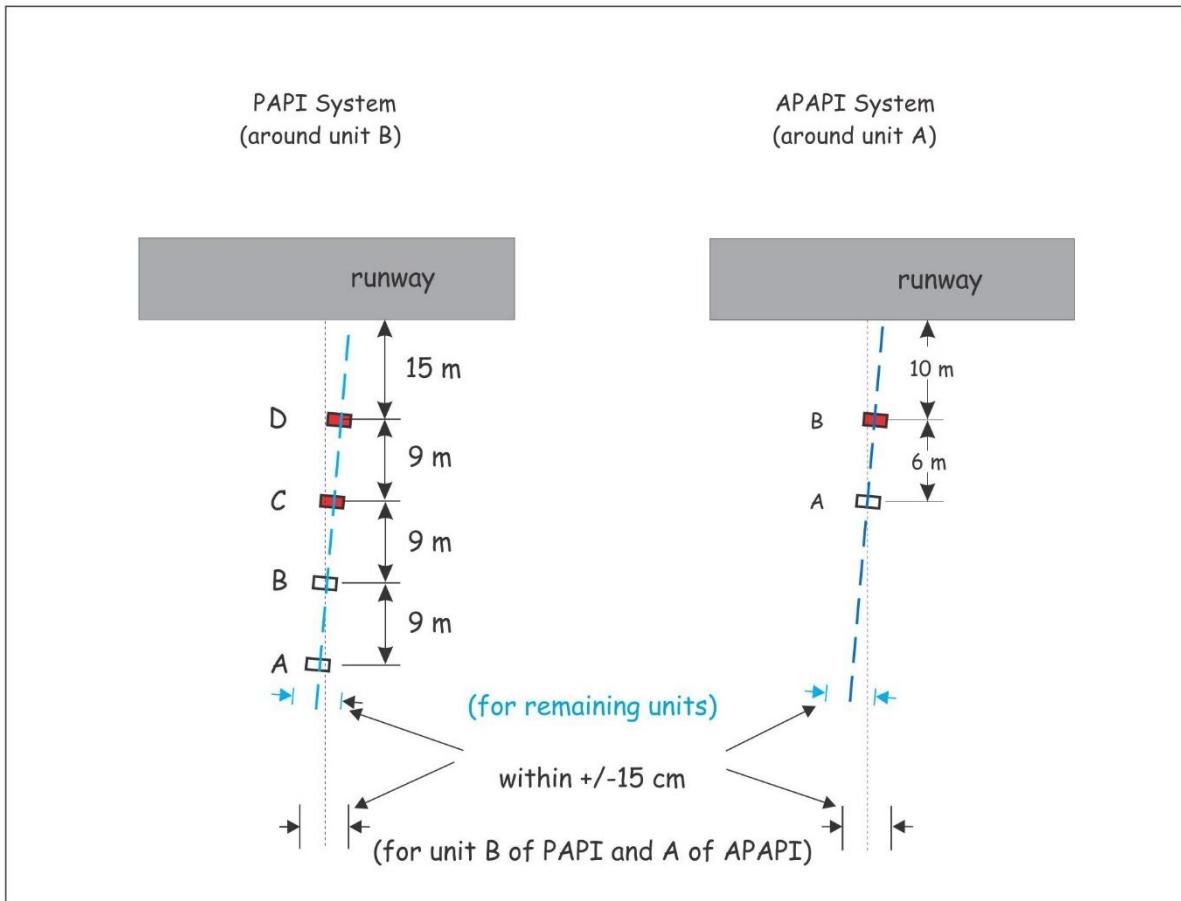


Figure 2 – Rotation of entire system

5.0 INFORMATION MANAGEMENT

- (1) Not applicable.

6.0 DOCUMENT HISTORY

- (1) Not applicable.

7.0 CONTACT OFFICE

For more information, please contact the appropriate TCCA Regional Office listed at the following address:

<http://www.tc.gc.ca/eng/regions.htm>

Suggestions for amendment to this document are invited, and are submitted via:

TC.Flights.Standards-Normesdevol.TC@tc.gc.ca

Original signed by

Robert Sincennes
Director, Standards
Civil Aviation