

CHANGE

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

**ORDER
7031.2C
CHG 13**

Effective Date:
12/19/2024

Airway Planning Standard Number One Terminal Air Navigation Facilities and
SUBJ: Air Traffic Services

- 1. Purpose.** This change transmits revisions to Chapter 2, Section 2, Radar Services, and Appendix 2 Summary of Establishment and Discontinuance Criteria.
- 2. Who this change affects.** This change pertains to the number of flight operations necessary for an FAA VFR control tower at an airport to become a candidate for a remoted radar display scope in the tower cab. The change lowers the number of flight operations from at least 30,000 annual itinerant operations to 15,000 itinerant operations. This change affects AJT and affiliated offices such as the Program Management Office and STARS office.
- 3. Disposition of Transmittal Paragraph.** After filing the attached change, this transmittal should be retained.

PAGE CHANGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
30	6/17/02	30	12/19/24
APPENDIX 2 page 7	11/15/84	APPENDIX 2 page 7	12/19/24

NATASHA A. DURKINS Digitally signed by
NATASHA A. DURKINS
Date: 2024.12.19
10:31:34 -05'00'

Natasha A. Durkins
Executive Director
Office of Aviation Policy and Plans

CHANGEU.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7031.2C CHG 12

8/17/99

SUBJ: AIRWAY PLANNING STANDARD NUMBER ONE--TERMINAL AIR NAVIGATION FACILITIES AND AIR TRAFFIC CONTROL SERVICES

1. **PURPOSE.** This change transmits revisions to Chapter 2, Navigation Aids, and Appendix 2, Summary of Establishment and Discontinuance Criteria.
2. **EXPLANATION OF CHANGE.** This change establishes criteria for capital and staffing investments at FAA air traffic control facilities to facilitate a non-Federal radar installation. The basis of the criteria are current FAA design and performance specifications, Report Number FAA-APO-83-5, Investment Criteria for Airport Surveillance Radar, and Order 1200.22B, Use of National Airspace System (NAS) Computer and Radar Data or Equipment by Outside Interests.
3. **DISPOSITION OF TRANSMITTAL.** After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
iii	10/20/89	iii and iv	8/17/99
iv	3/17/97		
31 (thru 34)	11/15/84	31	11/15/84
		32 (thru 34)	8/17/99
Appendix 2		Appendix 2	
7	11/15/84	7	11/15/84
8	11/15/84	8	8/17/99



Jane F. Garvey
Administrator

Distribution: A-WXZ-2; A-X (AF/AS/AT/FS)-2;
A-X (AF/AS/AT/FS)-3; A-FAF-2/3 (LTD);
A-FAS-1 (LTD); A-FAT-1,2,5,6 (LTD)

Initiated By: APO-200

CHANGE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7031.2C CHG 11

3/17/97

AIRWAY PLANNING STANDARD NUMBER ONE--TERMINAL AIR NAVIGATION FACILITIES
AND AIR TRAFFIC CONTROL SERVICES

SUBJ:

1. PURPOSE. This change transmits revisions to Chapter 4, Air Traffic Control, and Appendix 2, Summary of Establishment and Discontinuance Criteria.
2. EXPLANATION OF CHANGE. This change provides establishment and discontinuance criteria for Precision Runway Monitors. The basis of the proposed criteria is a life-cycle benefit-cost analysis outlined in Report Number FAA-APO-97-5, "Establishment Criteria for Precision Runway Monitors (PRM)." Copies of this report are available from APO-200.
3. DISPOSITION OF TRANSMITTAL. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
iii	10/20/89	iii	10/20/89
iv	09/24/93	iv	3/17/97
		67 (and 68)	3/17/97
Appendix 2		Appendix 2	
17 (and 18)	09/24/93	17	09/24/93
		18	3/17/97


Barry L. Valentine
Acting Administrator

CHANGEU.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7031.2C CHG 10

6/1/94

AIRWAY PLANNING STANDARD NUMBER ONE--TERMINAL AIR NAVIGATION
SUBJ: FACILITIES AND AIR TRAFFIC CONTROL SERVICES

1. PURPOSE. This change transmits revised pages to Chapter 4, Air Traffic Control, and Appendix 2, Summary of Establishment and Discontinuance Criteria.
2. EXPLANATION OF CHANGE. This change provides establishment and discontinuance criteria for Airport Surface Detection Equipment (ASDE) III. The basis of the proposed criteria is a life-cycle benefit-cost analysis outlined in Report Number FAA-APO-93-12, "Establishment Criteria for Airport Surface Detection Equipment (ASDE) III." Copies of this report are available from APO-220.
3. DISPOSITION OF TRANSMITTAL. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
51	11/15/84	51	6/1/94
52	11/15/84	52	6/1/94
Appendix 2		52-1 (and 52-2)	11/15/84
11	2/5/91	Appendix 2	
12	11/15/84	11	2/5/91
13		12	6/1/94
14 (and 15)	11/15/84	13	11/15/84
		14	11/15/84
		15 and 16	4/29/91

David R. Hinson
David R. Hinson
Administrator

Distribution: A-WYZ-2; A-X-2 (AF/AS/AT/FS/PL);
A-X(AF/AS/AT/FS/PL)-3; A-FAF-2/3(LTD);
A-FAS-1(LTD); A-FAT-1,2,5,6,(LTD)

Initiated By: APO-220

CHANGEU.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7031.2C CHG 9


4/25/94

SUBJ: AIRWAY PLANNING STANDARD NUMBER ONE - TERMINAL AIR NAVIGATION FACILITIES
AND AIR TRAFFIC CONTROL SERVICES

1. PURPOSE. This change transmits revised pages to Chapter 2, Navigation Aids; revised pages to Appendix 2, Summary of Establishment and Discontinuance Criteria; and adds Appendix 5, Establishment and Discontinuance Criteria for LORAN-C Nonprecision Approach Procedures--Final Rule. Pursuant to Public Law 100-223, these criteria were recently promulgated by FAA through Federal administrative regulation. They are reproduced in APS-1 together with other criteria established by FAA order to facilitate their application.
2. EXPLANATION OF CHANGE. This change provides establishment criteria to apply to initial establishments of LORAN-C nonprecision approaches together with discontinuance criteria for these approaches. Details on the development of these criteria are contained in the report FAA-APO-90-5, "Establishment Criteria for LORAN-C Approach Procedures, FAA-APO-90-5, June 1990." Copies of this report are available from APO-220.
3. DISPOSITION OF TRANSMITTAL. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
iii	10/20/89	iii	10/20/89
iv	09/24/93	iv	04/25/94
23	10/20/89	23	04/25/94
24 (thru 26)	11/15/84	24 (thru 26)	11/15/84
Appendix 2		Appendix 2	
5	03/02/87	5	03/02/87
6	10/20/89	6	04/25/94
Appendix 2		Appendix 2	
7 and 8	11/15/84	7 and 8	11/15/84
		Appendix 5	
		1 and 2	04/25/94


John M. Rodgers
Director of Aviation Policy, Plans, and Management Analysis

CHANGEU.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7031.2C CHG 8

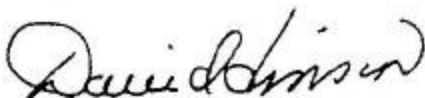
9/24/93

SUBJ: AIRWAY PLANNING STANDARD NUMBER ONE--TERMINAL AIR NAVIGATION FACILITIES AND AIR TRAFFIC CONTROL SERVICES

1. PURPOSE. This change transmits revisions to Chapter 4, Air Traffic Control, and Appendix 2, Summary of Establishment and Discontinuance Criteria.
2. EXPLANATION OF CHANGE. This change serves two purposes:
 - a. It provides establishment criteria for Metroplex Control Facilities (MCFs). The criteria provide for a preliminary screening (Phase I Criteria) based on number of instrument operations and number of enplanements and a second screening for those candidates passing the Phase I Criteria based on benefit/cost analysis (Phase II Criteria). The Phase I and Phase II Criteria are based on a benefit/cost analysis presented in Report FAA-APO-93-7, "Establishment Criteria for Metroplex Control Facilities (MCFs)." Copies of this report are available from APO-220.
 - b. It describes the process for considering the consolidation of airspace and facilities among alternatives for Terminal Radar Approach Control (TRACON) modernization/relocation. The criteria for consolidation are based on operational needs and cost benefit analyses as presented in Report FAA-AAT-93-2, "Operational Requirements and Facility Investment Criteria for Metroplex Control Facilities (MCF) and Terminal Radar Approach Control (TRACON) Facilities."
3. DISPOSITION OF TRANSMITTAL. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
iii	10/20/89	iii	10/20/89
iv	02/05/91	iv	9/24/93
		61 thru 65 (and 66)	9/24/93
		Appendix 2 17 (and 18)	9/24/93



David R. Hinson
Administrator

Distribution: A-WYZ-2; A-X(minus AF/AS/AT/FS/PL)-2;
A-X(AF/AS/AT/FS/PL)-3; A-FAP-2/3(LTD);
A-FAS-1(LTD); A-FAT-1,2,5,6(LTD)

Initiated By: APO-220

CHANGEU.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7031.2C CHG 7

4/29/91

AIRWAY PLANNING STANDARD NUMBER ONE--TERMINAL AIR NAVIGATION
SUBJ: FACILITIES AND AIR TRAFFIC CONTROL SERVICES

1. PURPOSE. This change transmits revised changes to Chapter 4, Air Traffic Control, and Appendix 2, Summary of Establishment and Discontinuance Criteria.
2. EXPLANATION OF CHANGE. This change provides establishment criteria for three windshear detection systems--the low-level windshear alert system (LLWAS), terminal doppler weather radar (TDWR), and airport surveillance radar modified for windshear detection. The basis of the proposed criteria is an integrated life-cycle benefit-cost analysis outlined in Report Number FAA-APO-90-13, "Establishment Criteria For Integrated Windshear Detection Systems: Low-Level Windshear Alert System (LLWAS), Terminal Doppler Weather Radar (TDWR), and Modified Airport Surveillance Radar." Copies of this report are available from APO-220.
3. DISPOSITION OF TRANSMITTAL. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
iii	10/20/89	iii	10/20/89
iv	02/05/91	iv	4/29/91
55 and 56 (thru 60)	11/15/84	55	11/15/84
		56 and 57 (thru 60)	4/29/91
Appendix 2	11/15/84	Appendix 2	
13 (and 14)		13	11/15/84
		14	4/29/91
		15 (and 16)	4/29/91



James B. Busey
Administrator

Distribution: A-WYZ-2; A-X-2-AF/AS/AT/FS/PL);
A-X(AF/AS/AT/FS/PL)-3; A-FAF-2/3(LTD);
A-FAS-1(LTD); A-FAT-1,2,5,6,(LTD)

Initiated By: APO-220

CHANGEU.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7031.2C CHG 6


2/5/91

AIRWAY PLANNING STANDARD NUMBER ONE--TERMINAL AIR NAVIGATION
SUBJ: FACILITIES AND AIR TRAFFIC CONTROL SERVICES

1. PURPOSE. This change transmits revisions to Chapter 4, Air Traffic Control, and Appendix 2, Summary of Establishment and Discontinuance Criteria. It also transmits Appendix 4, Establishment and Discontinuance Criteria for Airport Traffic Control Tower Facilities--Final Rule.
2. EXPLANATION OF CHANGE. This change provides establishment and discontinuance criteria for VFR airport traffic control towers. For the first time, the criteria have been promulgated through Federal administrative regulation. The revised criteria eliminate Phase I. Due to improved automation and the widespread availability of computer equipment, the need no longer exists for preliminary screening through Phase I criteria. The criteria are based on a benefit/cost analysis presented in Report FAA-APO-90-7, "Establishment and Discontinuance Criteria For Airport Traffic Control Towers." Copies of this report are available from APO-220.
3. DISPOSITION OF TRANSMITTAL. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
iii and iv	10/20/89	iii	10/20/89
47 thru 50	11/15/84	iv	2/5/91
Appendix 2	11/15/84	47	2/5/91
11 and 12		48 (thru 50)	11/15/84
		Appendix 2	
		11	2/5/91
		12	11/15/84
		Appendix 4	2/5/91
		1 thru 6	



John M. Rodgers
Director of Aviation
Policy and Plans

Distribution: A-WY2-2; A-X-2-AF/AS/AT/FS/PL);
A-X(AF/AS/AT/FS/PL)-3; A-FAF-2/3(LTD);
A-FAS-1(LTD); A-FAT-1,2,5,6,(LTD)

Initiated By: APO-220

CHANGE

7031.2C CHG 5


1/9/91

AIRWAY PLANNING STANDARD NUMBER ONE--TERMINAL AIR NAVIGATION
SUBJ: FACILITIES AND AIR TRAFFIC CONTROL SERVICES

1. PURPOSE. This change transmits a corrected page to Chapter 2, Navigation Aids.
2. EXPLANATION OF CHANGE. Order 7031.2C CHG 3 contained newly developed establishment criteria for the Runway Visual Range System on nonprecision instrumented runways. Paragraph 22a(4) was inadvertently printed with the incorrect number for the required landings. The attached page corrects the omission.
3. DISPOSITION OF TRANSMITTAL. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
21 and 22	11/15/84	21	11/15/84
		22	10/20/89


 John M. Rodgers
 Director of Aviation Policy and Plans

CHANGE

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

7031.2C CHG 4

10/27/89

AIRWAY PLANNING STANDARD NUMBER ONE-TERMINAL AIR NAVIGATION
SUBJ: FACILITIES AND AIR TRAFFIC CONTROL SERVICES

1. PURPOSE. This change transmits a revised Appendix 3, Summary of Economic Values.
2. EXPLANATION OF CHANGE. This change provides updated economic values to be used in FAA establishment and discontinuance criteria in this order. The supporting rationale for the economic values is described in the Office of Aviation Policy and Plans report "Economic Values for Evaluation of FAA Investment and Regulatory Programs," FAA-APO-89-10.
3. DISPOSITION OF TRANSMITTAL. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
Appendix 3		Appendix 3	
1 and 2	11/15/84	1 and 2	10/27/89
3 and 4	11/15/84	3 and 4	
5 (and 6)	11/15/84		


John M. Rodgers
Director of Aviation Policy and Plans

Distribution: A-WYZ-2, A-X-2 (EXCEPT AF/AS/AT/FS/PL);
A-X(AF/AS/AT/FS/PL)-3; A-FAF-2/3(LTD);
A-FAS-1 (LTD); A-FAT-1,2,5,6, (LTD)

Initiated By: APO-220

CHANGE

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

7031.2C CHG 3

10/20/89

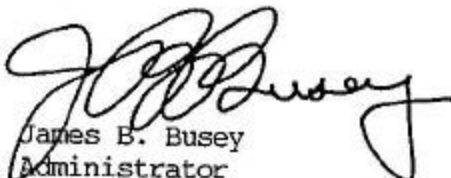
**AIRWAY PLANNING STANDARD NUMBER ONE - TERMINAL AIR
NAVIGATION FACILITIES AND AIR TRAFFIC CONTROL SERVICES**

SUBJ:

1. PURPOSE. This change transmits revised changes to Chapter 2, Navigation Aids, and Appendix 2, Summary of Establishment and Discontinuance Criteria.
2. EXPLANATION OF CHANGE. This change contains newly developed establishment criteria for the Runway Visual Range System on nonprecision instrumented runways. These criteria are based on the benefit/cost analysis outlined in Report Number FAA-APO-88-14, "Establishment Criteria for Runway Visual Range (RVR) System at Nonprecision Instrumented Runway," dated November 1988. Copies of this report are available from APO-220.
3. DISPOSITION OF TRANSMITTAL. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
iii and iv	3/2/87	iii and iv	10/20/89
21 and 22	11/15/84	21	11/15/84
		22	10/20/89
23 and 24 (thru 26)	11/15/84	23	10/20/89
		24 (thru 26)	11/15/84
APPENDIX 2		APPENDIX 2	
5	3/2/87	5	3/2/87
6	11/15/84	6	10/20/89


James B. Busey
Administrator

Distribution: A-WYZ-2; A-X-2 (EXCEPT AF/AS/AT/FS/PL);
A-X(AF/AS/AT/FS/PL)-3; A-FAF-2/3(LTD);
A-FAS-1(LTD); A-FAT-1,2,5,6(LTD)

Initiated By: APO-220

CHANGE

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

7031.2C CHG 2

3/2/87

AIRWAY PLANNING STANDARD NUMBER ONE - TERMINAL AIR
SUBJ: NAVIGATION FACILITIES AND AIR TRAFFIC CONTROL SERVICES

1. PURPOSE. This change transmits revised changes to Chapter 2, Navigation Aids, and Appendix 2, Summary of Establishment and Discontinuance Criteria.
2. EXPLANATION OF CHANGE. This change contains revised establishment and newly developed discontinuance criteria for the Touchdown Runway Visual Range (RVR) System. In addition to satisfying Airway Planning Standard criteria, RVR candidates must also satisfy the benefit/cost validation outlined in Report Number FAA-APO-87-___, "Establishment and Discontinuance Criteria For Runway Visual Range At Category I Precision Landing System Runway," dated January 1987. Copies of this report are available from APO-220.
3. DISPOSITION OF TRANSMITTAL. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
iii and iv	11/15/84	iii	3/2/87
		iv	11/15/84
15 and 16	11/15/84	15	11/15/84
		16	3/2/87
17 and 18	11/15/84	16-1 and 16-2	3/2/87
		17	3/2/87
		18	11/15/84
Appendix 2:		Appendix 2:	
3	2/10/86	3	2/10/86
4	11/15/84	4	3/2/87
5 and 6	11/15/84	5	3/2/87
		6	11/15/84

Donald D. Engen
Donald D. Engen
Administrator

Distribution: A-WYZ-2; A-X-2 (except AF/AS/AT/FS/PL);
A-X (AF/AS/AT/FS/PL)-3; A-FAF-2/3 (LTD);
A-FAS-1 (LTD); A-FAT-1, 2, 5, 6 (LTD)

Initiated By: APO-220

CHANGE**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

7031.2C CHG 1

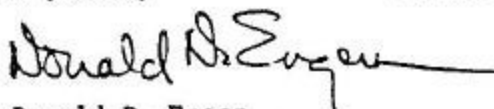
2/10/86

AIRWAY PLANNING STANDARD NUMBER ONE - TERMINAL AIR
SUBJ: NAVIGATION FACILITIES AND AIR TRAFFIC CONTROL SERVICES

1. PURPOSE. This change transmits revised pages to Chapter 2, Navigation Aids, and revises paragraph 20, Microwave Landing System (MLS) with Approach Lights.
2. EXPLANATION OF CHANGE. This change:
 - a. Provides supplemental establishment and discontinuance criteria to apply to initial establishments of the standard MLS at commercial service airports and reliever airports which meet the technical considerations of paragraphs 20a(1), 20a(2), and 20a(3) but which do not meet the conditions of paragraph 20c. The supporting rationale for the supplemental criteria is described in the Office of Aviation Policy and Plans staff study of October 1, 1985 (Revised), Option Paper: Supplementary MLS Criteria.
 - b. Reprints all other subparagraphs which have been renumbered and repaginated. The substance of these paragraphs remains unchanged.
3. DISPOSITION OF TRANSMITTAL. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
11 and 12	11/15/84	11	2/10/86
		12	11/15/84
13 and 14	11/15/84	13	11/15/84
		14 and 14-1	2/10/86
		14-2	11/15/84
15 and 16	11/15/84	15 and 16	11/15/84
Appendix 2			
3 and 4	11/15/84	3	2/10/86
		4	11/15/84
5 (and 6)	11/15/84	5 and 6	11/15/84



Donald D. Engen
 Administrator

Distribution: A-WYZ-2; A-X-2 (except AF/AS/AT/FS/PL);
 A-X (AF/AS/AT/FS/PL)-3; A-FAF-2/3 (LTD);
 A-FAS-1 (LTD); A-FAT-1, 2, 5, 6 (LTD)

Initiated By: APO-220