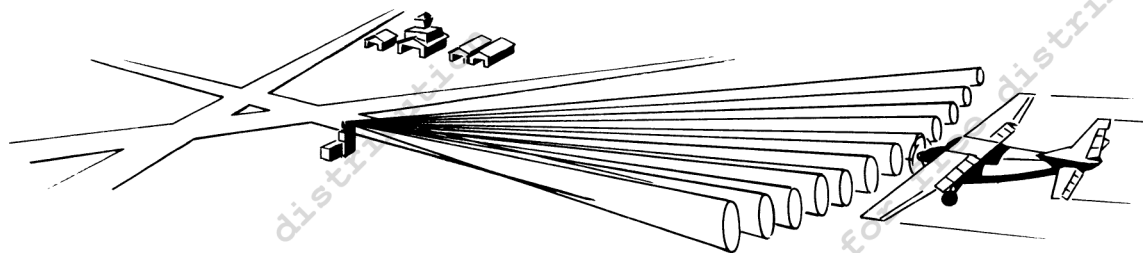


Department of Transportation  
 FEDERAL AVIATION ADMINISTRATION  
 IFR PILOT EXAM-O-GRAM® NO. 27

AIRPORT SURVEILLANCE RADAR (ASR) APPROACHES



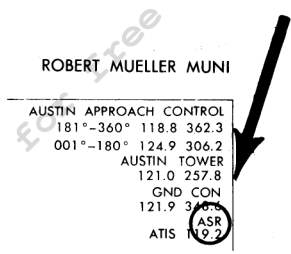
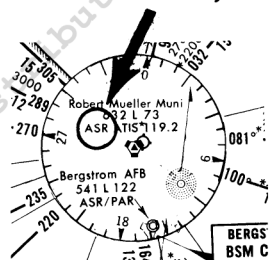
A number of airports have facilities for the performance of Airport Surveillance Radar (ASR) approaches. Responses to questions in Instrument Pilot Written Tests concerning these approaches, indicate misconceptions on the part of many applicants. A clarification of some of the points in this area will be attempted in the following questions and answers.

WHAT PUBLICATIONS LIST AIRPORTS HAVING FACILITIES FOR ASR APPROACHES? The most important source of information is the first part of each Regional Instrument Approach Chart Booklet, in the pages titled CIVIL RADAR INSTRUMENT APPROACH MINIMUMS.

CIVIL RADAR INSTRUMENT APPROACH MINIMUMS

ROBERT MUELLER MUNI TX (Austin) Amdt. 11, APR 24, 1975								
ELEV 632		DH/	HAT/		DH/	HAT/		
RWY	CAT	MDA-VIS	HAA	CEIL-VIS	CAT	MDA-VIS	HAA	CEIL-VIS
12R	ABC	1200-1	570	(600-1)	D	1200-1½	570	(600-1½)
30L	ABC	920/24	310	(300-1)	D	920/50	310	(300-1)
CIRCLING	AB	1200-1	568	(600-1)	C	1200-1½	568	(600-1½)
	D	1240-2	608	(700-2)				

Airports having Airport Surveillance Radar (ASR) are also indicated on the National Ocean Survey Enroute Low Altitude Charts, Area Charts, and Instrument Approach Procedure Charts.



WHAT MINIMUM AIRBORNE RADIO EQUIPMENT IS REQUIRED FOR AN ASR APPROACH? Under normal conditions, the minimum is considered to be a functioning communications radio transmitter and receiver. However, since a radar approach is predicated entirely upon voice instructions from a ground radar controller, in an emergency, only an airborne receiver is required. Means of alerting civil and military radar facilities of an emergency are described in Part I of the Airman's Information Manual.

WHAT IS AN ASR APPROACH? An ASR approach is conducted by surveillance radar and provides navigational guidance in azimuth only. This type approach may be made to an airport or heliport having approved surveillance approach. At an airport, the pilot is furnished headings to fly to align the aircraft with the extended centerline of any runway that has been approved for an ASR approach. Guidance in elevation is not possible, but the controller will advise the pilot when to commence descent to the minimum descent altitude (MDA) or, if appropriate, to an intermediate "step-down fix" minimum crossing altitude and subsequently to the prescribed MDA. In addition, the pilot will be advised of the aircraft's position each mile from the runway,

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airport/heliport, or MAP, as appropriate. If requested by the pilot, recommended altitudes will be issued at each mile, based on the descent gradient established for the procedure, down to the last mile that is at or above the MDA. Controllers will terminate guidance and instruct the pilot to execute a missed approach unless, at the MAP, the pilot has the runway, airport/heliport in sight or, for a helicopter point-in-space approach, the prescribed visual reference with the surface is established. Missed approach and loss of communication instructions will be given by the controller prior to starting the final approach.

References:

1. Airman's Information Manual, Parts I and III
2. Instrument Flying Handbook, AC 61-27B

Federal Aviation Administration  
Flight Standards National Field Office, Examinations Branch  
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