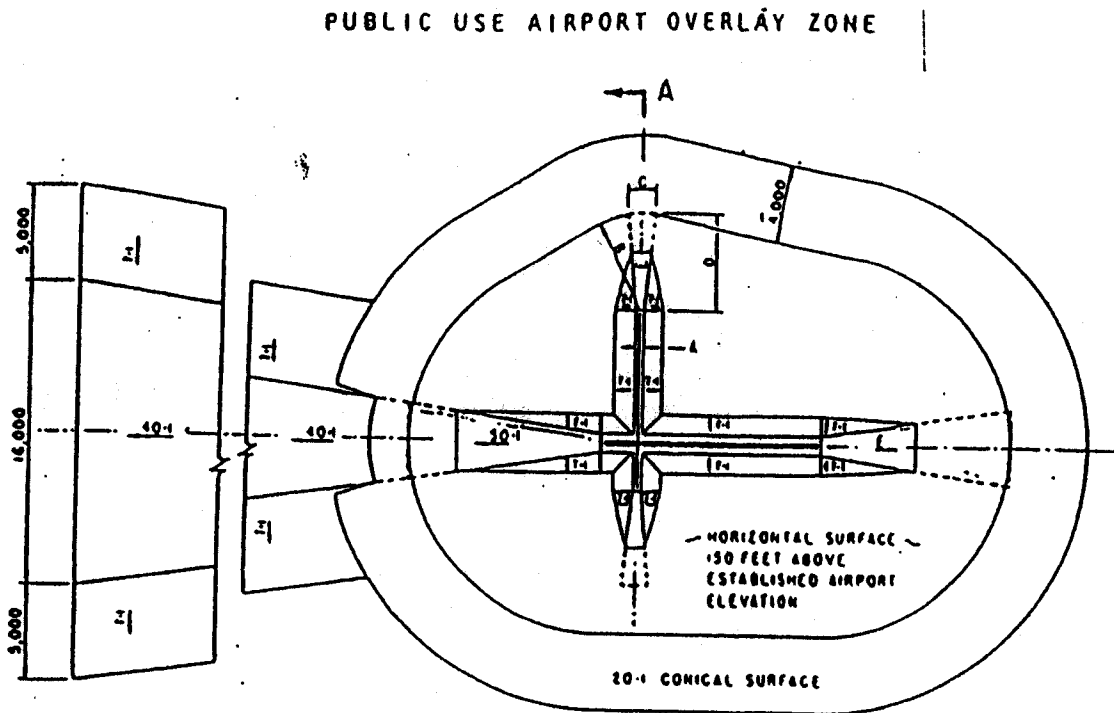


Section 3.2778 Implementation Diagrams.

The following diagrams shall be used in the implementation of the provisions of the AR Overlay Zone.

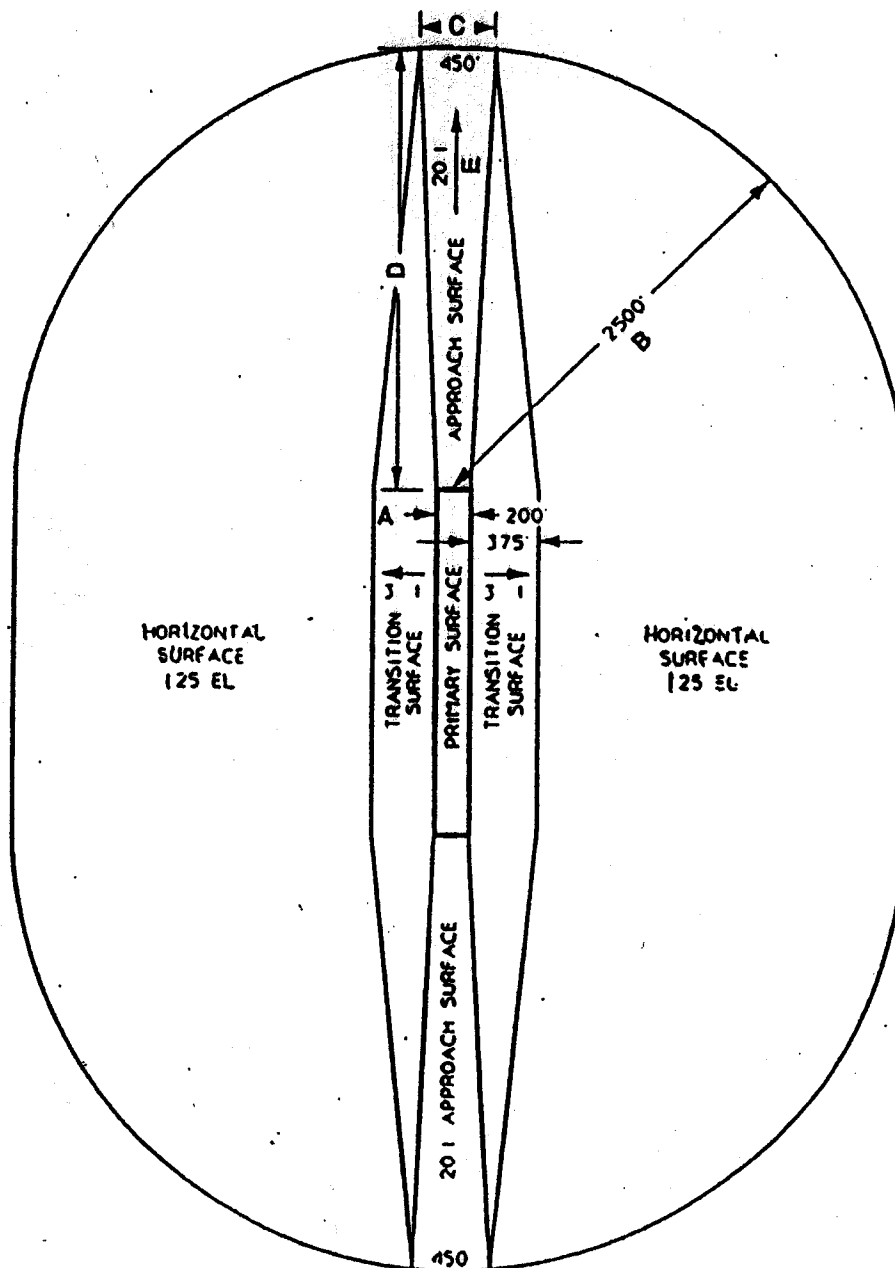
- Diagram showing imaginary surfaces for a public use airport.



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	C	D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	300	300	300	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	3,000	3,000	3,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	C	D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	3,000	3,000	3,000	10,000	10,000	0
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	0

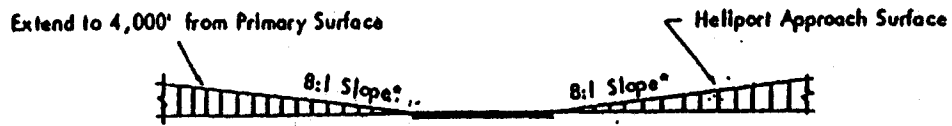
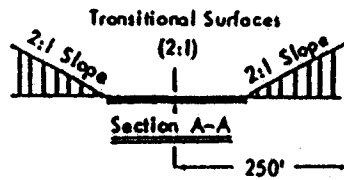
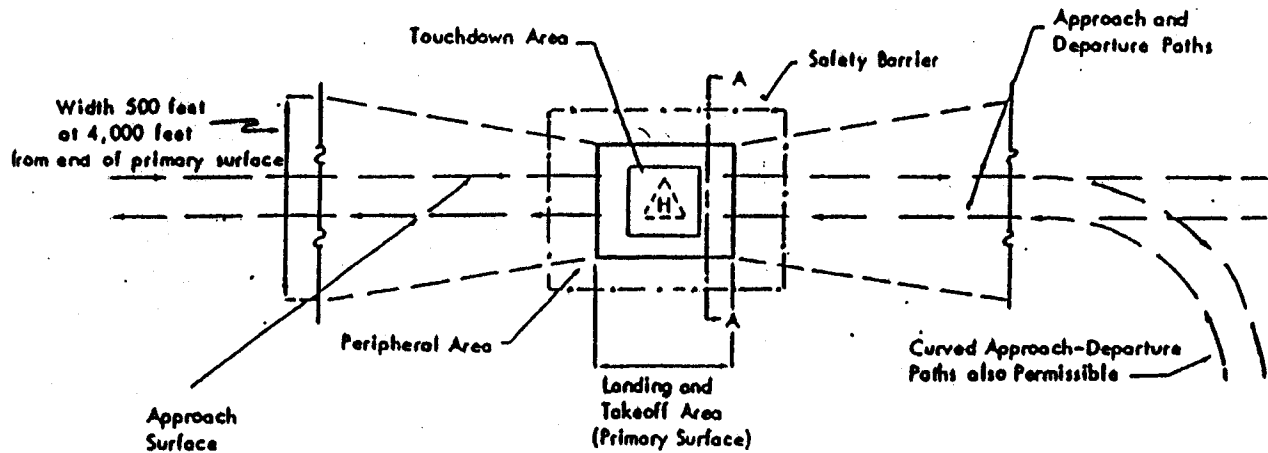
- A- UTILITY RUNWAYS
- B- RUNWAYS LARGER THAN UTILITY
- C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
- D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
- E- PRECISION INSTRUMENT APPROACH SLOPE IS 30:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET

2. Diagram showing imaginary surfaces for a private use airport.



DIM	ITEM	DIMENSIONAL STANDARDS IN FEET
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	200
B	RADIUS OF HORIZONTAL SURFACE	2500
C	APPROACH SURFACE WIDTH AT END	450
D	APPROACH SURFACE LENGTH	2500
E	APPROACH SLOPE	20:1

3. Diagram showing imaginary surfaces for a heliport.

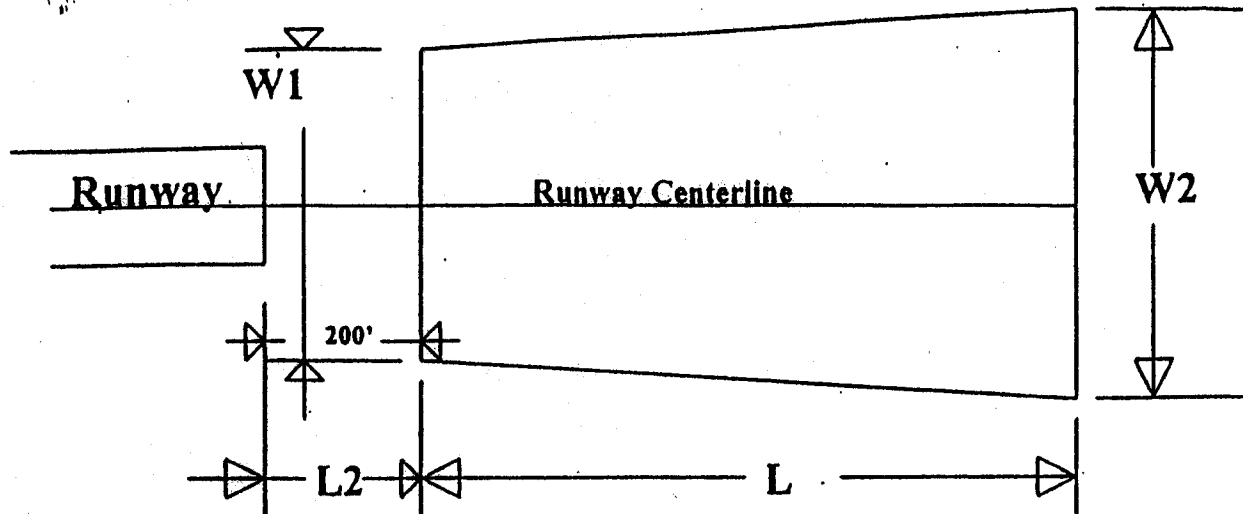


PROFILE

\*Slope 10:1 for Military Heliports

4. Diagram showing the location of the runway protection zone.

### Runway Protection Zone (RPZ) Dimensions



$L2 = 200$  feet for paved runways;  $0'$  for unpaved runways.

Visibility Approach Minimums <sup>1/</sup>	Facilities Expected To Serve	Dimensions			
		Length $L$ , Feet (meters)	Inner Width $W1$ Feet (meters)	Outer Width $W2$ Feet (meters)	RPZ Acres
Visual and Not Lower Than 1-mile (1600 m)	Small Aircraft Exclusively	1,000 (300)	250 (75)	450 (135)	8.035
	Aircraft Approach Categories A&B	1,000 (300)	500 (150)	700 (210)	13.770
	Aircraft Approach Categories C&D	1,700 (510)	500 (150)	1,010 (303)	29.465
Not Lower than 3/4-mile (1200m)	All Aircraft	1,700 (510)	1,000 (300)	1,510 (453)	48.978
Lower than 3/4-mile (1,200m)	All Aircraft	2,500 (750)	1,000 (300)	1,750 (525)	78.914

<sup>1/</sup>The RPZ dimensional standards are for the runway end with the specified approach visibility minimums.

#### Aircraft Approach Categories:

Category A: Speed less than 91 knots

Category B: Speed 91 knots or more but less than 121 knots

Category C: Speed 121 knots or more but less than 141 knots.

Category D: Speed 141 knots or more but less than 166 knots.

5. Matrix listing land uses compatible with noise levels adjacent to airports.

### Noise Compatability

LAND USES	YEARLY DAY-NIGHT AVERAGE SOUND LEVEL (DNL) IN DECIBELS				
	55-65	65-70	70-75	75-80	80+
<b>RESIDENTIAL</b>					
Residential, other than mobile homes, transient lodgings	Y	N <sup>1</sup>	N <sup>1</sup>	N	N
Mobile Home Parks ' Mobile homes	Y	N	N	N	N
Transient lodgings (models, hotels)	Y	N <sup>1</sup>	N <sup>1</sup>	N	N
<b>PUBLIC USE</b>					
Schools	Y	N <sup>1</sup>	N <sup>1</sup>	N	N
Churches, auditoriums, concert halls, hospitals, nursing homes	Y	25	30	N	N
Governmental services	Y	Y	25	30	N
Transportation/Parking	Y	Y	Y <sup>2</sup>	Y <sup>1</sup>	Y <sup>4</sup>
<b>COMMERCIAL</b>					
Offices-business and professional	Y	Y	25	30	N
Wholesale/retail-materials, hardware and farm equipment	Y	Y	Y <sup>2</sup>	Y <sup>1</sup>	Y <sup>4</sup>
Retail trade-general	Y	Y	25	30	N
Utilities	Y	Y	Y <sup>2</sup>	Y <sup>1</sup>	Y <sup>4</sup>
Communications	Y	Y	25	30	N
<b>MANUFACTURING</b>					
Manufacturing-general	Y	Y	Y <sup>2</sup>	Y <sup>1</sup>	Y <sup>4</sup>
Photographic and optical	Y	Y	25	30	N
Agriculture (except livestock) and forestry	Y	Y <sup>6</sup>	Y <sup>7</sup>	Y <sup>1</sup>	Y <sup>4</sup>
Livestock farming and breeding	Y	Y <sup>6</sup>	Y <sup>7</sup>	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y
<b>RECREATIONAL</b>					
Outdoor sports arenas/spectator sports	Y	Y <sup>3</sup>	Y <sup>3</sup>	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N
Nature exhibits and zoos	Y	N	N	N	N
Amusement parks, resorts, camps	Y	Y	Y	N	N
Golf courses, riding stables, water recreation	Y	Y	25	30	N

See following keys and notes for explanation of 3.2778 (5)

Section 3.278(5) cont.

**KEY**

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<b>Y (Yes)</b>	Land Use and related structures compatible without restrictions.
<b>N (No)</b>	Land Use and related structures are not compatible and should be prohibited.
<b>NLR</b>	Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.
<b>DNL</b>	Average Day-Night Sound Level
<b>25, 30, 35</b>	Land Use and related structures generally compatible; measures to achieve NLR of 25, 30, 35 dB must be incorporated into design and construction of structure.

**NOTES**

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1. Where the community determines that residential or school uses must be allowed, measures to achieve an outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10, or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. The use of NLR criteria will not, however, eliminate outdoor noise problems.
  2. Measures to achieve NLR of 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
  3. Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
  4. Measures to achieve NLR of 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas, or where the normal noise level is low.
  5. Land use compatible provided special sound reinforcement systems are installed.
  6. Residential Buildings require an NLR of 25 dB.
  7. Residential Buildings require an NLR of 30 dB.
  8. Residential Buildings not permitted.