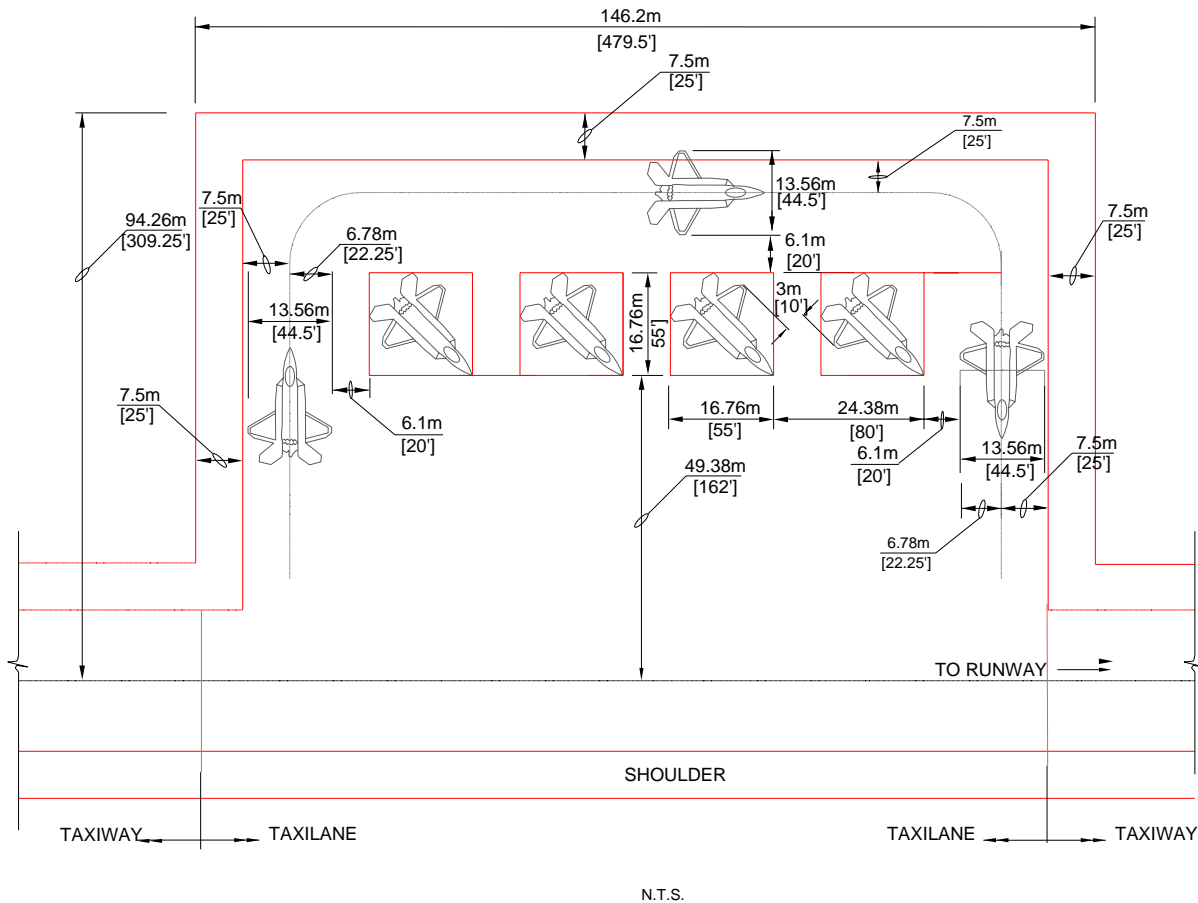


Figure 6-23. Arm-Disarm Pad for F-22 Fighter



6-11 **COMPASS CALIBRATION PAD (CCP).** An aircraft CCP is a paved area in a magnetically quiet zone where an aircraft's compass is calibrated.

6-11.1 **Air Force.** The Air Force has the option of using the criteria presented here or using the criteria provided in FAA AC 150/5300-13, Appendix 4. A current copy of FAA AC 150/5300-13 can be obtained from HQ AFCESA/CEOA. For CCP marking requirements, use the controlling aircraft technical order or use the information in FAA AC 150/5300-13 for general purpose CCPs.

6-11.2 **Navy and Marine Corps.** Prior to construction of, or major repair of, a CCP, a validation of need shall be filed through the maintenance department to NAVAIR for approval. Navy and Marine Corps requirements for CCPs are provided in NAVFAC P-80 and UFC 3-260-02.

6-11.3 **Location.** The CCP should be located off the side of a taxiway at sufficient distance to satisfy the runway and taxiway lateral clearance distance and airspace criteria in Chapters 3, 4, and 5. Do not site CCPs, other aprons, hot cargo spots, or taxiways to these facilities in a way that will allow penetration of the approach-departure clearance surface.

#### 6-11.4 **Siting Consideration**

6-11.4.1 **Separation Distances.** To meet the magnetically quiet zone requirements and prevent outside magnetic fields from influencing the aircraft compass calibration, efforts must be taken to make sure that minimum separation distances are provided.

6-11.4.1.1 **Army and Air Force.** See Appendix B, Section 10, for CCP separation distances.

6-11.4.1.2 **Navy and Marine Corps.** Criteria for separation distances for Navy and Marine Corps CCPs are given in UFC 3-260-02.

6-11.4.2 **Preliminary Survey.** During the site selection process, the proposed sites for CCPs must be checked for magnetic influences to ensure that the area is magnetically quiet regardless of adherence to separation distances. A preliminary survey as described in Appendix B, Section 10, must be conducted to determine if the proposed site is magnetically quiet. A survey similar to the preliminary survey must be conducted after construction of any new item or building, within or near the separation distances of the pad. This will ensure that the newly constructed item has not created new magnetic influences in the magnetically quiet zone.

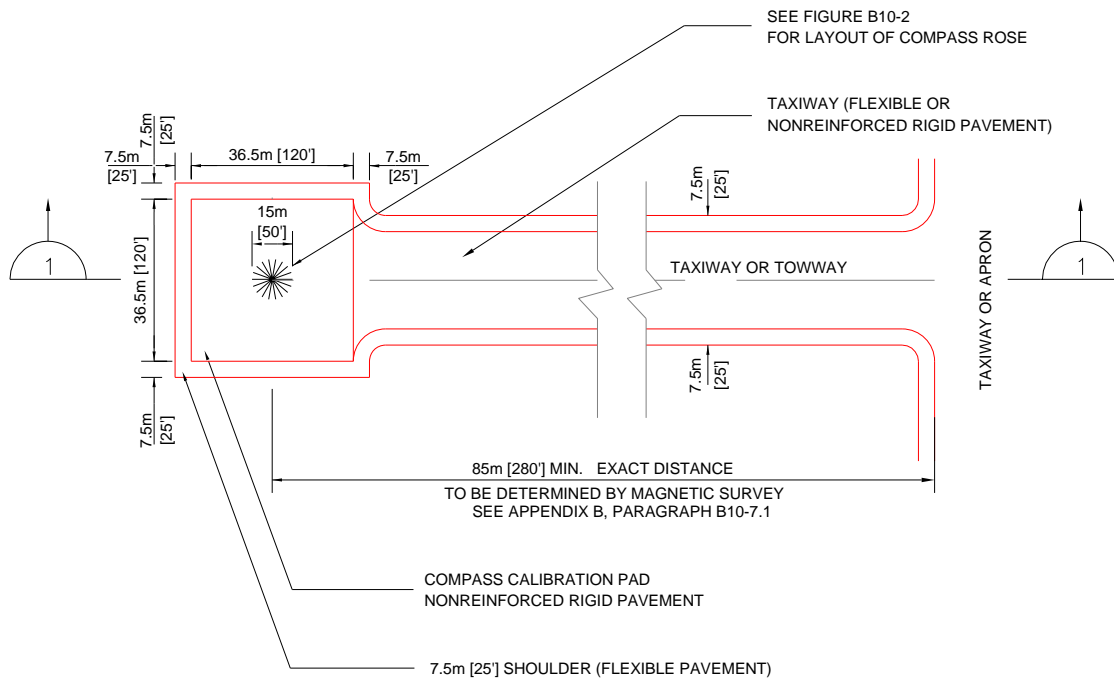
6-11.4.3 **Magnetic Survey.** The magnetic survey for the CCP is an airfield engineering survey that is conducted at the completion of the pad to assure that the area is magnetically quiet, to determine the magnetic declination of the area, and to lay out the markings for the pad. Engineering surveys are also required every five years for Army and Air Force CCPs and every year for Navy and Marine Corps CCPs. This cycle is operationally important because the magnetic north not only varies at different locations on the earth but physically changes as a function of time. It is an operational requirement to calibrate the aircraft's compass correction factor on a regular basis because of these changes in the earth's magnetic pole. In addition, the magnetic survey validates that the CCP is in a magnetically quiet zone, thus ensuring proper compass calibration. The magnetic survey for CCPs should be performed in accordance with Appendix B, Section 10.

#### 6-11.5 **Compass Calibration Pad (CCP) Size**

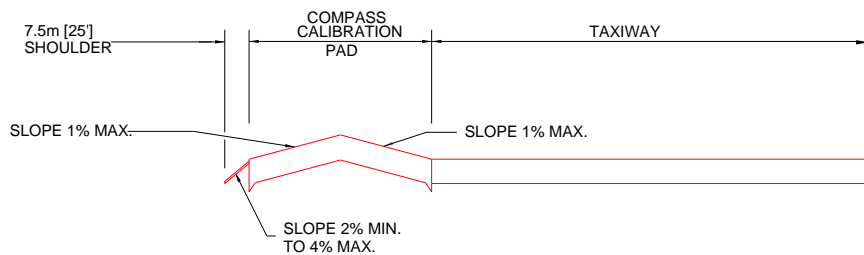
6-11.5.1 **Army and Air Force.** Army and Air Force CCP size is shown in Figure 6-24.

6-11.5.2 **Navy and Marine Corps.** Navy and Marine Corps CCP size is provided in UFC 3-260-02.

Figure 6-24. Army and Air Force Compass Calibration Pad



PLAN  
N.T.S.



NOTE

THICKNESS OF CONCRETE AND BASE COURSE, BASE COURSE DENSITY, TYPE OF SHOULDER SURFACING AND CBR OF SHOULDER BASE COURSE ARE GOVERNED BY EXISTING CRITERIA OR ARE DEPENDENT UPON SITE CONDITIONS.

SECTION



N.T.S.

6-11.6 **Access Taxiway/Towway.** An access taxiway will be provided for access from the primary taxiway to the CCP. The access taxiway must be oriented to facilitate moving the aircraft onto the CCP on a magnetic north heading. At Army and Air Force

aviation facilities, if the aircraft should be towed to the CCP, the access taxiway must be designed as a towway. At Navy and Marine Corps facilities, the taxiway should be designed as a taxiway. Taxiway and towway design requirements are presented in Chapter 5.

6-11.7       **Grading.** CCPs will be graded as specified in this section:

6-11.7.1      **Perimeter Elevation.** The elevation of the perimeter of the pad will be the same elevation around the entire perimeter.

6-11.7.2      **Cross Slope**

6-11.7.2.1    **Army and Air Force.** The CCP should be crowned in the center of the pad with a constant cross slope of 1 percent in all directions to provide surface drainage while facilitating alignment of the aircraft pad.

6-11.7.2.2    **Navy and Marine Corps.** Grading criteria for CCPs is located in UFC 3-260-02.

6-11.8        **Tie-Down/Mooring Points.** No aircraft tie-down/mooring points, tie-down/mooring eyes, or any static grounding points must be placed in the CCP pavement.

6-11.9        **Embedded Material.** Due to the influence of ferrous metal on a magnetic field, the PCC pavement for the CCP and access taxiway must not contain any embedded ferrous metal items such as dowels bars, reinforcing steel, steel fibers, or other items. In addition, ferrous metal must not be placed in or around the CCP site.

6-11.10       **Control Points.** A control point will be set in the center of the CCP. This point will consist of a brass pavement insert into which a bronze marker is grouted in accurate alignment. This point will be stamped with "Center of Calibration Pad." The layout of the control points is discussed further in Appendix B, Section 10.

6-12           **HAZARDOUS CARGO PADS.** Hazardous cargo pads are paved areas for loading and unloading explosives and other hazardous cargo from aircraft. Hazardous cargo pads are required at facilities where the existing aprons cannot be used for loading and unloading hazardous cargo. Do not site hazardous cargo pads, other aprons, hot cargo spots, or taxiways to these facilities in a way that will allow penetration of the approach-departure clearance surface.

6-12.1        **Navy and Marine Corps Requirements.** Hazardous cargo pads are not normally required at Navy and Marine Corps facilities; however, where operations warrant or an Air Force hazardous cargo aircraft is continuously present, hazardous cargo pads can be justified with proper documentation.

6-12.2        **Siting Criteria.** Hazardous cargo pads require explosives site planning as discussed in Appendix B, Section 9.