

## **Cold Regions Test Center**

## **Description**

The U.S. Army Cold Regions Test Center (CRTC) is located in the interior of Alaska on Fort Greely and on Fort Wainwright's Donnelly Training Area (DTA) and is comprised of over 670,000 acres of range, controlled airspace and support facilities. The CRTC is the Department of Defense's (DoD) only cold weather natural environment test organization and is a national asset designated as part of the DoD's Major Range and Test Facility Base. The CRTC plans, conducts and reports results of natural environment cold weather testing for the Army, other Services, government agencies, allied nations and private industry.

The test environment combines the varied and synergistic effects of terrain and temperature wind and snow in an area large enough to truly represent winter warfare. Limited winter sunlight provides extended test periods for night-vision systems while temperate conditions and nearly 24 hours of light provide excellent conditions for summer testing. Additionally, the CRTC facilities are located within 30 kilometers of Afghanistan-like mountains that reach 13,000 feet.

The unique combination of remote location, weather, terrain, facilities, airspace, test infrastructure and expertise that CRTC has developed at Fort Greely and the DTA over the years make it a one-of-a-kind asset, dedicated to providing soldiers, sailors, airmen, and Marines with clothing, equipment, and weapons systems that improve their lethality and survivability on the next winter battle-field. Training and testing are natural partners in the JPARC, because a well-trained warfighter with equipment that doesn't work, or a well-equipped warfighter who is poorly trained, are equally unacceptable.

Want to test at the CRTC? Learn more at: http://www.crtc.army.mil/testing.asp

Climatological Data Comparison Between CRTC and Selected Countries							
	CRTC, Alaska	Kazakhstan	North Korea	Bosnia and Herzegovina	Pakistan	India	Afghanistan
Winter Aver- age Daily Low Temp (°F)	-2	8	7	31	27	17	23
Winter Ex- treme Mini- mum Temp (° F)	-63	-60	-35	-22	-20	-19	-24
Ave. # of Days/ Winter with Snowfall	51	No Data	37	40	No Data	No Data	21

The above data is taken from one of the coldest cities within each particular country. (Example: Kazakhstan data is taken from Astana, North Korea data is taken from Changjin, where the 1950 Battle of Chosin Reservoir was fought. Afghanistan data is taken from Ghazni, located southwest of Kabul.)



## **Description (continued)**

The CRTC environment allows for mobility, maneuver, and direct-fire and indirect-fire testing that cannot be duplicated in environmental chambers. It can accommodate indirect fire testing with the capability of observed fire to 15 kilometers (km). Indirect fire, up to 100 km, can also be accomplished by utilizing ranges near Fort Wainwright with the impact on Fort Greely areas. Airfield-based and tactical air operations are supported and airdrop zones/facilities are available. Since cold weather testing is entirely weather dependent, large blocks of range time are often scheduled to support time-critical testing activities.

## The CRTC has access to the following infrastructure:

- 3.26-mile paved and banked oval test track, with skid pad and test slopes and the capability to produce large-scale ice and snowfields
- Ammunition storage areas
- Assault strips
- Air drop zones/facilities
- Battle Area Complex/Combined Arms Collective Training Facility
- Brake, suspension, traction and handling test courses (commercial courses)
- Communications circuits
- Meteorological sites
- Military Operations in Urban Terrain (MOUT) site
- Mobility Test Complex Developmental Test Control Center
- Network of roads and trails
- Surveillance testing facility
- Tracked and wheeled vehicle mobility courses
- Unmanned aerial system airfield
- U.S. Army Alaska Soldiers (when available) as test participants/operators during developmental testing
- Vehicle mobility, reliability, and durability test courses (primary, secondary, cross-country)

