



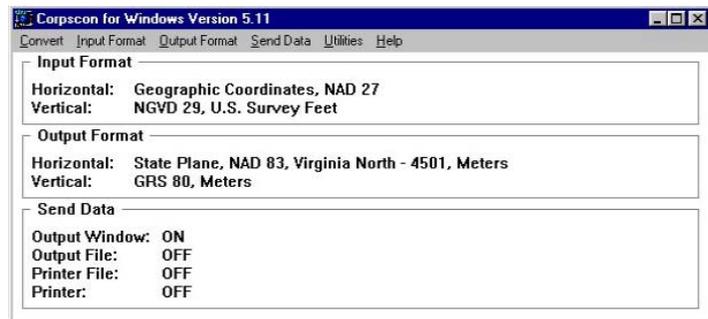
# **CORPSCON Coordinate Conversion Software**

## **Technology**

CORPSCON an MS-Windows-based software program that converts geospatial data (map) coordinates taken from different sources to a common coordinate system. The current version of CORPSCON (5.11) is a Microsoft® Windows® based software program that allows the user to convert coordinates between Geographic, State Plane, and Universal Transverse Mercator (UTM) systems on the North American Datum of 1927 (NAD 27), the North American Datum of 1983 (NAD 83), and High Accuracy Reference Networks (HARNs). CORPSCON uses the National Geodetic Survey (NGS) program, NADCON, to convert between NAD 27, NAD 83, and HARNs. CORPSCON performs vertical conversions to and from the National Geodetic Vertical Datum of 1929 (NGVD 29) and the North American Vertical Datum of 1988 (NAVD 88). Vertical conversions are based on the NGS program VERTCON and can be performed for the continental United States only. CORPSCON will also calculate geoid-ellipsoid separations based on the NGS program Geoid96. Geoid-ellipsoid separations can be calculated for the Continental United States, Alaska, Hawaii, and Puerto Rico/U.S. Virgin Islands.

## **Problem**

Geospatial data gathered from different sources, different agencies, or historical archives, may have been collected in different coordinate systems or datums. To combine these types of data, they must be transformed or converted into a common coordinate system and/or datum. CORPSCON resolves the discrepancies by providing consistent conversions between various coordinate systems and datums within the Continental United States, Alaska, Hawaii and Puerto Rico/U.S. Virgin Islands.



## **Expected Cost To Implement**

CORPSCON Version 5.11 is available for unrestricted download through the Internet, free of charge, from the Distribution Source listed below. Minimal program requirements are an IBM-compatible PC with a 80386 (or higher) processor, running a Microsoft® Windows® 95/98/NT/2000/XP operating system, and with 20 megabytes of free hard disk space.

## **Benefits/Savings**

CORPSCON extends the usability of existing data, and saves users the time and cost associated with more laborious data conversion or resampling. CORPSCON's Microsoft® Windows® based Graphical User Interface allows users to specify the type of conversion desired and to enter data by direct keyboard entry, or by batch file.

## **Status**

CORPSCON has become the industry standard for coordinate and datum conversions within the United States. The current release of CORPSCON, Version 5.11.08, is available via the Internet. Version 6, which will include new Geoid models and accuracy assessment, is currently under development.

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**Distribution Sources** CORPSCON is available via the Internet through URL:

<http://crunch.tec.army.mil/software/corpscon/corpscon.html>

**Available Documentation**

Program documentation is distributed with the software.

**Available Training**

CORPSCON is used in several Proponent Sponsored Engineer Corps Training (PROSPECT) courses:

- Survey I: Basic Principles (Control No. 295)
- Survey II: Construction (Control No. 339)
- Survey III: Mapping (Control No. 296)
- Survey IV: Global Positioning System (GPS) Surveying (Control No. 203)

Attendance at PROSPECT schools should be coordinated through the District training officer and the Huntsville Professional Development Support Center at URL:

<http://pdsc.hnd.usace.army.mil/>

**Available Support**

Due to restricted resources, very limited assistance is available to non-Corps of Engineers users. Some online assistance is available through a “Frequently Asked Questions” (FAQ) web page:

<http://crunch.tec.army.mil/software/corpscon/CorpsconFAQs.htm>