

**POSAID2 - Notes**  
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POSAID2 is a DOS program for converting Loran-C Time Difference measurements to Latitude and Longitude. The conversion is based on the Sodano (1965) method taken from McCullough, J, et al, "Loran-C Latitude-Longitude Conversion At Sea Programming Considerations". The original reference for the conversion is: Sodano, E.M., 1965, General non-iterative solution of the inverse and direct geodetic problems: Bulletin Geodesique, annee, Nouvelle Serie, no. 75.

The Loran-C station positions are in the text file CHAIN.INF. The positions are given in WGS 84 coordinates. If the Loran-C configuration changes this file would have to be updated. It has been updated using the latest version of COMDTINST M16562.4A, "Specification of the Transmitted Loran-C Signal", USCG 1994

The program also does some coordinate conversions between WGS 84, WGS 72, NAD 83 and NAD 27. Note that the answers for NAD 83 and WGS 84 are identical. The ellipsoids are virtually the same so for the ellipsoid conversion algorithms used here the results are identical. The NAD 27 conversion algorithms are based on an approximation of the NAD 27 spheroid for the whole continent. Accuracy will vary from 5-10 meters. For a precise NAD 27 conversion, go to the [National Geodetic Survey](#) home page.

The POSAID2 software package is contained in the self-extracting zipfile POSAID.EXE and consists of the following components:

POSAID2.EXE - the Positioning Aid 2.1a program file

CHAIN.INF - the Loran-C chain/station information file

README.TXT - a readme file with more information

[Click here to download POSAID](#)

Notice/Disclaimer: All users of this software program are hereby put on notice that use of this program to produce certain desired results is entirely at the risk of the user. The Government makes no representations regarding the reliability or accurateness of the program and specifically warns all users that the program is not intended as a real-time navigational program. Further, the Government does not make any warranties, express or implied, concerning the reliability or accurateness of the data generated by the program; assumes no liability for the correctness of the results produced through the use of the program; and assumes no liability for damages, which may occur through use of the program.