NAVIGATION SERIES · NAV-01

NAV-01 Grid Coordinates and Map Reading

The Military Grid Reference System

Saying exactly where something is, in a form another person can act on.

BOTTOM LINE UP FRONT

NAV-01 teaches you to produce, read, plot and verify a military grid reference, and to read the topographic sheet it comes from. It is distinct from land navigation (getting to a place, which is NAV-02) and from report writing (the format a location sits inside). This course covers marginal data, contours and terrain, grid structure and precision, extraction and plotting, device settings, and the location line.

WHY THIS MATTERS

A location nobody else can act on is not a location. It is a description of one.

Most people report location by landmark, because that is how ordinary conversation works. Landmarks are relational, personal, perishable and — the part that does the damage — unverifiable: a wrong shared understanding sounds exactly like a right one on readback. A grid resolves to one place for everyone, survives a marginal radio link, plots on paper with no power, and states its own precision.

► **Precision is a claim the recipient acts on. Given ten digits a person searches a doorway; given four they search a field. Claiming more than you measured is a lie in a convincing format.**

COURSE LESSONS

1	Why “Near the Big Oak” Fails — the five tests a location system must pass, and why groups standardize early.
2	Reading the Margin First — scale, contour interval, datum, edition, and the one-minute check.
3	Contours and Terrain — the eight shapes, slope from spacing, terrain association as a check.
4	Anatomy of an MGRS Grid — zone, square, digits, and what each precision level promises.
5	Read Right, Then Up — extraction and plotting, and the three errors. Map required.
6	Grids From Devices — MGRS display, datum matching, waypoints, auditing a receiver.
7	Grids in Reports — the location line, precision to purpose, readback, overlay registration.
8	The Grid Card — your family and group locations as grids, verified by somebody else. Map required.

WHAT YOU NEED

Prerequisites	None. No prior map training or military background assumed.
Equipment	A paper topographic sheet of your own ground, a coordinate scale cut for that sheet’s scale, a pencil and a straight edge. Free printable scales at maptools.com — check the printed size against your sheet’s bar scale before trusting it.
Format	Eight online lessons, roughly three to four hours plus field work. Support the development and availability of these courses by subscribing to my Patreon. Certificate on completion.

DOCTRINAL SOURCES

FM 3-25.26	Map Reading and Land Navigation	Marginal data, elevation and relief, grid structure and precision, overlay registration
MCWP 3-11.3	Scouting and Patrolling	The SALUTE report and its location element
USGS	Finding Your Way with Map and Compass	Civilian framing, systems comparison