

TABLE of CONTENTS

Pg. ii

| SECTION | CONTENT | PAGE |
|---------|--|------|
| I. | Introduction | |
| | A. Background | 1 |
| | B. GPS Terms | 3 |
| | C. Using a GNS 530W for the First Time | 5 |
| | D. Controls | 6 |
| II. | Basic Operations | |
| | A. Tuning Frequencies | 10 |
| | B. Direct-To | 11 |
| III. | Flight Plans | |
| | A. Creating a Flight Plan | 12 |
| | B. Activating a Stored Flight Plan | 13 |
| | C. Inverting & Activating a Stored Flight Plan | 13 |
| | D. Deleting a Stored Flight Plan | 14 |
| | E. Deleting a Waypoint14 | |
| | E ₁ . Resuming the Active Flight Plan | 14 |
| | F. Adding a Waypoint | 15 |
| | G. Nearest Airport | 16 |
| | H. Direct-To a Waypoint in Active Flight Plan | 16 |
| | (1) Direct-To City Name | 17 |
| | (2) Direct-To by Map Panning | 17 |
| | I. Storing the Active Flight Plan | 18 |
| | J. Closest Point of Flight Plan | 18 |
| | K. Parallel Track | 19 |
| | K ₁ . Resuming the Active Flight Plan | 19 |
| | L. SIDs | 20 |
| | M. STARs | 21 |
| | N. RAIM Prediction | 22 |
| | O. Vertical Navigation | 23 |
| | P. User Waypoints | 24 |
| | Q. OBS Mode | 29 |
| IV. | Approaches | |
| | A. Approaches | 30 |
| | Vectors-to-Final, Load or Activate | 31 |
| | ILS Approach | 32 |
| | LPV Approach | 32 |
| | LNAV / VNAV, and LNAV with Advisory Vert Guide | 33 |
| | VOR and Backcourse Approach | 33 |
| | Localizer, SDF and LDA Approach | 33 |
| | Approach Notes | 33 |
| | B. Holding - Part of Approach and NOT Part of Approach | 34 |
| | C. DME Arc Approach | 35 |

TABLE of CONTENTS

Pg. iii

| SECTION | CONTENT | PAGE |
|---------|---|------|
| V. | Appendixes | |
| | A. Default NAV Page (NAV 1) | 36 |
| | B. MAP Page (NAV 2) | 39 |
| | C. Terrain Page (NAV 3) | 44 |
| | D. NAVCOM Page (NAV 4) | 45 |
| | E. Satellite Status Page (NAV 5) | 46 |
| | F. Waypoint Pages and Airport Location (WPT 1) | 47 |
| | G. Airport Runways (WPT 2) | 48 |
| | Airport Frequencies (WPT 3) | 48 |
| | Airport Approaches (WPT 4) | 48 |
| | Arrival, Departure, Intersection, NDB, VOR, and User Waypoints (WPT 5, 6, 7, 8, 9, and 10) | 49 |
| | H. Nearest Pages | |
| | Airports (NRST 1) | 50 |
| | Intersections, NDBs, VORs, User, ARTCC, FSS and Airspace (NRST 2, 3, 4, 5, 6, 7, and 8) | 51 |
| VI. | Page Descriptions | |
| | NAV Pages | 52 |
| | Waypoint Pages | 53 |
| | Aux Pages | 54 |
| | Nearest Pages | 55 |
| VII. | Miscellaneous | |
| | Checklists | 56 |
| | Scheduler | 57 |
| | Charts | 58 |
| VIII. | XM Weather | |
| | Display NEXRAD on the Map Page | 61 |
| | Selecting a Product on the XM Weather Page | 61 |
| | Display Product Legend | 61 |
| | Display Textual METARs, TAFs and Winds Aloft | 62 |
| | Display TFR Info, Cells and Movement, and Lightning | 63 |

As with any new friend it will take some quality time for you to understand and appreciate the tremendous capabilities of the GNS 530W. Garmin has a Trainer CD to be used in PC computers. Garmin also offers a free, downloadable trainer for PC's from their website. It is almost completely functional.

Lone Star Aviation makes a docking station called the **Commander**, which allows you to practice and explore operations with the unit removed from the aircraft (take-home mode). It is a wonderful way to enhance your ability to perform the operations which are important to you without the noise, distractions, and outside vigilance that is a part of flying. They can be reached at: Lone Star Aviation, 604 South Wisteria Street, Mansfield, TX 76063-2423 (817) 633-6103.