NSN XXX-XXX-XXX-XXX 704750-0300

INSTRUCTION BOOK

ILS 420
GLIDE SLOPE STATION

NULL REFERENCE
SINGLE EQUIPMENT, SINGLE FREQUENCY
PART NUMBER 098784-0001
TYPE FA-XXXX

SIDEBAND REFERENCE
SINGLE EQUIPMENT, SINGLE FREQUENCY
PART NUMBER 098787-0001
TYPE FA-XXXX

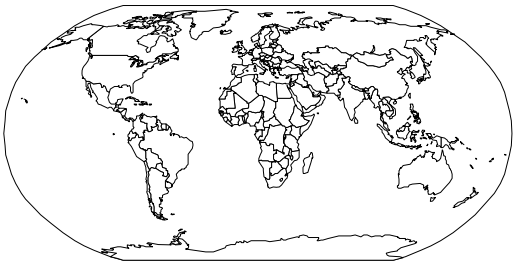
CAPTURE-EFFECT
SINGLE EQUIPMENT, DUAL FREQUENCY
PART NUMBER 098785-0001
TYPE FA-XXXX

DUAL EQUIPMENT, DUAL FREQUENCY
PART NUMBER 098786-0001
TYPE FA-XXXX

CONTRACT DTFAWA-05-C-00058

THALES ATM Inc.
23501 W. 84th STREET
SHAWNEE, KANSAS 66227

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
27 FEBRUARY 2008



THALES

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MANUAL NO. 704750-0300

Revision A.5
27 February 2008

- WARRANTY -

THALES warrants all equipment manufactured by it to be free from defects in material and workmanship, provided the equipment is operated under normal ratings and service for which it is intended. The obligations of the company shall be limited to making good at the factory, or at authorized repair and service facility of THALES, any part or parts thereof which shall by its inspection and test be found defective, provided these parts are returned prepaid to the company within one (1) year after delivery to the customer. All material being returned to THALES through Customs should show Customs Clearance at the Port of destination.

THALES is not liable for any damage or personnel injury resulting directly or indirectly from the design, material, workmanship, or installation of any of its products.

This warranty is in lieu of all other warranties, expressed or implied, and does not apply to any equipment which has been subject to unauthorized repair or alteration.

THALES neither assumes nor authorizes any person to assume for it any other liability in connection with its products.

THALES reserves the right to make modifications and alterations to its products without obligation to install such improvements at no charge in equipment theretofore manufactured.

- TECHNICAL SUPPORT AND ORDERING REPLACEMENT PARTS -

For technical support and information on how to order replacement parts, contact your equipment provider listed below.

Thales
23501 West 84th Street
Shawnee, Kansas 66227 USA
Tel: +1 913 422-2600
Fax: +1 913 422-2962

THALES

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SECTION TABLE OF CONTENTS

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INTRODUCTION

The Equipment

The Instrument Landing System (ILS) 420 glide slope station was developed according to Federal Aviation Administration (FAA) and International Civil Aviation Organization (ICAO) requirements and includes the glide slope station and installation kit.

NOTICE: This equipment has been Type Accepted by the FCC (FCC ID BOJ420GS) and changes or modifications not expressly approved by Thales may void the user's authority to operate this equipment.

The Manual

This manual provides information needed to install, operate, and maintain the Thales ILS 420 glide slope station. It is assumed that anyone using this book to operate the equipment has a thorough understanding of ILS and that anyone using it to maintain the equipment has graduated from the THALES ILS 420 glide slope training course or has met required FAA training.

Line-Replaceable Unit Maintenance Strategy

This manual supports a line-replaceable unit (LRU) maintenance strategy that simplifies onsite maintenance and minimizes downtime and life-cycle costs. With the LRU strategy, onsite technicians need only replace assemblies they have determined are faulty through troubleshooting routines and ~~only need to know how to use~~ the equipment's built-in diagnostics ~~to identify faulty assemblies and how to replace them~~. The faulty assemblies are sent to THALES or another authorized depot for repair.

This strategy keeps the equipment in service, limits the time, skill, and equipment needs of onsite personnel, and limits assembly level diagnosis, repair, and testing to those facilities with the highly specialized equipment and technicians required to do it efficiently.

Sections

SECTION 1. GENERAL INFORMATION AND REQUIREMENTS. This section describes the equipment, its purpose, physical specifications and requirements, and the interrelationships of the equipment in the group.

SECTION 2. ~~THEORY OF OPERATION~~TECHNICAL DESCRIPTION. This section will help you understand how the whole system works and how its subsystems interrelate. It will also give you the perspective you will need to do broad troubleshooting when fault isolation procedures are not enough. It covers only those LRUs and other parts that can be replaced onsite and describes their inputs, outputs, and controls.

SECTION 3. OPERATION. This section tells you how to operate the equipment and includes controls and indicators, operating procedures, and a screen-by-screen explanation of how to control and monitor the equipment with ~~a portable maintenance data terminal (PMDT~~ the local control panel (LCP).

SECTION 4. STANDARDS AND TOLERANCES. This section lists the standards, tolerances, and parameters of the equipment in the group.

SECTION 5. PERIODIC MAINTENANCE. This section tells you how and when to check and maintain the equipment to make sure it is always performing at its peak.

SECTION 6. MAINTENANCE ~~PROCEDURES~~. This section tells you how to maintain the equipment.

SECTION 7. CORRECTIVE MAINTENANCE. This section shows you how to troubleshoot, test, and adjust, ~~and troubleshoot~~ the equipment and lists recommended test equipment. It also provides onsite LRU replacement procedures~~. for all of the LRUs in the system~~.

SECTION 8. PARTS LIST. This section lists those assemblies and parts that can be replaced onsite. When you have identified a faulty LRU, this section is where you will find the information you will need to order a replacement.

SECTION 9. INSTALLATION. This section tells you how to install, setup, and adjust the system for optimum performance.

SECTION 10. COMPUTER SOFTWARE. This section lists and describes the software used in the ILS 420. ~~equipment. When it is not applicable, it is omitted, as it has been here.~~

SECTION 11. TROUBLESHOOTING SUPPORT DATA. This section contains the ~~schematics~~interconnect drawings, wiring diagrams, assembly drawings, and other drawings that support the other sections.

APPENDIX A. This appendix lists and defines the abbreviations used in the manual and is included in each manual and volume.

Single and Dual Frequency Equipment Coverage

This manual covers these glide slope configurations: null reference, the sideband reference, and the capture-effect, single or dual equipment.

~~The Manual Online~~

~~If you would like a copy of this manual on a CD ROM or would like to access it through the Internet, contact Customer Service. Refer to the Warranty page for contact information.~~