CharterLog XMS

Getting Started Guide

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Introduction

What is CharterLog XMS

CharterLog XMS is a software program which aids commercial flight operators in managing the information necessary to insure compliance with FAA regulations. It records and tracks "flight log" forms, individual pilot records, and aircraft records. Pilot records include tracking of on/off duty times, any number of user-specified checkrides (e.g. 135.293 and 135.297), and medical certificate. Aircraft records include tracking of airframe hours/cycles, engine hours/cycles, maintenance items, life-limited parts, squawks, work orders and condition reports. Printed reports include a monthly Flight Duty Report for each pilot, which both graphically and numerically depicts the pilot's duty hours, commercial flight hours, and non-commercial flight hours for each day of the month. Summary totals are included for the current quarter, previous quarter, and current calendar year.

How CharterLog XMS Organizes Information

CharterLog XMS organizes flight operations information into three primary databases; Flight Records, Pilot Records and Aircraft Records; with supporting databases for Inventory, Mechanics and Approved Vendors.

Flight Records
The Flight Records serves as a journal for recording all pertinent information about a flight. Flight Records are analogous to printed multi-leg flight log sheets and manifest sheets used to record flight information in the cockpit. Each Flight Record stores the Aircraft ID, Flight Number, Manifest information, Squawks, VOR Check, and Remarks for the flight, plus the following for each leg:
- From & To airports
- Date, Time Zone
- Time-Out, Time-Off, Time-On, Time-In
- Hobbs Out/In
- Block Time and Flight Time
- Crew Logbook Entries (Day, Night, Takeoffs & Landings, Approaches, Instrument and Holds),
- APU Meter Out/In, APU Hours, APU Cycles
- Air Conditioner Meter Out/In, Air Conditioner Hours
- RVSM Altitude Check,
- Passenger Count, Fuel Burn and Fuel Purchase data
- Weight & Balance information

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Pilot Records

The Pilot Record database stores the information necessary to track certificates, ratings, check rides, flight time and duty time for each pilot flying for the company. While the pilot database does include a "logbook" for recording flight times, it is not intended to act as the pilot's personal logbook. It records only those times necessary for commercial flight operations reporting to the FAA.

Each pilot record includes the following:
- Pilot Certificate: type, number and date of issue,
- Logbook: includes columns necessary to track flight time, block time, day/night, takeoffs, landings, instrument time and approaches,
- Time Sheet: records on-duty date/time, off-duty date/time, and remarks for each shift,
- Ratings: records and tracks an unlimited number of category/class ratings (e.g. AIR-MEL) and type-specific 135.293 checkrides . Each 293 check includes date issued, date of last 135.293 checkride, a valid time for the checkride, and the date the next checkride is due,
- Medical: includes date, class and due dates for private, commercial and ATP operations,
- Checkrides: An open-ended list of user-specified checkrides including the date of last check, the valid time period, and the date next check is due.

Aircraft Records

The Aircraft Record database stores information necessary to track aircraft status and maintenance. Supporting databases are provided for tracking parts inventory, mechanics and vendors.

Each aircraft record includes the following:
- Aircraft Identification: Tail number, type, category, class, maximum gross weight, number of engines and required crew, typical cruise speed, maximum number of passengers and operating cost per hour.
- Status: "Airworthy", "Minimum Equipment List" or "Grounded".
- VOR Check: includes date, type of check, facility, frequency, Nav1/Nav2 errors, and date next check due.
- Airframe & Engine Log: tracks hours and cycles for airframe and up to four engines. This log is updated automatically via the Flight Records (see above).
- Squawk Log: includes date reported, flight log number & leg, problem description & corrective action (memo fields), MEL category and repair interval, and return-to-service date.

- <u>Major System Log</u>: Tracks times and overhaul intervals for aircraft engines, APU and Air Conditioner.
- <u>Maintenance Log</u>: Tracks an unlimited number of recurring maintenance items (i.e. inspections, functional tests, overhauls, etc). Recurrence interval (hours, cycles or months) can be independently set for each item. "Next Due" calculations are performed automatically.
- <u>Parts Log</u>: Tracks an unlimited number of life-limited or "on condition" parts. Replacement interval (hours, cycles or months) can be independently set for each item. "Time remaining" calculations are performed automatically.
- <u>Work Cards</u>: Provides a mechanism for scheduling and tracking all work performed on the aircraft, including: squawk resolution, recurring maintenance, parts replacement, major system changes, and one-time modifications (i.e. SBs, STCs, ADs, etc.).
- <u>Condition Reports</u>: Provides a mechanism for documenting aircraft failure trends, with the goal of preventing future failures.

How CharterLog Works

CharterLog XMS streamlines the data entry bottleneck by tracking pilot and aircraft and flight records in an integrated environment. Once the databases have been initialized (e.g. pilot and aircraft records created), the daily "logging" of flights via the Flight Log automatically updates the Pilot Records and Aircraft Records databases. Here's how it works...

- A flight is "launched" by creating a new Flight Records, specifying the departure date and route (legs), and assigning an aircraft and a crew. The Flight Launch Wizard guides the user through the process. Relevant pilot currency and aircraft maintenance status information is displayed, allowing these factors to be reviewed when selecting aircraft and crew.

- Once the Flight Record has been created and initialized with the route, crew and aircraft information, a Flight Log Form can be printed and given to the crew before departure. During the flight, the crew records detailed information for each leg including departure and arrival times, on-duty/off-duty, meter readings, passenger count, fuel burned, fuel purchase, weight and balance information, squawks (if any), VOR and RVSM checks performed, remarks, and crew logbook entries.

- At the termination of the flight, information from the completed paper form is entered into the Flight Records winow. When the record is completed and verified, it is "closed". The closing process automatically posts logbook

information for each crewmember to the Pilot Records database, hours and cycle counts for airframe and engines to the Aircraft Records database, and updates VOR check and Squawk records. The Aircraft Records update automatically triggers an update of all Maintenance and Parts records attached to the aircraft.

Closed Flight Records retain all of their information, but are sealed against further modification. If necessary, to correct errors and omissions, the Flight Record can be re-opened, modified, then closed again. The closed forms remain in the Flight Log database until such time as the program administrator decides to archive them.

Product Support

Technical Assistance

Technical assistance is available to registered customers via Email or telephone.

If you experience problems with CharterLog XMS, contact us via phone or EMail at the numbers provided below. If you get the answering machine, please leave a message. We are a small company and are not able to man the phones at all times. On such occasions, our answering machine will be on. We return most calls within a few hours, and we do our best to get back to everyone within a day. We often return calls on weekends and in the evening, so you can leave both a home and business number if desired.

Technical Assistance Contacts

EMail: support@polaris-microsystems.com
Voice: 410-810-1030

Product Updates

Product updates, including program updates, airport list updates and report template updates are available to registered customers who have a current maintenance contract in effect. Initial purchase of CharterLog XMS includes a 1-year maintenance contract. This can be extended by purchasing additional coverage. See the Online Maintenance Contract order form.

Demo Mode Restrictions

To allow pre-purchase evaluation, CharterLog XMS will operate in Demo Mode for 15 "usage days" without a valid serial number and registration code. A "usage day" is a day during which CharterLog XMS was started at least once. Running the program several times during a day still only counts as one usage day. Days where the program is not used do not count toward usage days.

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Installation Guide

Overview

This document gives step-by-step procedures for installing CharterLog XMS on your computer system. It is organized into two chapters, one for single-user installation and one for multi-user installation. Review the following to determine which installation applies to your computing environment.

Single-User Installation

An environment is considered to be Single-User when the following conditions are met...

- Only one user will be running CharterLog XMS *at any given time*.
- Both the CharterLog XMS program files *and* the associated Data folder (the folder containing the database files) will reside on the local hard drive of a single workstation.

The workstation where CharterLog XMS is installed, *may or may not* be connected to a local area network (LAN). If it is connected to a LAN, the above conditions must still be met in order for the environment to be considered "single-user". *Specifically, the Data folder <u>cannot</u> be located on a shared or mapped drive on the network.*

Multi-User Installation

An environment is considered to be Multi-User when the following conditions are met...

- One or more user may be running CharterLog XMS *at any given time*.
- The CharterLog XMS Data folder (the folder containing the database files) will reside a shared LAN (network) drive.

Single User Installation

Overview
In a single-user environment, both the CharterLog XMS program files, *and* the data files reside on the local hard drive of a *single* computer. *The CharterLog XMS program files <u>cannot</u> be installed to or run from a shared Server drive.*

The sections below give step-by-step procedures for installing and uninstalling CharterLog XMS in a single-user environment.

Workstation Setup

Installing the CharterLog XMS Program Files

1. If you have a CharterLog XMS CD, insert it into the CD ROM drive. The CD will auto-start and display the CD window. If the CD does not auto-start, select [*Start>Run...*] to open the Run dialog. Click **Browse** and locate CDROM.EXE on the CD drive. With this file selected in the Run dialog box, click **OK**.
2. Click **Client Setup** in the CD window.
3. If you are installing from the Internet, download the install file ("CLX[nnn]_CLIENT.EXE", where nnn is the version number) and place on the workstation Desktop. To begin the install, run the file.
4. Step through the install screens. If you are unsure about the install options presented on a screen, accept the preset options and click **Next >** to proceed to the next screen. When you get to the last screen, click **Finish** to complete the installation.

Initializing CharterLog XMS – Single-User

1. Double click the CharterLog XMS icon on the desktop. If the <u>Registration Dialog</u> appears, enter your <u>System ID</u>, <u>Serial Number</u> and <u>Registration Code</u>. These numbers and associated instructions are enclosed in the CD ROM envelope, or in the EMail sent to you when you purchased the program. If you are evaluating CharterLog XMS, click **OK** to proceed past the <u>Registration Dialog</u>.
2. If a data folder has not been established, CharterLog XMS will establish a "default" data path and ask you to verify that this is where you want data to reside. If a different location is desired, alter the data path accordingly. The data folder will be created and initialized with empty data files.

Importing CharterLog v3.x Data

The CharterLog XMS Data Manager includes a utility which performs a "raw" import of all data records from CharterLog v3.x. The procedures for running this utility are given below. However, if you have been using your existing CharterLog to track Aircraft Maintenance, additional manual "clean up" procedures may be necessary. If you require assistance, contact Polaris Microsystems. *There is no additional charge for this service.*

☞ The following assumes that CharterLog XMS has been installed on the same workstation as your existing CharterLog.

☞ The import process may take a long time, depending on the size of your existing CharterLog database.

1. Shut down CharterLog XMS and your existing version of CharterLog.
2. Select *[Start>Programs>CharterLog XMS>CharterLog XMS Data Manager]* to start the Data Manager.
3. Click **Import from CharterLog v3.x** and follow the onscreen instructions.

Uninstalling CharterLog XMS – Single-User

1. Select [*Start>Settings>Control Pane]l* to open Control Panel, then double click the **Add/Remove Programs** icon.
2. Select "CharterLog XMS Client" in the programs list, then click **Remove**. Follow the on screen instructions.

Multi User Installation

Overview

In a multi-user environment, CharterLog XMS operates as a "client/server" application. In layman's terms, this means the following:
- The CharterLog XMS program files must be installed on each workstation from which it will be run. *The CharterLog XMS program files cannot be installed to or run from a shared Server drive.*
- The CharterLog XMS data files are located in a pre-designated folder on a shared Server drive. *No data files are stored on workstation drives.*

The sections below give step-by-step procedures for installing and uninstalling CharterLog XMS in a multi-user environment.

Server Setup

In order to prepare your Server for CharterLog XMS, you must do the following:
1. Create a shared folder which will serve as the CharterLog XMS data folder.
2. Grant CRUD (create/read/write/delete) permissions for this folder to all LAN users who will be running the CharterLog XMS program.

Workstation Setup

Perform the following steps for *each* workstation from which you will be running CharterLog XMS.

Installing the CharterLog XMS Program Files

1. If you have a CharterLog XMS CD, insert it into the CD ROM drive. The CD will auto-start and display the CD window. If the CD does not auto-start, select [*Start>Run...*] to open the Run dialog. Click **Browse** and locate CDROM.EXE on the CD drive. With this file selected in the Run dialog box, click **OK**.
2. Click **Client Setup** in the CD window.
3. If you are installing from the Internet, download the install file ("CLX[nnn]_CLIENT.EXE", where nnn is the version number) and place on the workstation Desktop. To begin the install, run the file.
4. Step through the install screens. If you are unsure about the install options presented on a screen, accept the preset options and click **Next >** to proceed to the next screen. When you get to the last screen, click **Finish** to complete the installation.

Initializing CharterLog XMS – Multi-User

☞ If any error messages appear during the initial startup phase, make a note of the text of the error message and the error number (if any) and report it to your network administrator.

1. Double click the CharterLog XMS icon on the desktop. If the Registration Dialog appears, enter your System ID, Serial Number and Registration Code. These numbers and associated instructions are enclosed in the CD ROM envelope, or in the EMail sent to you when you purchased the program. If you are evaluating CharterLog XMS, click **OK** to proceed past the Registration Dialog.
2. If a Browse For Folder dialog box appears, use this dialog to locate the CharterLog XMS data folder (set up in the previous section) on your server

drive. Select this folder then click **OK**. If you are not sure where the data is located, contact your network administrator. At this point, CharterLog XMS should establish a connection with the server, open the data files, and display the main program window.

Importing CharterLog v3.x Data

The CharterLog XMS Data Manager includes a utility which performs a "raw" import of all data records from CharterLog v3.x. The procedures for running this utility are given below. However, if you have been using your existing CharterLog to track Aircraft Maintenance, additional manual "clean up" procedures may be necessary. If you require assistance, contact Polaris Microsystems. *There is no additional charge for this service.*

☞ The following assumes that the Server Setup procedures (see above) has been performed on the Server where the existing CharterLog data resides.

☞ The import process may take a long time, depending on the size of your existing CharterLog database.

1. Shut down CharterLog XMS and your existing version of CharterLog on all workstations.
2. Log into the Server machine and start the CharterLog XMS Data Manager (double click on the desktop icon).
3. Click **Import from CharterLog v3.x** and follow the onscreen instructions.

Uninstalling CharterLog XMS – Multi-User

Uninstalling Workstation Files

☞ Perform the following steps on each applicable workstation.

1. Select [*Start>Settings>Control Pane]l* to open Control Panel, then double click the **Add/Remove Programs** icon.
2. Select "CharterLog XMS Client" in the programs list, then click **Remove**. Follow the on screen instructions.

Setup Checklist

Use this page as guide for setting up CharterLog XMS on your system. The references in parenthesis can be found in the Help file

Basic Setup

👉 The aircraft maintenance, mechanics and vendor tracking features of CharterLog XMS are optional. Setup for these are marked with a † in the list below.

☐ -- Enter your company information. (Setting Program Options.)

☐ -- Create a Pilot Record for each active pilot in your company. (Adding a New Pilot Record)

☐ -- Enter Checkride and Ratings records for each pilot as necessary. (Entering Checkrides, Entering Ratings)

☐ -- Create an Aircraft Record for each aircraft. (Adding a New Aircraft Record)

☐ -- (†) Enter Maintenance and Parts records for each aircraft. (Setting up Maintenance Tracking)

☐ -- (†) Create Mechanic Records for each mechanic on your staff. (Adding a new Mechanic Record)

☐ -- (†) Enter Training and RII Authorization records for each mechanic. (Tracking Recurrent Training, Entering RII Authorizations)

☐ -- (†) Create Approved Vendor records and enter Type Approvals (Adding a New Vendor Record, Entering Type Approvals)

Back-Entering Pilot Records

Since CharterLog XMS is not intended to act as the pilot's official logbook, there is no need to back-enter previous flight time and duty time into the Pilot Records window. As Flight Records are processed and closed, entries will automatically be made to these areas. The only exception to this is when you wish to be able to produce a complete pilot currency and experience reports for the current month (or year). To do this, you first need to enter the necessary flights and duty shifts for each pilot. See Entering Duty Shifts and Entering Pilot Logbook Records for step-by-step procedures.

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The Basics

The Main Window

CharterLog XMS 's main window (shown below) provides a central point from
which all of the programs windows and functions can be accessed.
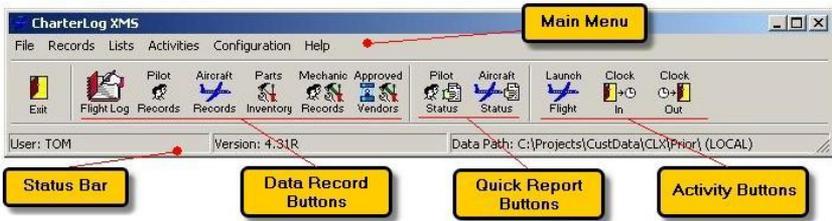
Main Menu

The Main Menu provides pull-down menu access to all of CharterLog XMS's
functions and data records:

- File Menu -- Provides user log-in/out functions, plus access to the
  Database Manager and Update Utility.
- Records Menu -- Provides menu access to the main data record windows
  (see Data Record Buttons below).
- Lists Menu -- Provides editing access to top-level supporting lists via the
  Supporting List Editor. Secondary supporting lists can be edited from the
  various data record windows.
- Activities Menu -- Provides menu access to frequently-utilized functions
  (see Activity Buttons below).
- Configuration Menu -- Includes functions for setting global program
  options. See Setting Program Options.
- Help Menu -- Provides access to program information ("About" dialog),
  documentation and related Web links.

Data Record Buttons

These buttons provide one-click access to the main data record windows in
CharterLog XMS:

- Flight Log -- Opens the Flight Log Window from which all flight-related
  information and reporting is managed.
- Pilot Records -- Opens the Pilot Records Window from which all pilot-
  related information and reporting is managed.

- Aircraft Records -- Opens the [Aircraft Record Window](#) from which all aircraft-related information and reporting is managed.
- Parts Inventory -- Opens the [Parts Inventory Window](#) from which information on uninstalled (inventoried) aircraft parts is managed.
- Mechanic Records -- Opens the [Mechanic Records Window](#) from which all mechanic-related information and reporting is managed.
- Approved Vendors -- Opens the [Vendor Records Window](#) from which vendor-related information and reporting is managed.

Quick Report Buttons

These buttons provide one-click access to frequently-used reports:

- Pilot Status -- Prints a report which summarizes the "currency" status of pilots.
- Aircraft Status -- Prints a report which summarizes the pending maintenance and squawk status of aircraft.

Activity Buttons

These buttons provide one-click access to frequently-utilized functions:

- Launch Flight -- Initiates the creation of a new Flight Record by opening the [Flight Launch Wizard](#).
- Clock-In -- Creates a new non-flight Duty Shift record at the start of a duty shift.
- Clock-Out -- Completes the currently-open non-flight Duty Shift record (created by Clock-In) at the end of a duty shift.

Status Bar

These area displays various program-related information:

- User -- Shows the username of the current user.
- Version -- Shows the program version number.
- Data Path -- Shows the full path name to the folder containing the CharterLog XMS database. The "server" name is shown in parenthesis next to the path.

Basic Record Editing

This topic explains how to editing data records in CharterLog XMS. The techniques are generally applicable to all of the main data windows.

Record Modes

The screen shot below shows a portion of the Pilot Records Window. Note that the editable fields have a turquoise background. This background color indicates that the record is in <u>Display Mode</u>.

In <u>Display Mode</u>, the field values are visible, but cannot be changed.

The screen shot below shows the same record. Note that the editable fields now have a white background. This background color indicates that the record is now in <u>Edit Mode.</u>

In <u>Edit Mode</u>, field values can be modified. A record is placed into <u>Edit Mode</u> by clicking the button in the associated <u>command bar</u>.

Editing an Existing Record

- Locate the record using the search or navigating buttons in the <u>command bar</u>, or using the associated scroll bar.
- Click the button to place the record in <u>Edit Mode</u>.
- Make changes to the fields as required.
- Click the to save the changes, or the to discard changes.

Adding a New Record

- Click the button to add the new record and place it in <u>Edit Mode</u>.
- Make changes to the fields as required.
- Click the to save the new record, or the to discard it.

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Deleting a Record

- Locate the record using the search or navigating buttons in the command bar, or using the associated scroll bar.
- Click the 🗑 button to delete the record.

Command Bars

Many of the common program functions are grouped into button bars called "command bars". Most of on-screen windows incorporate at least one command bar located at the top. In cases where the window in question includes sub-lists of associated data records, there will be additional command bars for those lists. A typical command bar is shown below.

The command buttons and the functions they perform are described in detail below. Note: In many cases, some of the buttons described below will either be omitted from the command bar or disabled, indicating that their respective functions are not applicable.

Close - Closes the window.

Help - Displays help information for the window.

First - Move to the first record. Keyboard Shortcut: [Ctrl-Home]

Prior - Move to the previous record. Keyboard Shortcut: [Ctrl-PgUp]

Next - Move to the next record. Keyboard Shortcut: [Ctrl-PgDn]

Last - Move to the last record. Keyboard Shortcut: [Ctrl-End]

New Record - Adds a new record to the database. Keyboard Shortcut: [Ctrl-Insert]

Delete Record - Permanently erases the displayed record. A confirmation dialog is always displayed first, giving the user an opportunity to cancel the delete. Keyboard Shortcut: [Ctrl-Delete]

Edit Record - Places the displayed record in Edit mode, allowing fields to be entered and/or modified. Keyboard Shortcut: [Ctrl-Enter]

Post Edit - Saves any changes made to the displayed record during editing. CharterLog XMS will do an automatic "Post" before moving to another record or closing the window.   Keyboard Shortcut: [Ctrl-Enter]

Cancel Edit - Cancels any changes made to the displayed record during editing. When an edit is canceled, all fields are restored to their pre-edit state. A confirmation dialog is always displayed first, giving the user an opportunity to retain the changes.

Refresh Data - Reads the displayed record from disk and updates the display. This button is useful in a shared-data installation where multiple users may be modifying data concurrently.

Set Bookmark - This button works in conjunction with the Return To Bookmark button to provide a convenient way to mark and quickly return to a record in the database. To mark the displayed record, click the button. To later return to the marked record, click the Return To Bookmark button (below). Note that bookmarks are lost when the CharterLog XMS session is terminated.

Return to Bookmark - Displays a previously-book marked record. See Set Bookmark (above) for details.

Locate -Displays a search dialog to aid in locating records in a large database. The search dialog allows the user to locate a record

Print - If a record-print option is available for the database, clicking this button initiates the print operation.

Modified By - Displays a dialog showing the date and time the currently displayed record was last modified. If Access Control is in use, the username of the person who did the modifications is also displayed.