

The logo for ORBCOMM, featuring the company name in white, bold, sans-serif capital letters on a red rectangular background. A small satellite icon is integrated into the letter 'O'.

CONNECTING THE  
WORLD'S ASSETS



# inthinc Connect ELD User Guide

IT002, Version 0.01  
October 2017

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# TABLE OF CONTENTS

<b>Contact Information .....</b>	<b>3</b>
Contact Customer Care .....	3
Headquarters .....	3
<b>Preface .....</b>	<b>6</b>
Purpose .....	6
Notation .....	6
<b>1. About the inthinc Connect App .....</b>	<b>7</b>
1.1. About the inthinc Connect ELD.....	7
<b>2. ELD Dashboard .....</b>	<b>8</b>
2.1. DRIVER Tab .....	9
2.2. VEHICLE Tab .....	10
2.3. ELD Export.....	10
2.4. ELD Status.....	10
2.5. Timers .....	11
2.6. ELD Notification/Malfunctions .....	11
<b>3. Getting Started .....</b>	<b>12</b>
3.1. inthinc Connect App Login.....	12
3.2. Driver Login .....	13
3.3. Duty Status .....	14
3.3.1. ELD Dashboard Status Options .....	14
3.4. IFTA Status.....	15
3.5. Editing HOS Logs.....	15
<b>4. DRIVER TAB .....</b>	<b>16</b>
4.1. HOS Logs Overview.....	16
4.2. Viewing the HOS Log Page.....	17
4.3. Graph View and Summary View .....	17
4.4. Unidentified Logs Option .....	18
4.5. Showing the ELD Log Header .....	19
4.6. Compliance Options .....	20
4.7. Change Ruleset .....	21
<b>5. VEHICLE TAB .....</b>	<b>22</b>
5.1. Vehicle ID Details .....	23
5.2. Trailer Option .....	24
5.3. Co-Driver and Occupants .....	24
5.4. e-DVIR .....	25
<b>6. Law Enforcement Operating Instructions .....</b>	<b>26</b>
<b>APPENDIX A: FMCSA regulation §395.2 Summary .....</b>	<b>27</b>
<b>APPENDIX B: Safety Concerns.....</b>	<b>28</b>



Lower Crash Rates ..... 28

Quicker Inspections ..... 28

Benefits of Alerts and Timers ..... 28

Less Intrusive Communications ..... 28



## PREFACE

### Purpose

This document describes the ELD functions of the inthinc Connect app. The Connect app helps carriers meet the requirements of the ELD mandate.

The four main elements of the ELD mandate include:

- Requiring commercial truck and bus drivers who currently use paper log books to maintain hours-of-service records to adopt ELDs.
- Strictly prohibiting commercial driver harassment. The Final Rule provides both procedural and technical provisions designed to protect commercial truck and bus drivers from harassment resulting from information generated by ELDs.
- Setting technology specifications detailing performance and design requirements for ELDs so that manufacturers are able to produce compliant devices and systems – and purchasers are enabled to make informed decisions.
- Establishing new hours-of-service supporting document (shipping documents, fuel purchase receipts, etc.) requirements that will result in additional paperwork reductions. In most cases, a motor carrier would not be required to retain supporting documents verifying on-duty driving time.

### Notation

Throughout this document, the term *asset* is used to refer to a piece of equipment with an activated ORBCOMM mobile unit.

Images shown in this document may vary slightly from the user's view.



## 1. ABOUT THE INTHINC CONNECT APP

The inthinc ELD app is a part of the inthinc Connect app. inthinc Connect™ provides real-time insight and access to driver behavior and compliance to mandated regulations. Eliminating the need for paper-logs, the inthinc Connect app focuses on ELD and electronic Hours of Service tracking, Driver/Vehicle Inspection Reports (DVIR), Fuel Tracking and much more.

The inthinc Connect app keeps drivers focused on safe driving behaviors while accurately logging HOS data. Electronic HOS logs mitigate the need for painstaking manual paperwork and minimize errors associated with paper logs, decreases administrative overhead, and ensures your fleet of good CSA scores.

### Key Features:

- Track and view On Duty, Driving, Off Duty, and Sleeper Berth duty status time
- Electronic Hours of Service
  - *Track vehicle usage for both personal and professional driving*
  - *Identify load type (hazardous or non-hazardous)*
  - *Check available hours in real time*
- Driver/Vehicle Inspection Reports
  - *Pre- and post-trip inspection reporting*
  - *Safe to operate vehicle – meets CSA compliance*
  - *Capture/report vehicle non-compliant events*
- IFTA tax reporting
- Trailer tracking
- Fuel use tracking
- Occupant tracking – co-drivers and non-driving occupant

### 1.1. About the inthinc Connect ELD

The inthinc ELD is the solution for meeting Federal Motor Carrier Safety Administration (FMCSA) ELD rule requirements. The FMCSA ELD rule:

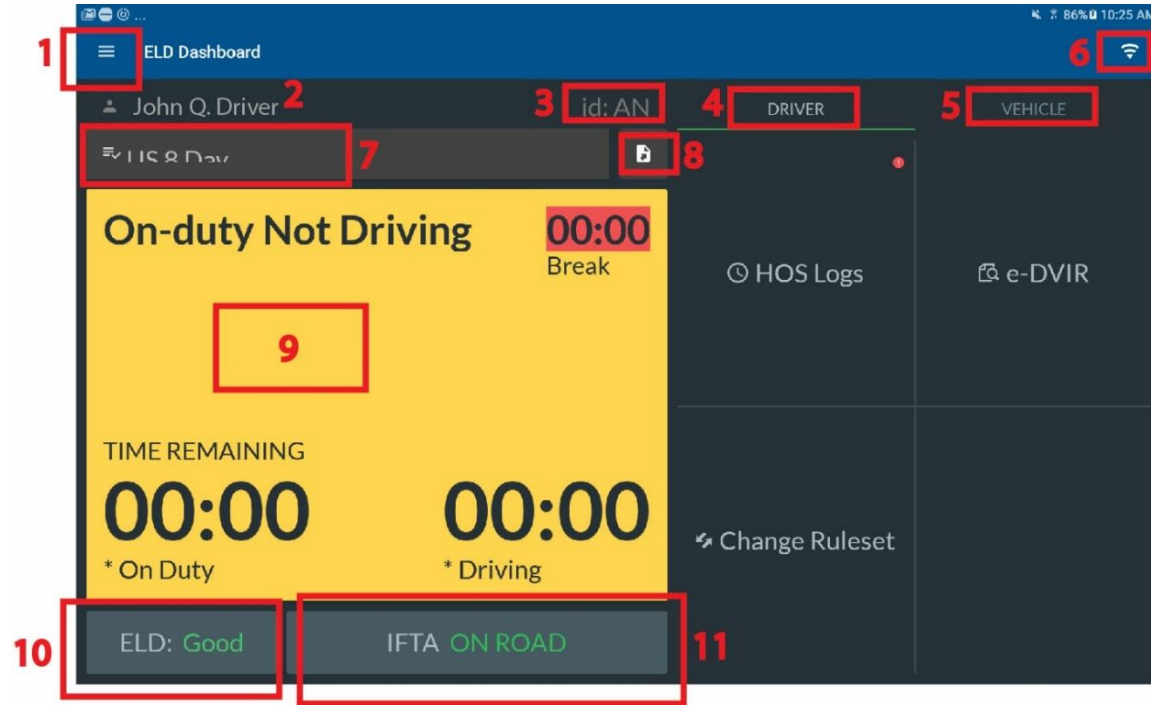
- Requires ELD use by commercial drivers who are required to prepare hours-of-service (HOS) records of duty status (RODS).
- Sets ELD performance and design standards, and requires ELD providers to be certified and registered with FMCSA.
- Establishes what supporting documents drivers and carriers are required to keep.
- Prohibits harassment of drivers based on ELD data or connected technology (such as fleet management system). The rule also provides recourse for drivers who believe they have been harassed.



## 2. ELD DASHBOARD

This section features an overview of the ELD Dashboard. The ELD Dashboard presents a complete picture of all the information a driver needs for HOS logging and compliance. The ELD Dashboard is accessed from the inthinc Connect app. (The inthinc Connect app is available on the Google Play Store).

**Figure 1: ELD Screen**



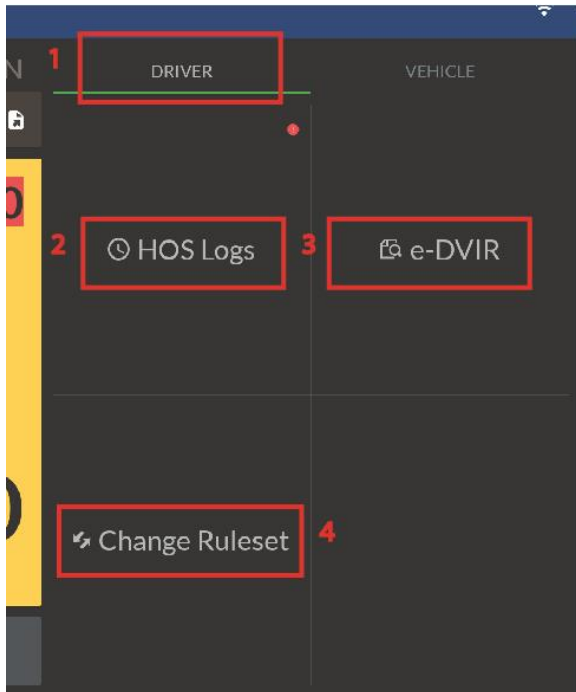
Interface Item	Function
1	Slideout menu. Use this to access other functions of the Connect app.
2	Logged in driver. Displays the name of the current driver.
3	Driver ID. Displays the ID of the current driver.
4	Driver tab. Displays functions the focus on the driver.
5	VEHICLE tab. Displays functions that focus on the vehicle.
6	Wi-Fi connection button. Displays the status of the current Wi-Fi connection. Tap to select a Wi-Fi connection.
7	Ruleset button. Tap to select a Ruleset.
8	One Touch Export button. Tap this to open log export options.
9	Driver Status tile. Displays the driver status, and timers. Tap to access driver status options.
10	Vehicle Status tile. Tap this to display vehicle details.
11	IFTA status. Tap this to set the off/of road status.



## 2.1. DRIVER Tab

The DRIVER tab contains functions the driver uses pre-trip and post-trip. Below is an overview of the DRIVER tab, located on the ELD Dashboard.

**Figure 2: ELD DRIVER Tab**

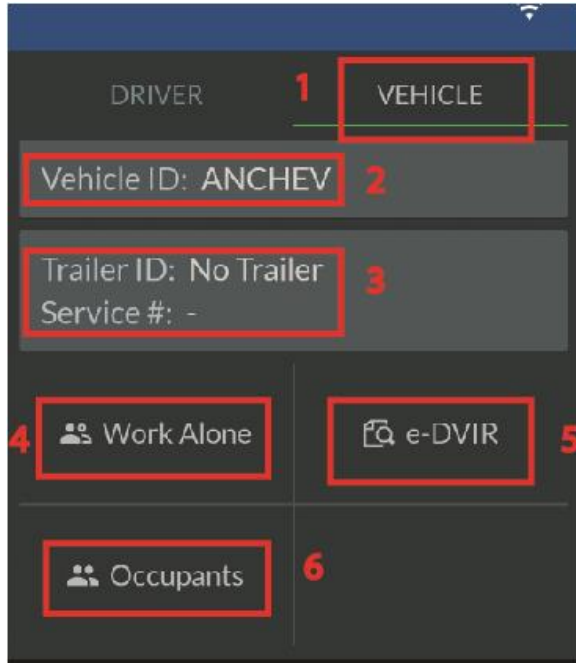


Interface Item	Function
1	DRIVER tab. Tap this to access driver functions.
2	HOS Logs tile. Tap this to display the HOS Log page. A graph view and a summary view are available. The One Touch Export button on this page allows export of the logs from this page.
3	e-DVIR tile. Tap this tile to review forms.
4	Change Ruleset tile. Tap this tile select a Ruleset for the current drive.

## 2.2. VEHICLE Tab

VEHICLE tab functions are used during a trip when connected to a vehicle. Below is an overview of the ELD VEHICLE tab, located on the ELD Dashboard.

**Figure 3: VEHICLE Tab**



Interface Item	Function
1	VEHICLE tab. Tap this to display vehicle information and functions.
2	Vehicle ID tile. Tap this to display vehicle information.
3	Trailer ID tile. Tap this to display the Trailer and Service wizard to attach a trailer to a trip.
4	Work Alone time. Set a timer for working alone.
5	e-DVIR tile. Tap this to review forms.
6	Occupants tile. Tap this to add and review occupants on the trip.

## 2.3. ELD Export

HOS logs can be displayed on a device screen for easy review. ELD export options available are USB, Bluetooth, or email. See [Compliance Options](#) for more information.

## 2.4. ELD Status

Displayed on the ELD status dashboard:

- Driver
- Driver ID
- Driver current rule set

## 2.5. Timers

Hours of Service regulations are issued by the Federal Motor Carrier Safety Administration and govern the working hours of anyone operating a commercial motor vehicle (CMV) in the United States. See [FMCSA regulation §395.2](#) for information on how timers are governed.

Timers that display in the Off Duty, Waiting, Sleeper Berth, or Personal duty status:

- Cycle Reset
- Daily Reset
- Cycle Time

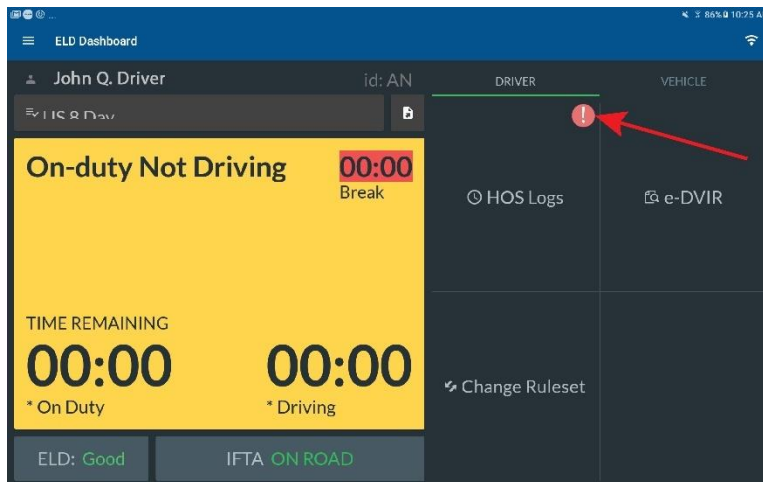
Timers that display in On Duty Not Driving, Yard Movement–On Duty Not Driving, and Driving status:

- On Duty Time – Accumulated time driving and in On Duty status.
- Driving Time – Accumulated time spent driving.
- Break Time – A countdown to a required break.

## 2.6. ELD Notification/Malfunctions

An exclamation mark (!) appears on a tile that needs attention. This Notification symbol is called out on the screen shot below.

**Figure 4: ELD Notification**



1. Tap the tile with the display notification symbol.
2. Perform any actions required to resolve the issue.

Notifications include:

- e-DVIR: A port-trip or pre-trip inspection is required.
- HOS profile change: A profile has changed.
- ELD exemption: An exemption has been enabled.
- Driver not logged in: The vehicle has been driven with no driver logged in.
- Log certification: Open a log to certify it.
- HOS Logs Summary: Review work over a shift. Sign driver logs.

### 3. GETTING STARTED

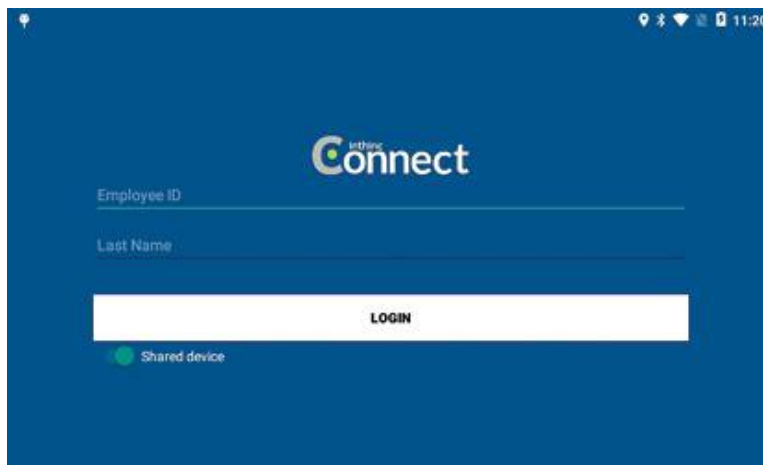
The inthinc Connect app runs on Android platforms. Run the Connect app to access the ELD. The ELD Dashboard is the starting spot for all ELD functions. Functions available on the ELD Dashboard include:

- Duty Status
- Vehicle Details/Diagnostics
- IFTA On/Off Road
- Ruleset
- HOS Logs
- Trailer and Service
- Occupants

#### 3.1. inthinc Connect App Login

Below is an image of the Login page of the inthinc Connect app.

**Figure 5:** Connect Login



Login to Connect access the ELD functions.

1. Turn the vehicle to ignition on.
2. Ensure in-cab device is powered on.
3. Confirm the Wi-Fi connection is active from tablet to in-cab device.
4. Launch the inthinc Connect app.
5. Enter Employee ID.
6. Enter Last Name.
7. Tap the **LOGIN** button. The Home page displays.

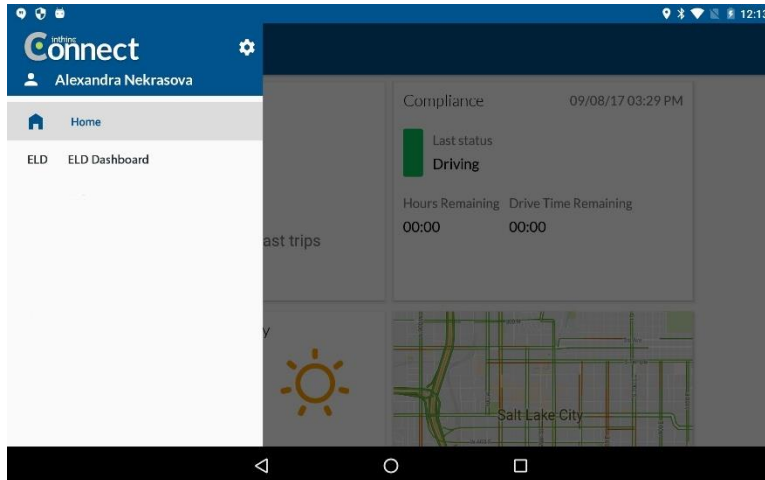
Employee ID and Last Name must be entered the exact same way as they are listed in the driver's inthinc Portal ELD profile. Last name is case-sensitive. Note that this step is an app login, not a driver login. See below for driver login.

If the Login page asks for an account ID, please contact your admin for the account ID for initial registration of the app.

## 3.2. Driver Login

A driver login must be performed before moving the vehicle.

**Figure 6: ELD Dashboard Link Highlighted**



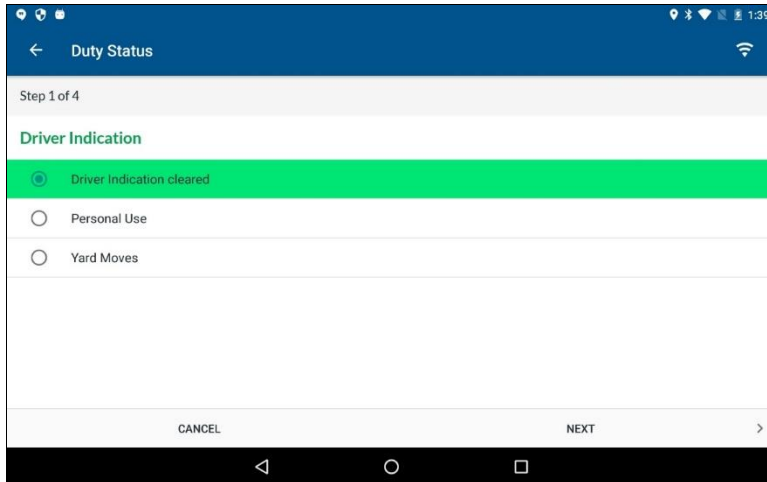
Begin this procedure from the Connect app.

1. Tap the **Slideout** icon.
2. Tap the **ELD Dashboard** link. The ELD Dashboard page displays.
3. Tap the **No Driver/Duty Status** tile.
4. The Login screen displays.
5. Confirm your driver is displayed.
6. Answer all questions provided.
7. Tap **SUBMIT**.

### 3.3. Duty Status

Set Duty Status on these screens. See [APPENDIX A: FMCSA REGULATION §395.2 SUMMARY](#) for more information on Duty Status.

**Figure 7: Duty Status**



Ensure you are logged in as a driver.

1. Tap the **Slideout** icon and select the **ELD Dashboard** link. The ELD Dashboard displays.
2. Tap the **Duty** tile. The Duty Status screen displays.
3. Answer all questions provided.
4. Tap **SUBMIT**.

#### 3.3.1. ELD Dashboard Status Options

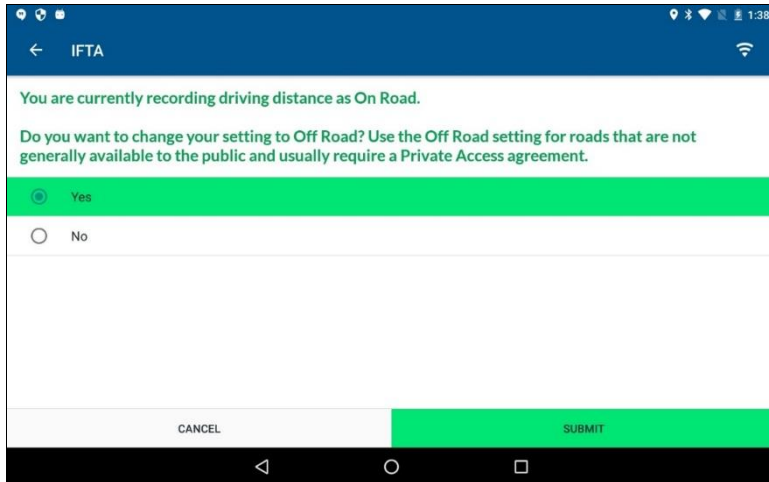
Tap the Duty Status tile to select from these duty status options. A wizard will allow the selection of these options.

- On Duty Driving, On Duty Not Driving
- Pre-trip or Post-trip DVIR
- Fuel
- Hazardous Materials indication
- Optional status indicators: Yard Move, Personal Use

### 3.4. IFTA Status

Track International Fuel Tax Agreement (IFTA) status from the IFTA status screen on the ELD dashboard.

**Figure 8: IFTA screen**



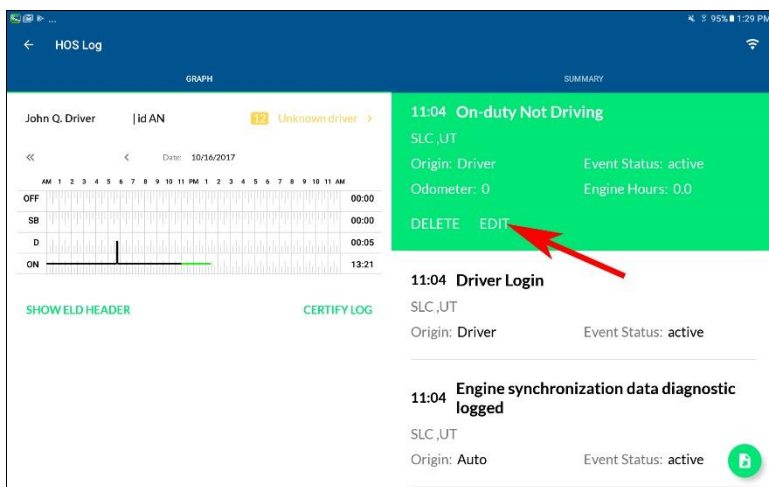
Begin this procedure from the ELD dashboard. To change IFTA status:

1. On the ELD Dashboard, tap the **IFTA** tile. The IFTA screen displays.
2. Answer the questions, then tap **SUBMIT**.

### 3.5. Editing HOS Logs

As needed, drivers can edit HOS logs in the ELD app. Edits are made from entries.

**Figure 9: Editing HOS Logs**

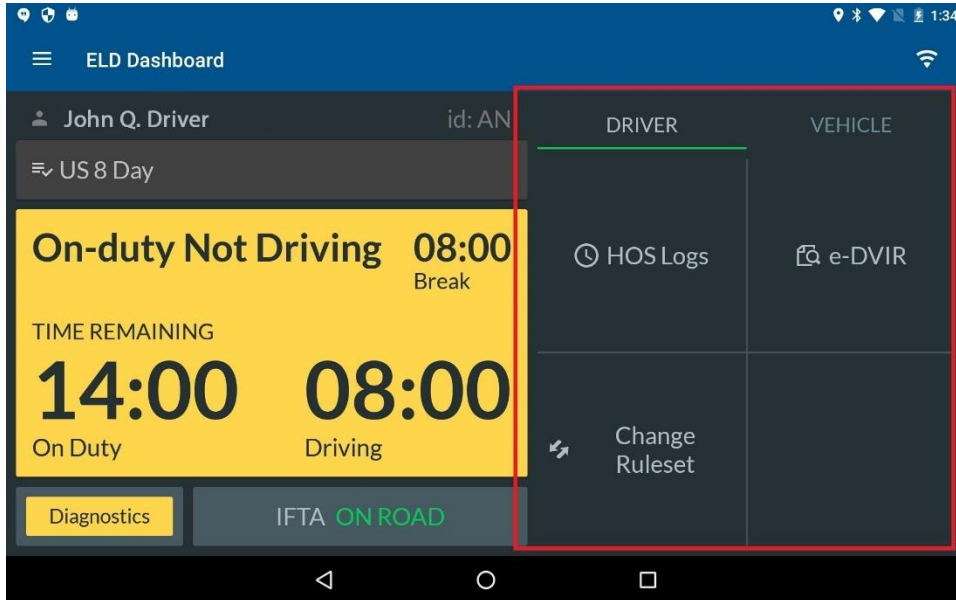


1. On the HOS Log page (Driver tab > HOS Logs) be sure the Graph tab is displayed.
2. Tap the event to be edited. An option to delete or edit displays.
3. Tap the **Edit** link. The event display in an editing screen.
4. Make any necessary changes.
5. Tap **SUBMIT**.

## 4. DRIVER TAB

HOS logs can be viewed from the DRIVER tab of the ELD Dashboard. Rulesets can be set from the DRIVER tab. DVIR forms can be reviewed. Note the DRIVER tab highlighted on the screen shot below.

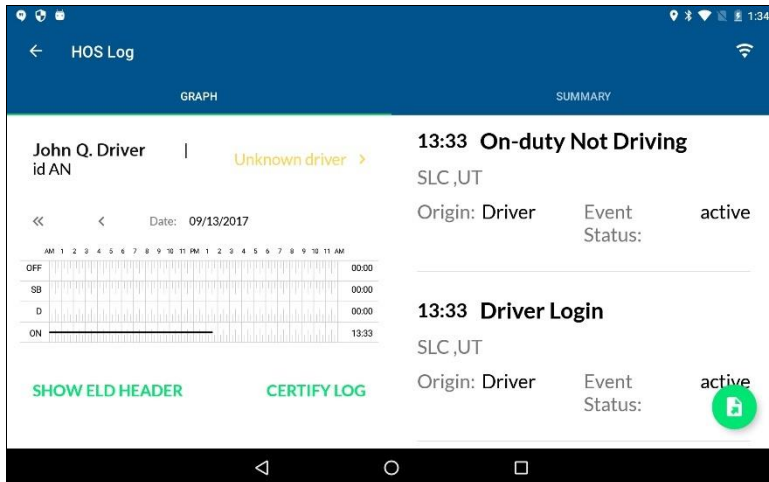
**Figure 10: DRIVER tab**



### 4.1. HOS Logs Overview

The HOS Logs can be viewed from the DRIVER tab.

**Figure 11: HOS Log**



The HOS log helps ensure DOT compliance. A graph view and a summary view are available for the HOS log from the ELD Dashboard. The HOS log can be exported via email, Bluetooth, or to a device’s USB port. Note the green One-Touch Export button in the lower right of the screen.

The HOS Log tile displays an alert when an HOS related alert is reported from the ELD engine.



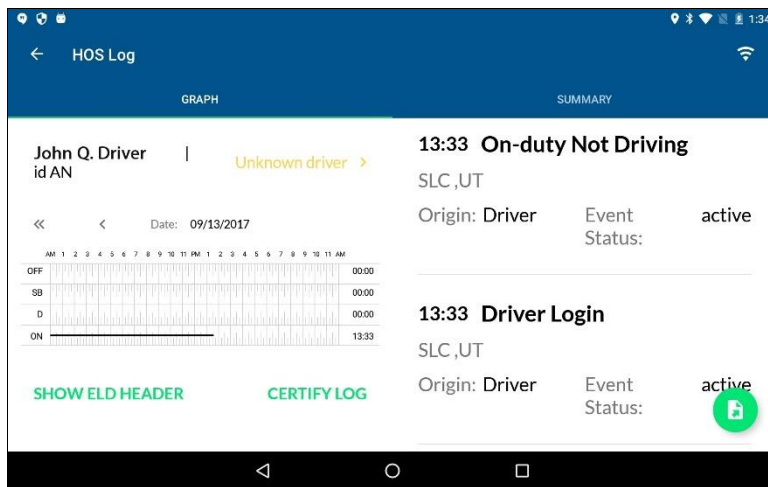
HOS Alerts:

- I am out of hours.
- I have any HOS Violations.
- Someone has an edit suggestion I need to review.
- Certify HOS Logs for a time frame.

## 4.2. Viewing the HOS Log Page

The HOS Log page allows a driver to get information about the current logged in session. The HOS log can be exported from this page.

**Figure 12: HOS Log**



Begin this procedure from the ELD Dashboard.

1. Tap the **DRIVER** tab (if not already displayed.) The HOS Logs tile becomes available.
2. Tap the **HOS Logs** tile. The HOS Log page displays.

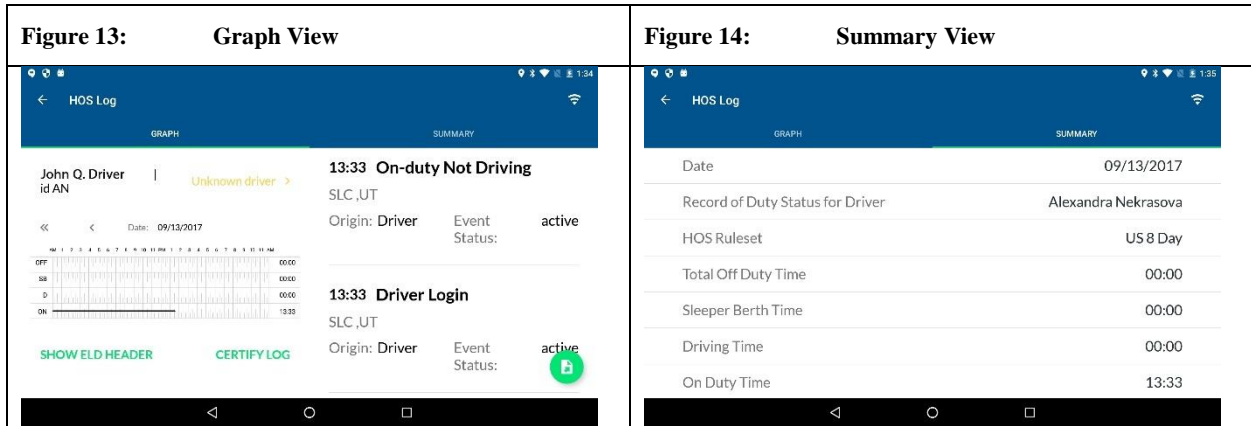
## 4.3. Graph View and Summary View

The Graph View is a ‘at a glance’ view of HOS logs. The HOS log can be exported from Graph view. The Summary View provides a text list of the HOS log information.

Summary View items:

- Date
- Record of Duty Status of Driver
- HOS Ruleset
- Total Off Duty Time
- Sleeper Berth Time
- Driving Time
- On Duty Time
- Waiting Time

- On Duty Time 7-day Rule
- Total Truck Distance



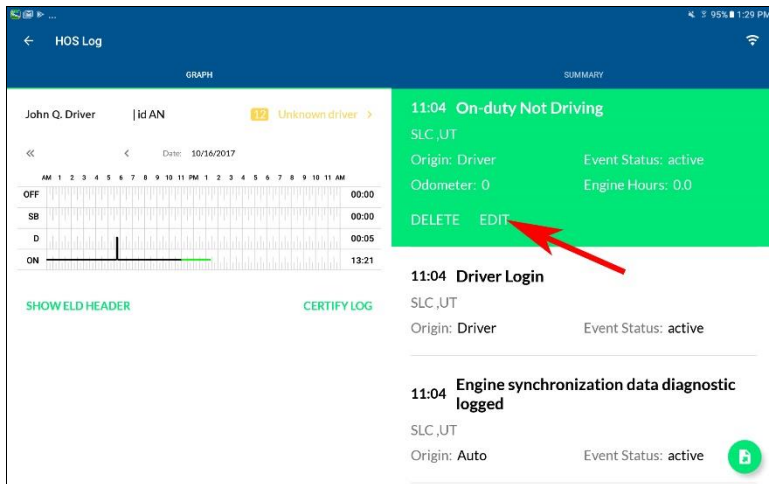
Toggle between views on the HOS Log page.

1. Tap the **GRAPH** link (at the top of the page) to switch to the graph view.
2. Tap the **SUMMARY** link (at the top of the page) to switch to the SUMMARY view.

### 4.4. Unidentified Logs Option

Events that are recorded without a driver logged in are available for review in the logs. Unknown events can be assumed by the driver on this page.

**Figure 15: Unidentified Logs Option**

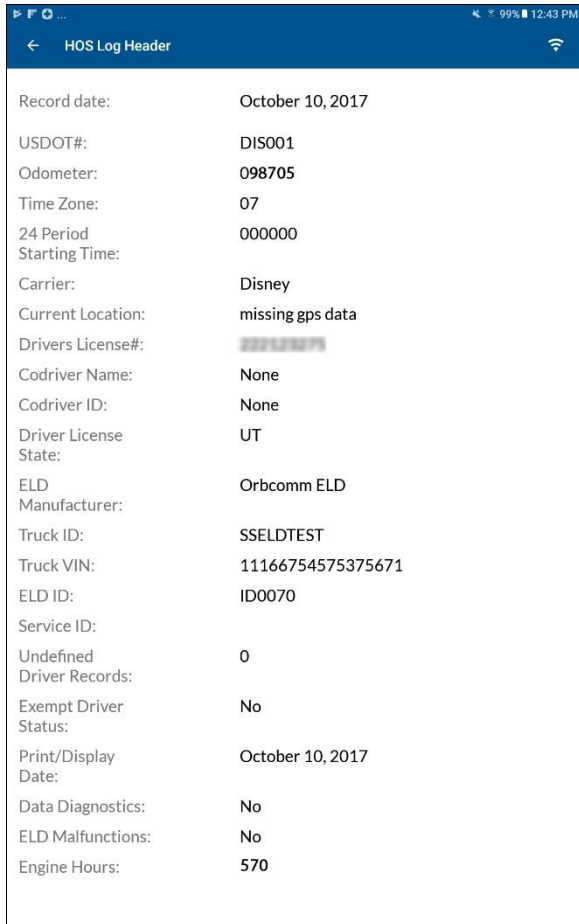


1. On the HOS Log page (Driver tab > HOS Logs) be sure the Graph tab is displayed.
2. Tap the event to be edited. An option to delete or edit displays.
3. Tap the **Edit** link. The event displays in an editing screen.
4. Assume the event.
5. Tap **SUBMIT**.

## 4.5. Showing the ELD Log Header

The ELD Log Header page contains log information for the driver’s use. This page will be exported as part of the logs.

**Figure 16: HOS Log Header**



Begin this procedure from the DRIVER tab. To display the HOS Log Header:

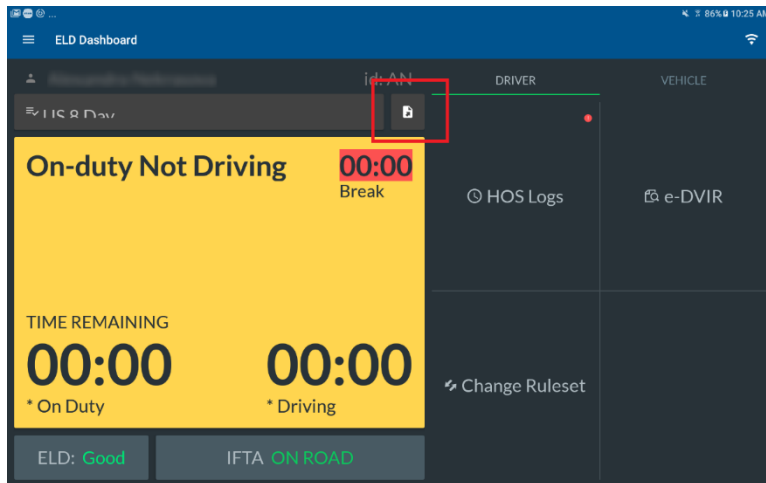
1. Tap the **HOS Logs** tile. The HOS Log page displays.
2. Tap the **HOS Log Header** link. The HOS Log Header page displays.

## 4.6. Compliance Options

For roadside inspections, export the HOS log. Export options include USB, Bluetooth, and email. Begin this procedure from the HOS Log page. HOS Logs can be exported via the green button on the HOS Logs page, or using the One-Touch Export button on the ELD Dashboard.

Note the call-out to the One Touch Export button on the screen shot below. This button will display as a green circle icon on the HOS Log page.

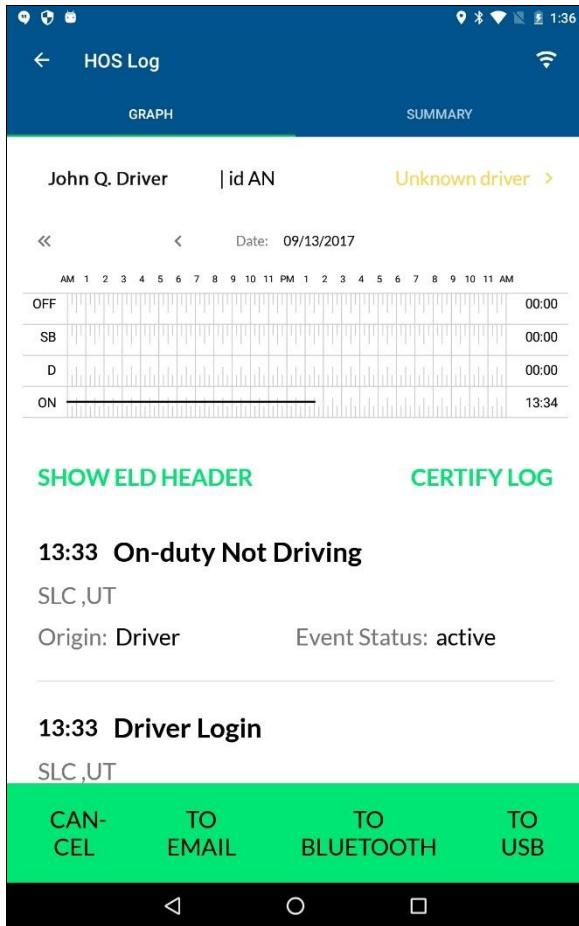
**Figure 17: One Touch Export Button**



1. Tap the **One Touch Export** button (at the top of the page). Export options display (email, USB, Bluetooth).
2. Tap the option desired.
3. Follow any instructions for the export option selected.

See the image below for the export options that display on the screen. (The green bar along the bottom of the screen).

**Figure 18: Logs Export**



An export option, when selected, will start the export wizard.

## 4.7. Change Ruleset

Change the ruleset for the current session. Select the required HOS ruleset to comply with the regulations governing the trip. Begin this procedure from the ELD Dashboard.

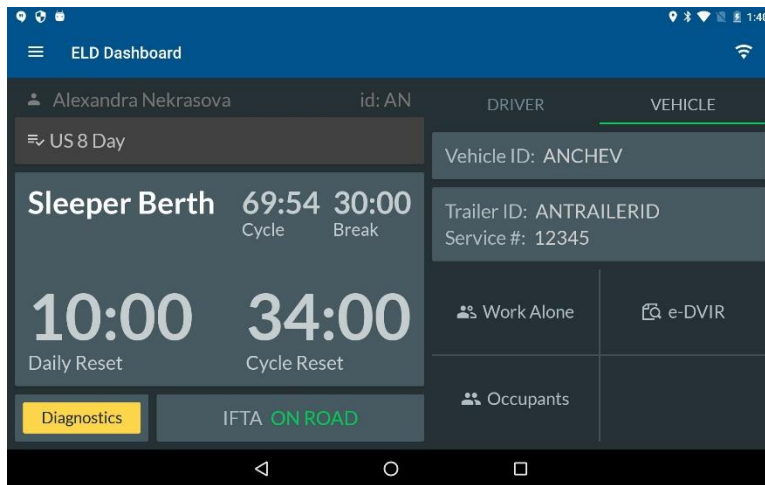
1. Tap the **DRIVER** tab to display the Change Ruleset tile.
2. Tap the **Change Ruleset** tile.
3. Select the desired ruleset from the list of rulesets.
4. Tap **SUBMIT**.

## 5. VEHICLE TAB

The VEHICLE tab displays a Vehicle ID and a Trailer ID. Tiles that display when the VEHICLE tab is tapped:

- Occupants
- e-DVIR

**Figure 19: VEHICLE Tab**

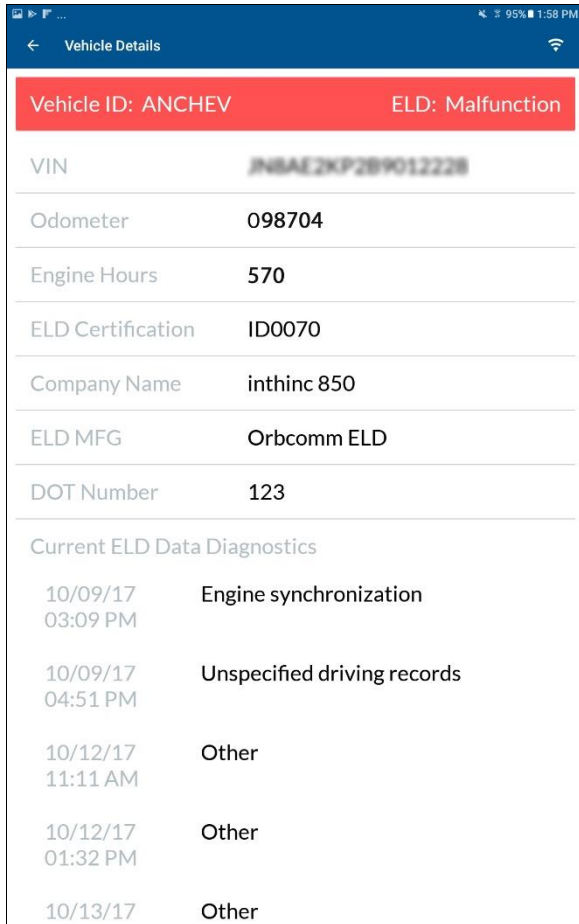


When the vehicle is moving the VEHICLE tab will automatically display, and the tiles on the VEHICLE tab will display the standard speed, the speed limit, and the Wi-Fi connection.

## 5.1. Vehicle ID Details

Vehicle details are displayed in the screen image below.

**Figure 20: Vehicle Details**



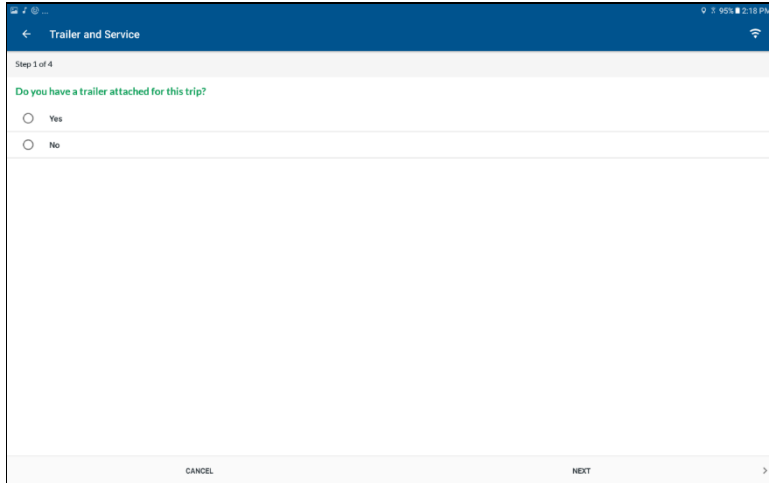
Tap the Vehicle ID link to display vehicle information:

- Engine Run Time
- Odometer
- Vin Number
- DOT Service Number
- ELD Certification
- Home Time Zone
- ELD MFG
- DOT Number
- DOT ADDRESS
- List of ELD Diagnostics
- List of ELD Malfunctions

## 5.2. Trailer Option

The trailer option allows the driver to enter attached trailer information. Update the trailer information each time a trailer is connected to the truck. Trailer options are displayed in the screen image below.

**Figure 21: Trailer and Service**



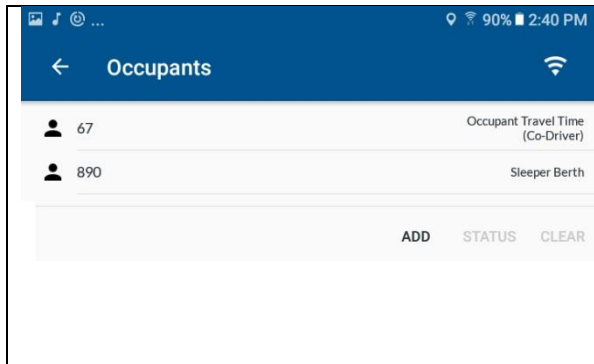
Begin this procedure from the ELD Dashboard.

1. Tap the **Trailer ID** tile. The Trailer and Service page displays.
2. Answer all the questions. (Tap **SUBMIT** to move to next question).

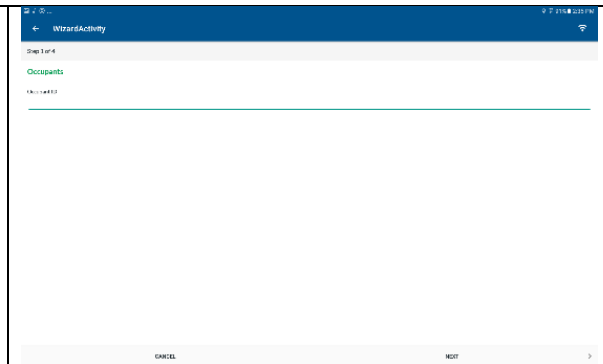
## 5.3. Co-Driver and Occupants

Enter a co-driver using the Occupants screen. A driver must be logged in before adding occupants.

**Figure 22: Occupants and Co-driver**



**Figure 23: Adding Occupants and Co-drivers**



View any occupants added for the trip. Add occupants to the list, entering them by ID.

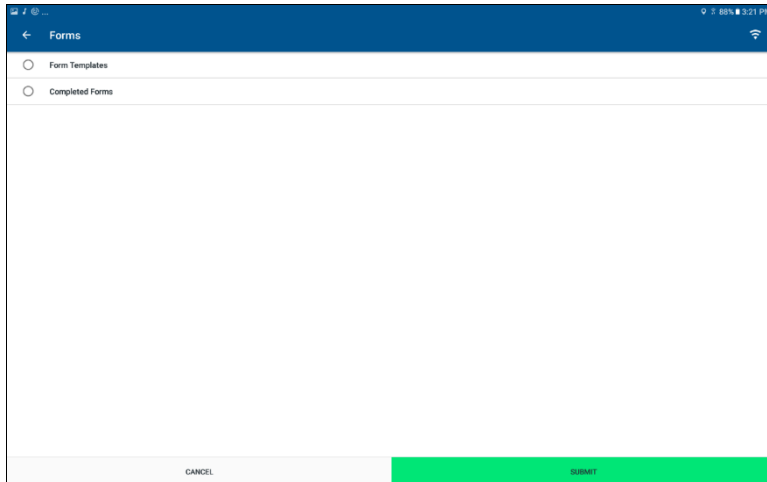
1. From the VEHICLE tab, tap **Occupants**. A list of occupants already added displays (if any).
2. To add an occupant, tap the **ADD** button.
3. Answer the questions and tap **SUBMIT**.



## 5.4. e-DVIR

Access and review Driver-Vehicle Inspection Report (DVIR) forms.

**Figure 24:** Forms



1. From the VEHICLE tab, tap **e-DVIR**. The Forms page displays.
2. Answer any questions. Tap **SUBMIT** to move through the wizard.

## 6. LAW ENFORCEMENT OPERATING INSTRUCTIONS

Basic instructions in the event of a system failure:

1. Trucks are equipped with a blank log book.
2. Drivers have been instructed to record that the system failed, the date and time of the failure, and to recreate the last log at their next change of status location.
3. Recreated logs may consist of both printed and paper logs.
4. Electronic logs can be road side via USB Download, Bluetooth transfer, or sent electronically via Email to your location.
5. Access logs: **Home > ELD Dashboard > HOS Logs.**

49 CFR 395.15 (g) (1)



## APPENDIX A: FMCSA REGULATION §395.2 SUMMARY

**On-duty** time is all time from when a driver begins to work or is required to be in readiness to work until the driver is relieved from work and all responsibility for performing work.

On-duty time includes:

- All time at a plant, terminal, facility, or other property of a motor carrier or shipper, or on any public property, waiting to be dispatched, unless the driver has been relieved from duty by the motor carrier.
- All time inspecting, servicing, or conditioning any CMV at any time.
- Crossing a border
- All driving time as defined in the term "driving time".
- All time, other than driving time, in or upon any CMV except time spent resting in a sleeper berth.
- All time loading or unloading a CMV, supervising, or assisting in the loading or unloading, attending a CMV being loaded or unloaded, remaining in readiness to operate the CMV, or in giving or receiving receipts for shipments loaded or unloaded.
- All time repairing, obtaining assistance, or remaining in attendance upon a disabled CMV.
- All time spent providing a breath sample or urine specimen, including travel time to and from the collection site, to comply with the random, reasonable suspicion, post-accident, or follow-up drug testing.
- Performing any other work in the capacity, employ, or service of a motor carrier.
- Performing any compensated work for a person who is not a motor carrier. (This rule does not explicitly forbid a driver from obtaining a second or part-time job. It simply prevents a driver switching from a non-driving job to a driving job without the required 10 hours of rest.)

**Driving** time is all time spent at the driving controls of a CMV.

**Sleeper berth** time is any amount of time spent inside the sleeper berth (e.g., resting or sleeping). FMCSA regulation §393.76 gives the minimum requirements for a space to be defined as a sleeper berth. The simple definition is an area separate from (usually immediately behind) the driving controls that includes a bed. The rules do not explicitly require that a driver must sleep, only that a driver must take a period of "rest" within the sleeper berth or off-duty (i.e., home). A statement made by the ICC in 1937 gives the reason: "We have no control over the manner in which a driver may spend his time off-duty, although some of his spare time activities may tire him as much as any work would do. We can only emphasize, by this comment, the responsibility which is the driver's own to assure himself of adequate rest and sleep, in the time available for this purpose, to ensure safety of his driving, and likewise the employer's responsibility to see that his drivers report for work in fit condition."

**Off-duty** time is any time not spent on-duty, driving, or in the sleeper berth.

## APPENDIX B: SAFETY CONCERNS

Electronic Logging Devices contribute to greater safety in the transportation industry.

### Lower Crash Rates

The Federal Motor Carrier Safety Administration released a report titled “Evaluating the Potential Safety Benefits of Electronic Hours of Service Recorders Final Report”. The report found that commercial drivers using electronic logs had a significantly lower total crash rate (11.7% reduction) and a significantly lower preventable crash rate (5.1% reduction) than trucks not equipped with electronic logs.

### Quicker Inspections

With organized paperwork, DOT audits can take hours rather than days. Roadside inspections go much faster. Drivers are back on the road sooner when inspection officials can verify compliance with HOS regulations with a glance at a device screen.

### Benefits of Alerts and Timers

A countdown timer to a break, visibly displayed any time the vehicle is in motion, allows drivers to plan their next break without taking their hands away from driving. Audible alerts give drivers plenty of time to find parking before reaching HOS limits.

### Less Intrusive Communications

The inthinc ELD can help prevent phone calls and other disruptive communications. A call from a driver relaying HOS hours or location could distract a driver’s attention from driving. A dispatcher can now receive this information directly from the inthinc Portal. No call needed.



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