Streamlined Aircraft Refueling
Aviation Fuels Management from Tank Farm to Takeoff

Electronic Register for Into-plane Operations

When using paper tickets to manually record aircraft fueling, the fuel agent is required to arrive at the correct aircraft during an assigned time window, manually record aircraft and fueling vehicle meter values, perform calculations, accurately fuel the aircraft, validate their own manual calculations, complete a paper fuel ticket and deliver a copy to the cockpit - a time consuming and complex process.

New Development for Aircraft Fueling

Varec's FuelsManager® Aviation solution now integrates Liquid Controls' LectroCount LCR 600 FlightConnect electronic register. This replaces back office data entry as a means of assigning and recording aircraft fueling transactions. It is an integral part of an automated aviation fuels management system that performs the following critical tasks:

- Automatically provides fuel agents with time, gate, aircraft and fuel load information for efficient dispatching

- Automatically captures accurate fuel load data and automatically performs net volume calculations and validates calculations to help reduce data entry errors

- Automatically updates FuelsManager Aviation with real-time status and completed transaction data that enables ACARS messaging, fuel reconciliation and enterprise reporting

No Handheld Computer Required

By utilizing the LCR 600 Electronic Register, fuel agents are guided through a streamlined, consistent and simplified fueling process directly at the fueling vehicle. The LCR 600 receives flight information and fuel load data from FuelsManager Aviation via cellular communications and displays it clearly on the large LCD screen.

Reducing Errors Associated with Paper Tickets

Using the LCR 600, fuel agents simply log in and select an assigned flight to receive all flight and fuel load details from dispatch. Limited manual data entry is required during the fueling process; the majority of fueling information is automatically populated or calculated for them. This dramatically reduces manual data collection and calculation errors associated with paper tickets.

Improve Accuracy, Reduce Delays

Two-way status updates between dispatch and fuel agents allow complete transparency of all fuel operations. Dispatch operators are able to manage fueling resources more effectively, while fuel agents are able to react quickly to flight, gate or fuel load changes, which improves accuracy, and ultimately assists in reducing flight delays. At every step of the fueling process the electronic ticket is time stamped. This provides a full audit trail and a clear picture of when fueling has actually completed.

Measurement | Control | Automation | Enterprise | Integration | Support

FuelsManager® AVIATION

Streamlined Aircraft Refueling
for Aviation Fuels Management from Tank Farm to Takeoff

▶ *Completed, validated transactions are automatically visible throughout the system before the aircraft takes off.*

LCR 600 Quick Specs

- Weights & Measures, custody transfer (product delivery and ticket generation) accuracy
- NEMA 4X enclosure
- -40 to 158 °F (-40 to 70 °C) temperature range
- Available in Class I, Div 2 enclosure, Groups C & D
- Metrological data collection
- Multi-point and Single-point calibration
- No-flow timer
- Two auxiliary outputs (settings include: On, Off, On During Delivery, Monitor Flow Rate, Toggle Flow Rate, and Flow Direction)
- RS232/RS485 communication
- Electronic temperature volume compensation (ETVC)
- Electronic valve control
- Electronic air or vapor elimination
- Easy-to-use rotary selector switch and alphanumeric keypad

Improved Accuracy with Fuel Reconciliation on a Daily Basis

All fueling transaction data is automatically sent to FuelsManager Aviation when the transaction completes - it is then available to all users before the aircraft takes off! On a daily, weekly or monthly basis, your back office personnel no longer have to wait for the delivery of paper tickets, manually enter whole fuel tickets, find lost tickets or identify and correct manual data errors. These processes consume valuable time and resources, but more importantly, delay the reconciliation and close out of fuel accounts.

Reducing Your Expenses and Your Carbon Footprint

Today, the environmental impact of an airline's operations is a major concern. The Varec aviation fuel management and electronic ticketing systems — installed at three major U.S. hubs — helped remove from circulation an estimated 450,000 paper tickets (annually) and the system helped achieve multiple zero-delay months due to fuel operation delays. If the need arises, however, the fuel agent has the option of printing a paper ticket directly from the LCR 600 electronic register.

Surviving Harsh Environments and User Abuse

The LCR 600 is produced by an industry leading manufacturer of fuel meters. It is proven to operate in harsh environments (NEMA 4x classification) and survive user abuse. The LCR 600 is also available in a Class I, Div 2 enclosure for use in areas of operation, such as most areas under the aircraft wing. The rotary selector switch and alphanumeric keypad make data entry and process selections a breeze, even with bulky gloves.

Retrofit Your Vehicles

The LCR 600 is a self-contained unit that is compatible with most flow meters on the market today, including PD, Amplified Turbine, Electromagnetic and Mass. For a simple retrofit this means a small capital investment with a short ROI.