

Fuel Service Point-of-Sale System Replacement

Cameron Park Airport District
Fuel System Ad-Hoc Committee

June 24, 2022

Fuel System Risk of and Consequence of Failure

- Fuel System Ad-Hoc Committee formed in February 2022 to evaluate risks associated with our Fuel System; Underground Tank, Fuel pumps, plumbing and dispenser, and Point-of-Sale (POS) system.
 - Members: Dominic Coutches, Greg Wright, Knud Kirkegaard, Mike Bell, Mike Brewer, Phil Albee, and Terry Bohlen
- Invaluable input into evaluating underground tank risk. Great input with different skill sets, knowledge, experience and contacts.
- Underground tank risk of failure reduced to acceptable with results of video inspection of tank interior. Deferred a very significant expense.
- Next Risk item in Point-of-Sale (POS) system. Financial risk.

Fuel System Risk Status

- Underground Tank risk of failure reduced to acceptable with results of video tank Interior.
- Next risk item was the POS system
 - Current POS is over 20-years old (15-year lifetime), only accepts magnetic strip cards, is no longer supported and requires expensive land-lines.
 - When it fails, very likely cannot be repaired and new update system may take months to be delivered and installed
 - If/when the POS fails, fuel transactions can only be done by manual processing by the airport manager or trained volunteer. No 24/7 fuel availability.
 - Financial risk in that fuel sales are a significant part of the airport's income, about 20%.
 - EMV (chip reader) capability needed to reduce fraud liability risk and eventual discontinuation of magnetic strip cards.

Why EMV Capability is Needed

- EMV is short for Europay, MasterCard, and Visa
 - It commonly refers to a credit card with a smart chip.
- The EMV standard is a security technology used worldwide for all payments done with credit, debit, and prepaid EMV smart cards.
- Banks in the U.S. will no longer be required to issue chip cards with a magnetic stripe, starting in 2027.
 - By 2029, no new Mastercard credit or debit cards will be issued with a magnetic stripe.
- As of April 2021, gas stations and convenience stores in the U.S. are required to comply with EMV technology.
- EMV shifts fraud liability to convenience and gas station retailers
 - For example, in counterfeit card situations, if a merchant is incapable of accepting a chip card (so the transaction processes uses magnetic stripe data) and the card is EMV capable, the merchant would be liable.

POS Risk

- Financial risk
 - 1) Loss of sales as fuel sale are about 20% of the airport's income
 - 2) Fraud liability as current POS is not EMV (chip on card) capable
- 1) Risk is if/when current POS fails, it is unlikely to be repairable as it is no longer support.
 - Would have to order new POS. Delivery times are uncertain for lower cost system (Fuel Master)
- 2) Risk of fraud liability without MEV capability

Risk Mitigation

- Replace the POS before possible failure to eliminate or reduce fuel sales down time.
- The delivery schedule QT-Pod solution is about 45-days from order.
- The schedule for Fuel Master is unknown by the vendor as the system about to go into beta testing.
 - Placing order for Fuel Master locks price and get us in line.
- Other benefits
 - Current land-lines not required, savings of about 1,200 per year.

Proposals

- Received proposals for two systems; QT-Pod and Fuel Master
 - QT-Pod and Fuel Master are the only known aviation POS systems
 - Current POS is Fuel Master
 - Number of bid complies with CPAD Policy 1.4.4



QT-Pod

- Replaces current pedestal
- New internet connection to existing router in Fuel Shed
- Internet based, no land-lines
- Compatible with current fuel dispensers



Fuel Master

- Replaces current Fuel Master head
- New internet connection to existing router in Fuel Shed
- Internet based, no land-lines
- Compatible with current fuel dispensers

Funding and Terms

- Requesting \$18,000 budget
- From Restricted Airport Maintenance Account
 - POS is a capital equipment / infrastructure item, replacing falls under infrastructure maintenance/replacement criteria.
 - *Note: Funding possible due to CARES money*

CPAD Policy Compliance

- CPAD Accounting Procedure Budget 1.4.1, adopted 03-28-22
 - 1. Capitalization Policy. Fixed asset equipment and/or property purchased with a value at or over \$2,500 and with a estimated useful of one-year or more shall be capitalized.
 - POS is capital equipment
- CPAD Procurement and Purchasing Policy 1.4.4 adopted 09-14-2020
 - “(e) Open Market - Purchases more than \$5,000 and up to \$25,000; Authority to award is by approval of the CPAD Board of Directors during a public Board Meeting. If practical, quotes must be received from three competitive sources whenever possible. Award is to be made to the total lowest cost, responsive, responsible bidder that meets the stated licensing and insurance requirements and provides best value to the District. ...”
- Cameron Park Airport Capital Budget-Project Request Form
 - Completed and submitted as part of this recommendation

Fuel System AHC Recommendation to Board

- Purchase Fuel Master
 - Lowest cost
 - HW, install and training, including taxes at start-up:
 - Fuel Master: \$16,603 (bid expires July 2, 2022, delivery unknown)
 - QT-Pod: \$22,942 (bid expires August 6, 2022, delivery 45-days)
 - Difference: \$6,338
 - Annual Subscription:
 - Fuel Master: \$1,240
 - QT-Pod: \$945
 - Would take about 21 years to breakeven with QT-Pod
 - Features, while not as extensive as QT-Pod, they are sufficient
 - Accept delivery risk – uncertain when it will be available and installed
 - However by procuring now, price is locked in and we are in-line
 - As of 6-27-22, uncertain if deposit required. Bid is silent.
 - Fuel refund if terminate before shipping.
- Approved Motion to proceed with purchase of Fuel Master
 - Budget \$18,000

Supplemental Information

What EMV stands for in credit cards

- What does EMV stand for?
- EMV is short for **Europay, MasterCard, and Visa**, the 1994 founders. It commonly refers to a credit card with a smart chip.
- The EMV standard is a security technology used worldwide for all payments done with credit, debit, and prepaid EMV smart cards.
- May 1, 2020

Credit Cards

- Banks in the U.S. will no longer be required to issue chip cards with a magnetic stripe, starting in 2027. By 2029, no new Mastercard credit or debit cards will be issued with a magnetic stripe.
 - <https://www.mastercard.com/news/perspectives/2021/magnetic-stripe/>

- **As of April 2021, gas stations and convenience stores in the U.S. are required to comply with Europay, Mastercard, and Visa (EMV) technology.**
- This means establishments must use systems that accept EMV cards, which have an embedded chip to secure payments.
- Feb 15, 2022

What does the payment fraud liability shift mean to convenience and gas station retailers?

- The liability shift means that in some circumstances, merchants may now be liable for fraudulent transactions. In general, the least sophisticated link in the transaction chain determines liability.
- For example, in counterfeit card situations, if a merchant is incapable of accepting a chip card (so the transaction processes uses magnetic stripe data) and the card is EMV capable, the merchant would be liable. If the merchant is capable of processing EMV cards, but the card is not EMV (only mag stripe), the card issuer remains liable.
- Even though the liability shift for automated fueling dispensers is 2021, merchants can be held liable for fraudulent transactions immediately if the fraudulent card is from a non-domestic issuer or if the site has experienced excessive fraud.

• Source: <https://www.conexus.org/content/emv-101-gas-station-and-convenience-store-retailers>

- **Are gas stations required by law to upgrade to be EMV-compliant?**
- Gas stations are not bound by law to be [EMV-compliant](#). Card issuers will still process transactions from pump payment terminals. Yet, the station owners will assume all liability for any fraudulent transactions.
- **Why should gas station owners proceed with the EMV upgrade?**
- The use of card skimmers at automated fuel dispensers has been on the rise since EMV technology started rolling out in the U.S. The problem has become a major issue to the point the Secret Service has gotten involved in monitoring and tracking down skimmers.
- With the deadline past, any skimmers that collect card data which is used for fraudulent activity traced back to a gas station pump will now become the liability of the station owner, even when charges are made online since their station was where the card data was collected.
- **What are some EMV benefits?**
- The biggest benefit is not being held accountable or liable for fraudulent transactions. For station owners that put off converting due to the costs, some of the newer technologies are making it easier, as they are becoming easier to integrate into older POS systems.
- **How can you accommodate customers without EMV cards?**
- If your gas station has upgraded to EMV-compliant chip card readers at your pumps, customers who have cards without the EMV chips can still swipe their cards to get gas. Instead of your station being held responsible for fraudulent transactions, the card issuers are held accountable since they have not issued new cards with the embedded chips.
- Source: <https://adeptpayments.com/blog/2021/05/12/emv-compliance-deadline-for-gas-stations-update/>