

# The Clarifier

## Parker Velcon CDFX: In Field Trials....

Parker Velcon supports IATA, JIG and A4A and highly commends them for their joint bulletin **“Joint Industry Field Trials: Impacts of the COVID-19 Crisis and Withdrawal of EI1583 Specification”** dated May 26, 2020. <https://velcon.us/iata-jig-a4a-extension-of-trials-due-to-covid-19/>

In support of this bulletin, we can confirm that Covid-19 has indeed caused unavoidable delays in implementing the planned field trials of the CDFX barrier technology. While this will obviously impact the completion date on the approvals of CDFX, the Industry regulators recognize this and have stated clearly, that: *“Because of new technology development delays and especially due to the impact of COVID 19, the projected start and end dates for some technologies in the Joint Industry Field Trials will be delayed. The original proposed industry road map cannot, therefore, be met.”*

Our Parker Velcon team have been working with JIG, A4A and others to get the Joint Industry Field Trials back on track. You may recall that

after CDFX met the qualification parameters of EI-1588, field trials are required before CDFX is approved for use and adopted in JIG and A4A operating standards for commercial aviation. In March 2020, we delivered several sets of CDFX elements to the various test sites around the world in preparations of having them installed and immediately commencing the required field tests.

In parallel with the official Joint Industry Group field trials, we are also proceeding on a limited scale in testing our CDFX elements in several non-commercial aviation fueling applications, i.e., General Aviation (GA). Because CDFX is qualified to EI-1588, we are confident that the GA market will embrace its use and the data we gather can be incorporated by the Joint Industry Group to offer further field trial data collection for review.



***We are pleased to announce that preliminary field trials have now commenced, and we are excited to review any and all data and feedback generated from the trials with the Joint Industry Group. We will also continue offering our support as other trial sites are added to the test program.***

EI 1583 type monitors have been the predominant last line of defense in protecting aircraft from dirt and water for more than 40 years and we at Parker Velcon are committed to developing a drop-in alternative without any possibility of media migration. The CDFX is currently the only technology capable of removing both dirt

***We also take this opportunity to remind users that “even when technology options are referred to within JIG standards, this is NOT an approval for use”. (JIG TN8)***

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and water. It is qualified to EI-1588 and, although the Covid 19 crisis is impacting the field trials, we are confident that this is the only true drop-in solution currently qualified to prevent dirt and water contamination in fuel during aircraft fueling.

Furthermore, Parker Velcon will be incorporating the 6" diameter version (ACO-X) of the EI-1588 water barrier filter however, at this time we are working with and assisting EI in publishing the addendum for inclusion of this model into the existing specification. Additionally, we will also be developing the 5" diameter version for existing single-stage filter housings.



We understand the urgency, there is enormous pressure to remove water-absorbing SAP type monitors and installing alternative technologies that may indicate a potential water problem but will not alleviate the issue by removing the water.

To this end, and in support of JIG, A4A and IATA, Parker Velcon will continue to supply CDF monitors to our customers in line with industry guidelines.

Manufacture of CDFX for both field trials and on-hand inventory are ongoing, and we will be ready to supply our customers with a safe, drop-in solution on completion of the field trials. Until then, current EI-1583 7<sup>th</sup> Edition qualified CDF monitor elements will remain readily available per bulletin "**Joint Industry Field Trials: Impacts of the COVID-19 Crisis and Withdrawal of EI1583 Specification**" dated May 26, 2020.

## Parker Velcon DDF: Project Update....

Since the founding of Parker Velcon, our primary focus has always been developing filtration technologies that allow our Customers to deliver clean, dry fuel every time they fuel an aircraft. In pursuit of that challenge we have recently invested heavily in the research and development of several technologies, mainly our EI-1588 CDFX barrier technology, but also our Dirt Defense Filter (DDF). Unfortunately, while testing

our DDF filter to meet EI-1599, we have been unsuccessful in pairing it with a qualified and approved EI-1598 sensor. We found that

the qualified sensor available did not accurately report the water concentration passing through the element presented under test

**CAUTION:**

We have been informed by some GA and small facility operators that they have been instructed to replace monitor elements in small single-stage vessel applications with microfilters. We **do not** encourage this practice as we believe this is an unsafe filtration option and advise you to contact Parker Velcon for clarification. Additionally, this practice does not conform to A4A or JIG operating standards – check your quality manual or consult your fuel supplier.

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conditions. We believe that this was caused by random water droplet sizes and distribution produced naturally by the filtration mechanisms of Dirt Defense Filters and not totally captured electronically. **Dirt Defense Filters do not remove water.** In fact, they are likely to exacerbate the problem as they are known to coalesce water on the “clean side” of the filter, potentially sending water downstream of the filter vessel.

**Therefore, despite the recent JIG, A4A & IATA evaluation summary, we have concluded that DDF is not an into-plane technology that Parker Velcon currently wishes to continue developing and endorsing and therefore are moth-balling the project at this time.**



Parker Velcon recognizes the benefits of electronic water sensor equipment as a possible alternative to chemical water detectors (CWD) tests and we are making great progress in the

development of the Parker Velcon Water-In-Fuel (WIF) electronic water sensor.

For the safety of our Customers and the Aviation Industry, Parker Velcon’s recommended solution has always been to replace filter monitor cartridges containing SAP water absorbing material with approved EI-1581 filter separator systems or EI-1588 qualified, direct drop-in barrier filtration.

As we have stated in our latest June 11, 2020 Clarifier <https://velcon.us/knowledge-base/clarification-of-jig-a4a-trial-extensions/>

***Parker Velcon will continue to supply previously qualified EI-1583 7th edition filter monitors until such time as our CDFX barrier filter technology completes Joint Industry commercial aviation field trials.***

Available Technologies	Removal Capabilities		
	Solids	Emulsified Water	Water Slug
EI1588			
EI1581			
EI1599 & EI1598		ALARM ONLY	ALARM ONLY

For more information about CDFX and barrier technology, please visit <https://velcon.us/wp-content/uploads/2020/02/VEL2296-BUL-CDFX-EI1588-Water-Barrier-for-Aviation-Fuel-Filtration.pdf> or contact your Territory Sales Manager for further information and product brochures.

Furthermore, future Clarifiers will address our Water-In-Fuel (WIF) Sensor and High Flow Filter/Separators technologies among other information important to the industry. If there is a topic you would like us to address, please send your inquiries to [vfsales@velcon.com](mailto:vfsales@velcon.com) for further assistance.

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