



## Global Standard Filtration Technologies in 2021. A path to safe and sustainable filtration solutions.

### Charting a clear course.

In November 2017, the IATA SAP Special Interest Group released a statement regarding the presence of super-absorbent polymer (SAP) in engine/fuel system components. They stated that engine and airframe OEMs had not identified a level of SAP that is acceptable in aviation fuel. Filter monitor manufacturers and SAP manufacturers had confirmed that it is not possible to guarantee that no SAP will pass downstream of filter monitor elements when in service. The collective opinion of the Special Interest Group was that the continued use of filter monitor filtration systems in aviation fuel handling was incapable of reliably meeting the aircraft and engine operating requirements. The Special Interest Group took the position that filter monitors shall be phased out of all aviation fuel handling systems. Consequently, the Energy Institute Specification EI 1583, Laboratory tests and minimum performance levels for aviation fuel filter monitors, was withdrawn in December 2020, since filter monitors *"may not be fit-for-purpose due to their release of super-absorbent polymer (SAP) into fuel."*<sup>1</sup>

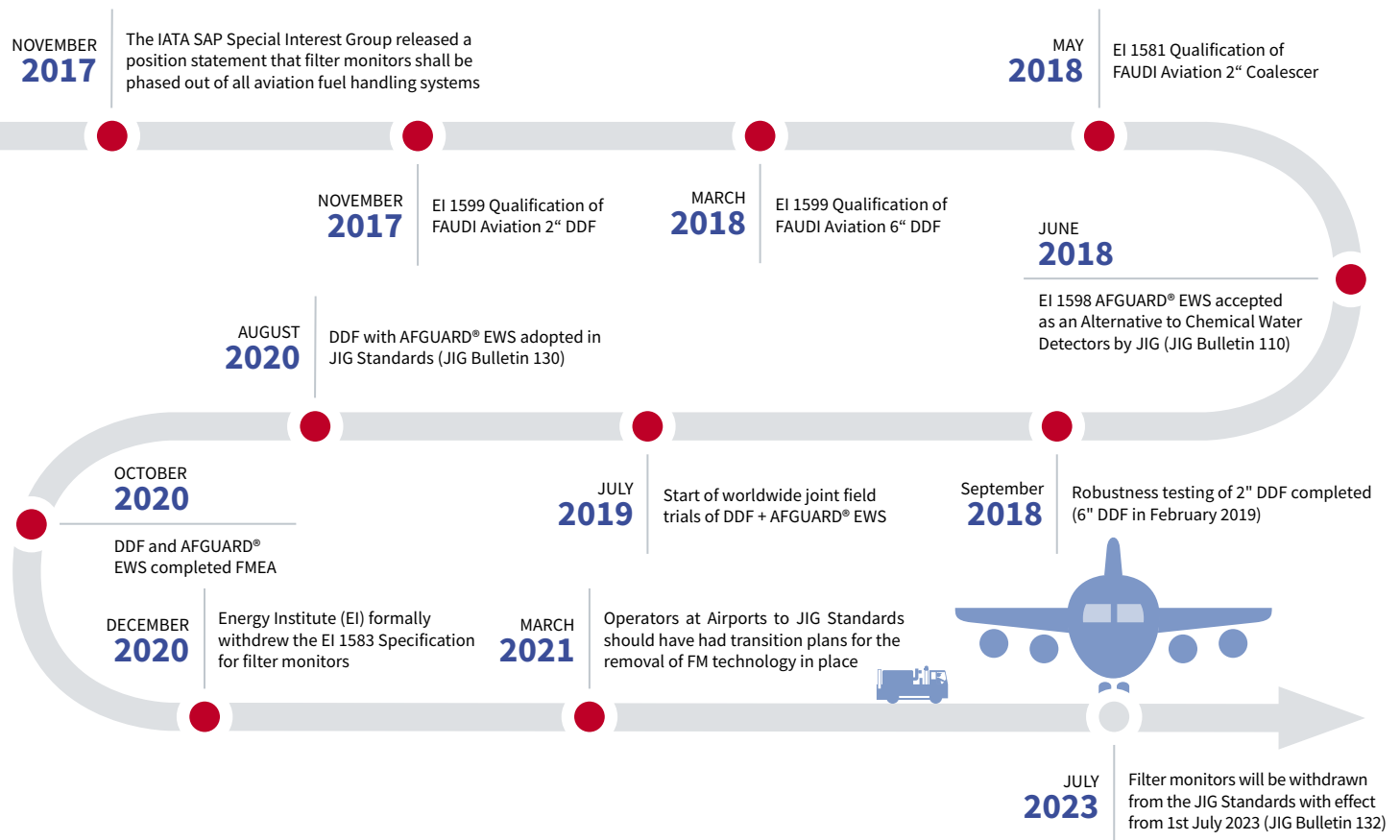
The key to a well-developed filter monitor replacement strategy is to understand which technology is best suited for each site. At most airports, there is predominantly no free water in jet fuel at point of delivery into aircraft.

#### Key facts:

- ▶ To date, two qualified solutions have been endorsed by the industry to replace filter monitors: Filter/Water Separators and a drop-in combination of Dirt Defence Filtration (DDF) with AFGUARD® EWS.
- ▶ Global acceptance for DDF combined with an AFGUARD® EWS followed the recommended process to meet operational safety requirements, including qualification to EI specification, robustness testing, FMEA analysis and a 12-month global field trial.
- ▶ In addition to conventional filter/water separators utilising 6" diameter coalescer elements, FAUDI Aviation qualified with 2" diameter coalescers. This results in smaller, lighter vessels compared to those with 6" coalescers. Vessel dimensions are similar to those of filter monitors, allowing for an easier vessel retrofit.

<sup>1</sup> <https://publishing.energyinst.org/topics/aviation/aviation-fuel-handling/ei-1583-laboratory-tests-and-minimum-performance-levels-for-aviation-fuel-filter-monitors>

The FAUDI Aviation path to safe and suitable filtration solutions.



**Benefits of Dirt Defence Filter with AFGUARD® EWS:**

- ▶ End-user acceptance worldwide
- ▶ Clean, dry jet fuel with the assurance that every litre of fuel is monitored
- ▶ Filter with water handling properties
- ▶ Rapid return-on-investment compared to filter monitors and CWDs
- ▶ No SAP-related safety concerns
- ▶ Sustainable technology with longer life and less hazardous waste than filter monitors and CWDs
- ▶ Waives the need for CWD
- ▶ Available from stock

**Safety is our top priority.**

Recognising the risks, end users need to make the decision to switch to more efficient and safer filtration technologies. If you are concerned about the risks related to the continued use of filter monitors and would like us to assist you in considering filtration options, please contact us by phone +49 6428 44652-570 or by email [contact@faudi-aviation.com](mailto:contact@faudi-aviation.com).

**Life after Covid-19:**

- ▶ Assistance in planning and performing filter element changes prior to recommissioning
- ▶ Remote training for Certified Installers and Certified Servicers to carry out sensor installations
- ▶ Remote training to refresh filtration and maintenance knowledge
- ▶ Readily available to support any emerging issues
- ▶ Apps and digital services

