

# *Aviation Contamination Control*



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# **FILTER WATER SEPARATOR EI1581 6<sup>TH</sup> EDITION**

# EI 1581 – Filter Water Separator

## Pro's

- No SAP
- Known/Deployed Technology
- Ideal for Tank Farms
- **Solids Removal**
- **Emulsified Water Removal**

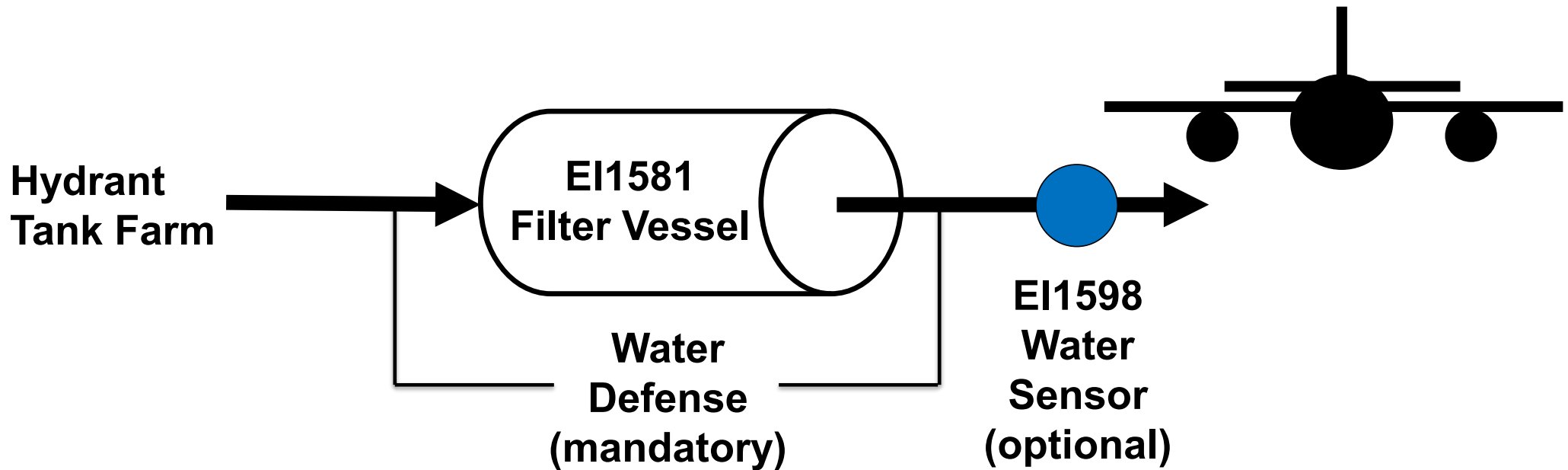
## Con's

- Greater Size & Weight
- Retrofit costs
- Issues in “dry” systems over time
- **No slug protection**

		EI1581
Removal Capabilities	Solids	Green
	Emulsified Water	Green
	Slug Water	Red

# EI 1581 – Filter Water Separator

- Where should a sensor be placed?



# EI 1581 – Filter Water Separator

- Status of the technology?
  - Options available for use
  - New configurations later in 2018





**EI1599 – SOLIDS FILTRATION**  
**EI1598 – FREE WATER SENSING**

# EI 1599 – Dirt Defense Filter

## EI 1598 – Free Water Sensor

### Pro's

- No SAP
- Long filter life
- Lower cost filters
- **Solids removal**

### Con's

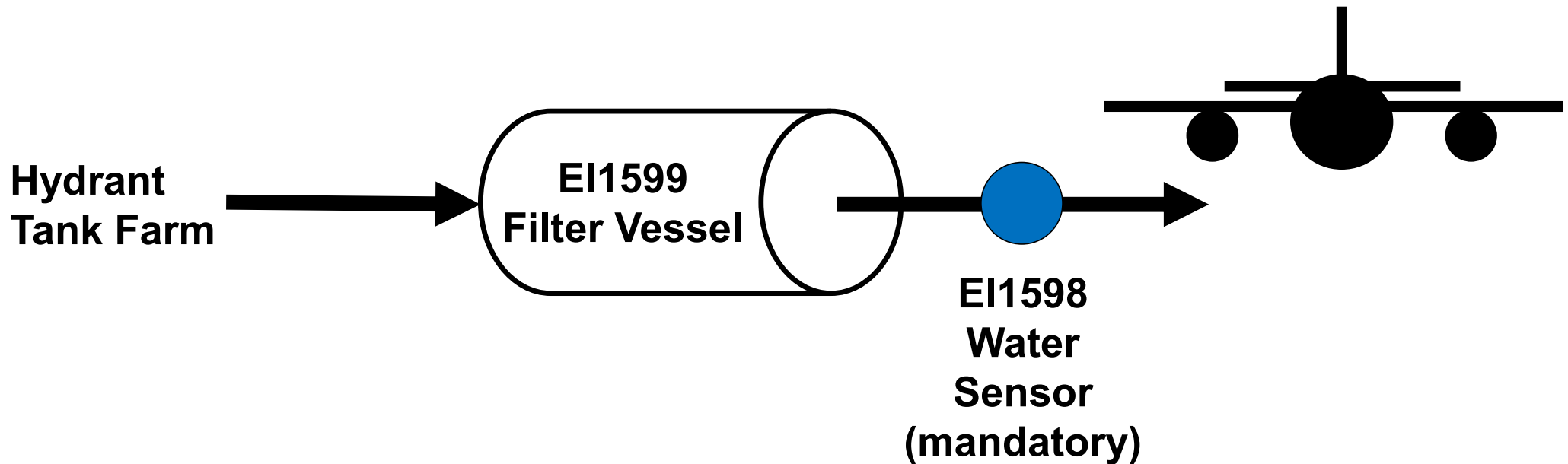
- Possible flight delays
- Retrofitting
- Calibration
- Water accumulation
- **No Emulsified water**
- **No Water slug**

		EI1599 & EI1598
Removal Capabilities	Solids	
	Emulsified Water	ALARM ONLY
	Slug Water	ALARM ONLY

# EI 1599 – Dirt Defense Filter

## EI 1598 – Free Water Sensor

- Where should the sensor be placed?





## **EI 1599 – Dirt Defense Filter**

## **EI 1598 – Free Water Sensor**

- Status of the technology?
  - Supply key customer trial units – Q2/3 2018
  - Complete EI1598 Qualifications / Testing – Q2/3 2018
  - Release EI1598 WIF sensor to Market – Q3 2018
  - Release EI1599 filter to Market – Q3 2018





# EI1588 – BARRIER FILTRATION

# EI 1588 – Barrier Filter

## Pro's

- No absorbent SAP
- Same configuration
- Same flow rate
- Longer on-stream life
- **Emulsified water** removal
- **Water slug** protection
- **Solids** removal
- Consistent uplift fuel quality
- Cat-M compatible

## Con's

- New to Aviation Market
- Requires DP switch \*
- Requires vessel sumping \*

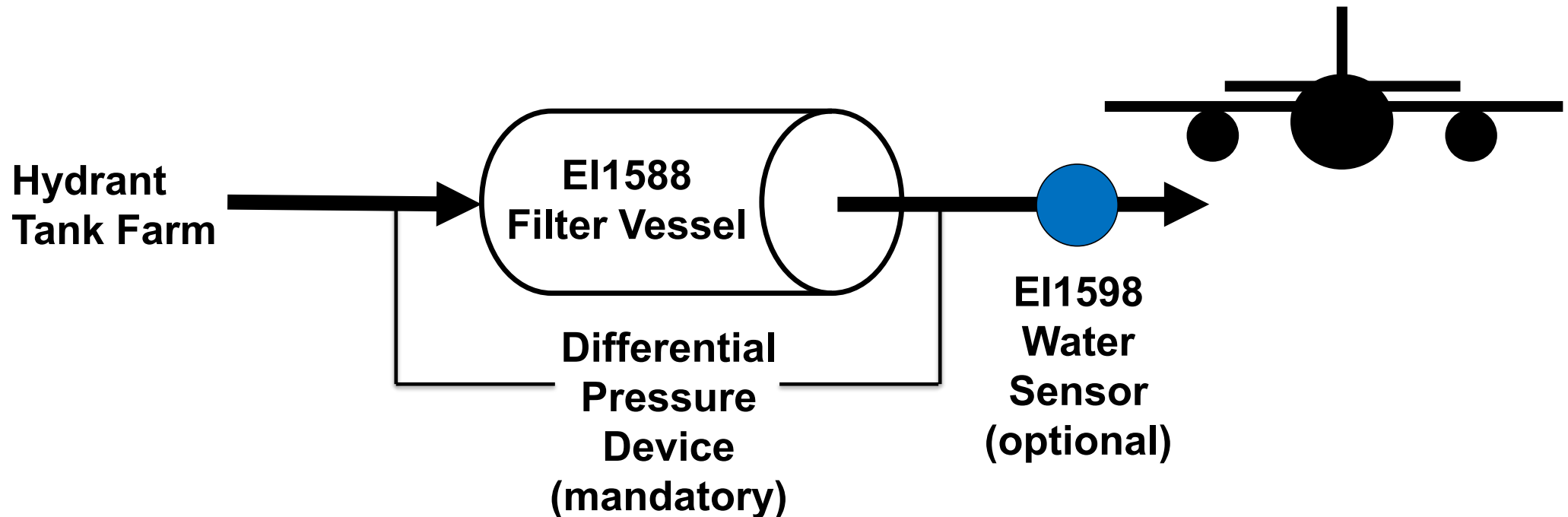
		EI 1588
Removal Capabilities	Solids	
	Emulsified Water	
	Slug Water	

\* Should be in place

# EI 1588 – Barrier Filter

Where should the sensor be placed?

- Water will not penetrate the barrier below 21 psid



# EI 1588 – Filter Water Separator

- Status of the technology?
  - Release EI1588 Specification – Q2
  - Complete product development – Q2
  - Complete the element qualification – Q2
  - Start Secondary Testing – Q2/3
  - Begin field evaluations – Q3



# What do you need to consider?

- What will be the user 2020 plan?
  - Retrofitting current “EI1583” equipment
  - Building new equipment
- What is your tolerance to risk?
  - Is water removal important at the wing?
  - Is water slug prevention important?
  - Who makes the “all good” call after an sensor alarm?

# CLEAN DRY FUEL

