Executive summary

This report details the experience in the testing of the MVP of the FastFields app performed in paralell with a tradicitonal surveillance of 2 B737-8 of Arajet.

Viewd from the point of an auditor performing the inspection and as someone receiving and reading the report and making use of the information from inside DAE.

To summarize , this new modality is a big time saver compared to the traditional word format. This report will show a list of findings as a way of feedback and suggestions for the coming versions.

Add on this part also a quick overview of the findings and factual conclusions that help this product be better.

App used: FastField V.6.0.11-S (14) . on Iphone 15 proMax , with iOs Version 26.2
Web version on DAE computers under windows 11Enterprise Version 25H2 , Chrome browser.

Major critique: as this is an opportunity to reformulate the process, it defineetly has to streamline it and reduce time of use ease and validate data given the existing technology. Even though this is a good progress from the word report, the opportunity calls for making this a big leap instead of just automating a form in word. Usability (amount of clicks, easy to understand where we are, clarigy of information should be a priority and fastfield does not seem to meet that.

FastField Configuration

Upload of photos:

The multiphoton upload is located on the bottom of the category, and sometimes the list becomes too long and it requires to leave and reenter anyway if accessing different folders from the desktop or if choosing different sets of photos. Example Aircraft views

Type of fields:

Telephones , especially when dealing with international contacts to allow either the character + and different formts, or a selection of country and different formats. Now it is number integer. Might lead to confusion.

On several sections it is required to enter hours (TSN, TSO). Fields now allow negative numbers, nulls, and no decimals (Sometimes provided hours in minutes, sometimes decimal of an hour. Need standarization in case it has to later be exported to other systems).

CSN at Last Check

-1924

Title

Planning & Records Manager

Telephone

999999999999999999999999

Email

Type of field or configuration:

Ensure the dates are allowed in the timeframe required if there are limitations:

Example: dates in the future allowed for next due dates (Overhauls, checks, etc) and not greyed.

Dates in the past (DOM, last oVh, performed checks, etc)

Interval

36MO , 5000FC

Date of Last Check

Reset

◄   December 2025   ►

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
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Check Next Due

In some cases there is either no data, or the answer is NO data (example a certificate that has no expiration date). It is not clear if the auditor failed to complete it or if the data expected is NULL. Example on screenshot.

HI1103

Country of Registration

Dominican Republic ⌄

C of R Expiry date

⌄

Reset

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Total Airframe Hours

11143

Total Airframe Cycles

2987

As at Date

Oct 15, 2025 ⌄

Interval field:
Limit the user to the possible fields that are expected to avoid problems in the data export
now it is a textbox that allows free text, however we should expect entry of calendar (MO, Yr, DY) , FH, FC and no more.

Check Type / Name

C Check (Heavy)

Interval

36MO , 5000FC

HI1103

Country of Registration

Dominican Republic   ⌄

C of R Expiry date

                                                                      ⌄

Reset

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Do not request data if the answer from the user is no or not applicable.

Example on the screenshots, where there are no additional monitors installed, but still a quantity is required.

Multiphoto upload:

Examples like in the area below , you might want to consider uploading photos for each section and not a package of photos at the end, as it incersasees the chances of either forgetting what the pictures have been uploaded, and it is hard to doublecheck with the current visualization if all the requested pictures have been uploaded.

Order of the pictures does not seem easy or possible to alter, and later pictures get shown on the PDF report in the order of upload.

Assinginign a picture upload section for each aircraft area might improve this.

Multiphoto upload from phone:

It allows to have bigger views, and in contrast to the web view, it is possible to add comments. Refer to screenshot below.

On the web version it is prioritizing the camera that is not required, and the file upload is possible but not the clearest. Order of photos Is not possible, and no comments can be entered.

LH Main Landing Gear looking aft	Yes	No

RH Main Landing Gear looking aft	Yes	No

CARGO COMPARTMENT

View of FWD Freight Compartment looking AFT	Yes	No

View of AFT Freight Compartment looking FWD	Yes	No

View of Bulk Freight Compartments looking AFT	Yes	No

MISC.

Any Exterior Damage/repairs noted including doublers. Please include photos in Findings Section 1.3

	Yes	No

Exterior Photos	📷 Take Photos

Additional remarks:

In the exterior part of the aircraft section it is possible to enter a comment on an area if the condition was average or poor. It is not like that when it is on the interior of the aircraft.

Conditions on when to request the extra comments to be standardized through all the report.

Options that are of selection

User to be able to add a new option when not found within the possibilities.

In this example the operator Arajet was not available in the list and had to leave it blank.

Same can happen with list of manufacturers, avionics components PN, LAV or galley names, etc.

Physical Inspection Exterior Checklist

Exterior - Forward Cargo Hold

Door

(•) Good   ( ) Average   ( ) Poor

Floor

( ) Good   (•) Average   ( ) Poor
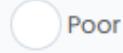
Ceiling
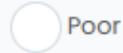
(•) Good   ( ) Average   ( ) Poor

Forward / Aft Bulkheads & Sidewalls

( ) Good   (•) Average   ( ) Poor

Baggage Handling Equipment

( ) Good   ( ) Average   ( ) Poor

Smoke Detectors

( ) Good   ( ) Average   ( ) Poor

Additional Remarks

[   ]

( ) Good　　　　　( ) Average　　　　　( ) Poor

Additional Remarks

Referring to LAV A

Add

Standarization of names

It is a good improvement ot have listed the possible options (Names of galleys, Lavs, etc), however there is no way to introduce new options, and the ones available do not seem to match aircraft configuration (LAV A, LAV B, vs LAV 1, LAV 2, ...etc)

Lavatory Name

Q Search...

( ) LAV1
( ) LAV2
( ) LAV3
( ) LAV4
( ) LAV5
( ) LAV6
( ) LAV7
( ) LAV8

Add

Interior - Lavatory

Lavatory Name

LAV1   ⌄

Criteria for each field

TO be reviewd along the report Example Evidence of leaks Good/Average/Poor instead of Yes/NO

◯ Good   ◯ Average   ◯ Poor

Exterior - Right Wing

Evidence of Leaks

◯ Good   ◯ Average   ◯ Poor

Paint

◯ Good   ◯ Average   ◯ Poor

Leading Edge

◯ Good   ◯ Average   ◯ Poor

Complete captions

Seveal captions have generic text to complete in a stage after MVP

Acknowledgement

Section Completion Acknowledgment*

Enter Text here - Information or Description of what the user is
agreeing to

Thank You

Do not ask twice the same information to the auditor

It opens the door to introduce errors and takes more time.

Example on assigned engine, installed engine SN has to be entered several times, or galley name , or entering a LG form that is assigned for a certain position and the first question is position again (allowing the user to enter free text NLG, Nose, N, etc..)

Landing Gear

Landing Gear Form

Position

NOSE

Part Number

Landing Gear Form

Position

NOSE

Part Number

FastField bug (?)

For openAI: check if this bug has been reported or if there is a solution in the configuration part of fastField, and put it on the right category.

Sync problems:

The web browser version of the reports do not seem to be synchronized with the mobile app version. This photo shows how a report being completed and saved on the web version does not impact on the phone version.

It was intended to make 2 different reports: one aircraft on site with the mobile app, one copying and pasting in the desktop post inspection.
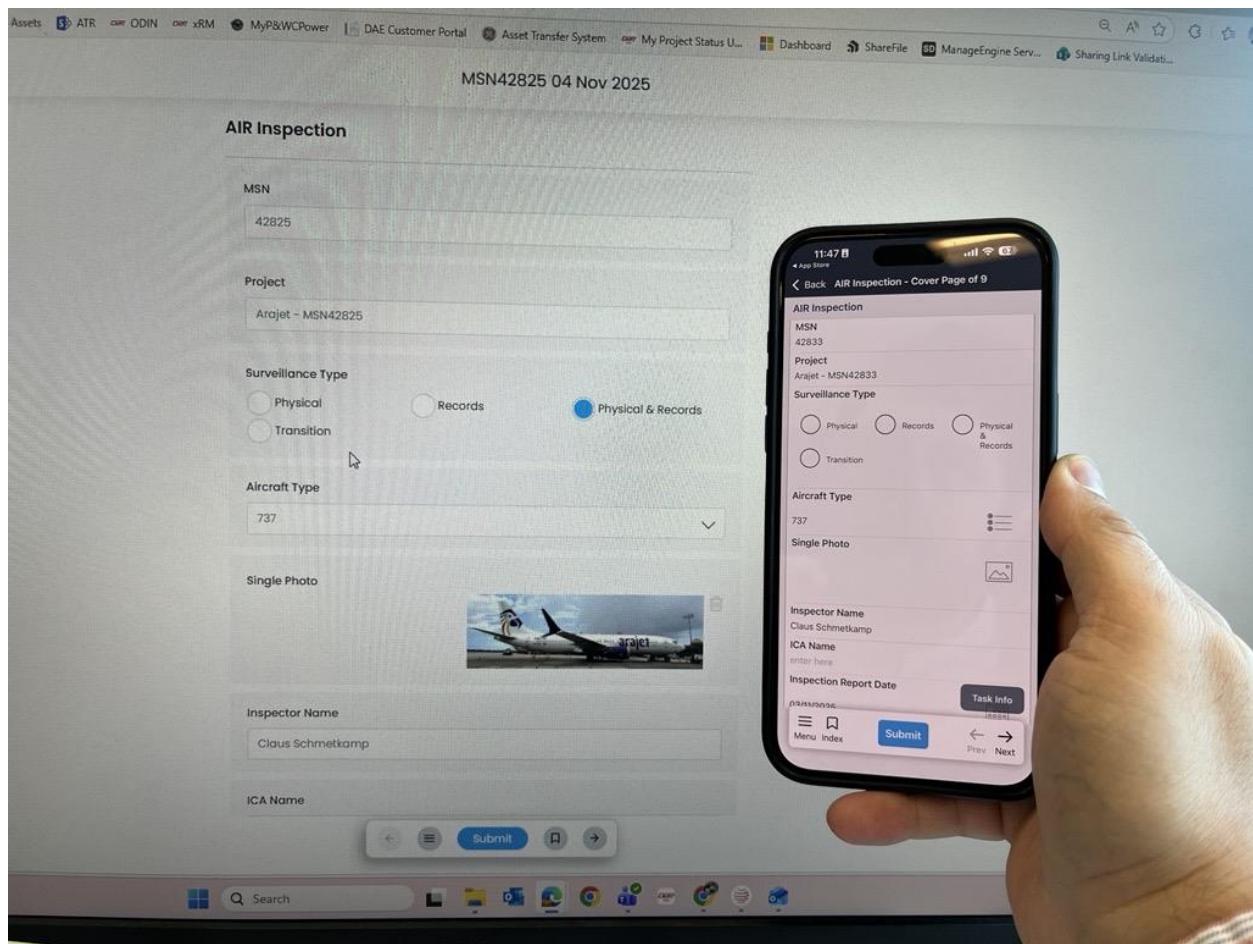
It was not possible to pull on the web version the data recorded on the field with the phone. Connectivity normally is an issue in remote positions in airports for different countries, however Fast Field seems to offer an online/offline operation with later synchronization. In the current configuration it does not seem to work.

Another example of this is both of the screenshots below taken at the same time, where you can see that the forms have been submitted on the web version, but they are still available for edition on the iPhone version. Note from the screenshots that the auto sync forms feature is ON and auto sync from library also is on.
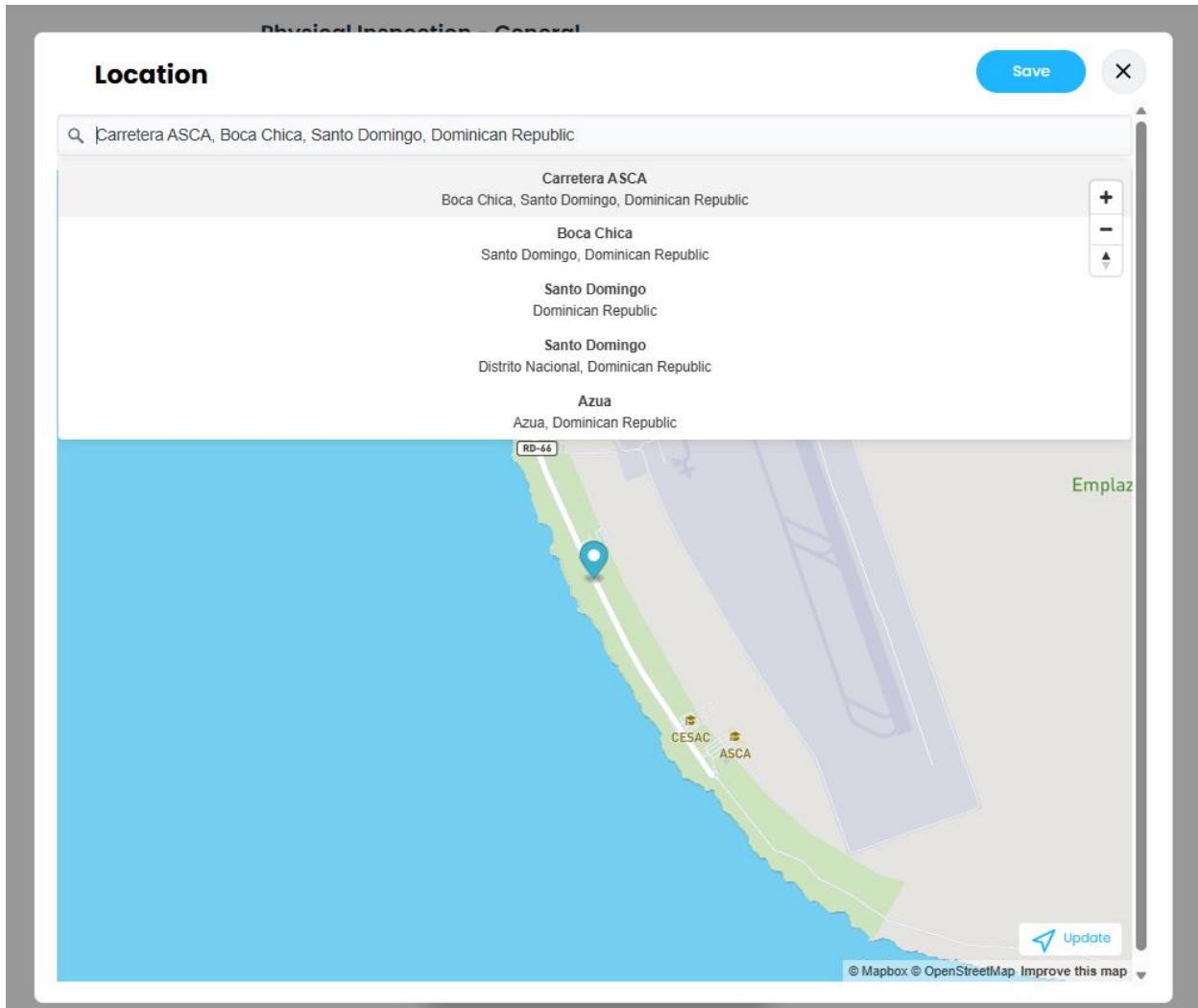
Photo: 2 phones logged with the same account and different information

Web version of the form saved and refreshed, and form on phone online, reflecting different information at the same time.

GPS Location: Especially for air side on airports, the GPS picking does not seem user friendly and it snaps to a known location by the vendor, but not to the actual location. Not impossible, but hard to get. Manual entry of the airport nme or location could be an option.

Avoinics List

It is now possible to search avionics components ,but it is hard to validate Name of the component, no possibility to enter vendor and quantity.
Not possible to enter new PN.

There is no visible list at the end of the process, just a concatenation of PN that is hard for the auditor to validate if he entered all the data.

18. Avionics Fitted List

Avionics

NA138-714C, 01N65920, 453-5004, 622-5342-101, 980-6032-003, 822-0990-004, ⌄

🔍 Search...	
☐	261303876-1000
☐	69002600-0101
☐	HG2030AE44
☐	4088240-901
☐	980-6032-003
☐	Z163H0013302
☐	7100-4400-70
☐	C13206AA00
☐	822-2556-102
☐	C12848EDB01
☐	822-2763-020
☐	971-4193-001
☐	7510700-951
☐	2015000-009
☐	51090130-2
☐	G7501-01
☐	822-2909-050
☐	D52000-63000
☐	LA2E50700140000
☐	822-0334-021

Units of measurement

All fields to indicate what we are measuring (FH, FC, Lbs, kg, qty , YR , MO, DY, etc...) to avoid free interpretation (365 DY, 1 YR , 30.5 DY , 2200lb, 1000kgs,)

8. Operating Weights

Is this aircraft configured for Dual Weight Variants? No

Maximum Taxi Weight (MTW)

181700

Maximum Take Off Weight (MTOW)

Maximum Landing Weight (MLW)

Maximum Zero Fuel Weight (MZFW)

Empty Weight (EW)

Last Weighed Date

FastField facts that make life not so easy

Datepickers require several steps (clicks) compared to how easy it sould be to pick a date on a phone or browser. (like ATS that allows even to write it manually fatser). Datepicker of fastfiels does not refer to the iphone scvroll that makes it almost intutitve. Slows down the process, even when compared to entering the dates in word. This report has many dates of previous years (DOM, Shop visit dates) or in the future (Next checks, etc) and those changes of years, not only months take time compared to the normal typing.

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Aircraft Cycles at Install

0

Aircraft Fit Date

	⌄

Reset	

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LG Cycles at Overhaul

Date of Last Overhaul

	⌄

FastField limitations (?)

(openAI: Check if this is true, and if this is a real limitation in the fast field capabilities). If not, chage the text for all the statements to be true in all the cases.

At least this MVP is a blank form in which all the data has to be entered from scratch. Even when verification of all historical data is required, it simplifies the data entry to have the previlsy entered data and just confirmation. It is not clear if FastField in the current version can be fed from XRM/ATS/ historical data in a way that previous reports can be shown as parameter where the auditor just has to validate or correct instead of entenreing all the data from scratch where there are opportunities for introducing more errors.

Can a form in fastfield be fed from the previous form of the same MSN ? or even import assets like engines that have been installed on other iarcrft or gears or apu ?

(openAI) check if this is a limitation or if it should go in the area of fastfield configuration instead

IN general the areas that require to report findings or long text do not allow to text or add multiple records. Exmaple on the screenshots where the use of bullets and multiple paragraphs might be uf use.
Not sure if required, but the possibility of adding pictures on this section might be of help.

c) Please specify any findings – elaborate categorically on External Structural Damages, repeat inspection/time limited repairs and significant cabin interior findings (eg seat cushions/covers badly warn, corrosion issues surrounding galleys/lavatories, etc.)

– Multiple areas of paint stripping followed by poor recoating observed, notably around the AFT cargo door. The door does not appear to close flush with the fuselage contour.
– A large section of the crown above the cockpit area has been stripped and repaired. The related work documentation is attached in ATS.
FORMATTTTTT

c) Please specify any findings – elaborate categorically on External Structural Damages, repeat inspection/time limited repairs and significant cabin interior findings (eg seat cushions/covers badly warn, corrosion issues surrounding galleys/lavatories, etc.)

FORMATTING COMPLICATED

d) If the aircraft was in storage during the visit, please specify if any components have been removed or cannibalized. Also specify the storage conditions and any findings related to improper storage/incorrect preservation etc.

Comments

Auto Save

Aircraft General View

Full Aircraft Front view	**Yes** / No
Full Aircraft Left side view with visible Reg marks	**Yes** / No
Full Aircraft Front view	Yes / **No**
Multi Photo	3 📷 Take Photos

Aircraft General View

Full Aircraft Front view	**Yes** / No
Full Aircraft Left side view with visible Reg marks	**Yes** / No
Full Aircraft Front view	Yes / **No**
Multi Photo	3 📷 Take Photos

:

On one hand FastField has the possibility of autosavings as we go typing, however when we do copy and paste on the fields, that feature does not seem to work all of the times. Copying and pasting is a standard practice in this case of reports, as it simplifies and

reduces changes of introducing mistakes when copying Serial numbers, long part numbers (avionics, etc).

Timeout:

It is normal during the production of these reports that the auditor spends too much time on a same page. On the web browser page, it times out, and when attempting to save, not all the data gets recorded producing uncertainty about the records being kept. Not sure if timeaout time adjustment is possible, but given that the autosave does not work all of the times, it is not reliable for ensuring that all the data entered is saved.

Add

⊗ **2b. Maintenance Status (2)**

Please provide details of each maintenance event completed or due

Check Type / Name

15 YR

Interval

NO SELF SAVE WHEN YOU ADD MULTIPLE LINES

Date of Last Check

˅

Form logic – Usability

In order to reduce the time of reporting, the introduction of errors by iteration the following tips are suggested

Duplication of data: More than one time it is required to enter the same information (Engine SN, APU SN, Aircrft SN.). Given that the data is parametrized in a form, several instances can be avoided to be requested to be entered by the user repetitely in the form.

Format of screen

The app on small screen phones (normal iphones, give examples of google or Samsung models) and not the max versions, the configuration of the styles of the fast fields app does not allow comfortable use , less compared when just using the camera for fast taking details in the inspections compared to the app.

Suggestions:

Order of form to favor the inspector

Rationale: To save time , avoid introduction of errors, avoid entry of duplicate data, avoid missing photos or observing details that can be cleary informed if you walk the inspector toruhgh the process.

- Change the order of requested fields, especially photos and data in the order of the walk-around for exterior, and in the order you can walk the aircraft in the interior
- Request (only once) the data . Example:

  o When requesting engine data for the physical ask for photo of inlet cowl, general view of the engine, data plate (AND CONFIRM Sn!!!) ,
  o When walking the cabin, request to check for aircrf data plate, and owner plate.
  o When in cockpit request to see if latest certificates are available. Request to see if any mod (EFB, CDSS, minor mods, etc...) are fitted
  o When checking for attendand seats ask to look for general condition of cushions, covers, seat belts, check TSO tags if readable...minimal checklist in the text and take picture if effective.
  o Can even suggest requested views with template examples.

- Allow Access to Fleet Management Director/VP for revision of progress before submission.
- Allow document scanning tool directly to pdf (available in API and on all smartphohnes today) to capture certificates that are on board or TLB quickly. This can upload directly to ATS and populate the fields of the required certifiactes. This information sometimes os not provided direblty and reduces the amount of documents rquired to the airline staff if we already have the latest found physically.

Possiblities beyond MVP

FastField vs In-house

Instead of customizing an existing app that has lmitations in the format, in the time it takes to keep updated and the limitations in the export of data and integration with existing databases of DAE, have an inhouse form that is easy to configure with today's AI tools , fit to DAE for quicker time upon review of the project when submitted, ensuring more reliability of data , and reducing the time of the inspector in doing paperwork and more time in checking the aircraft.

This will allow to have continuous history of the airplane, integrated ieasily with xRM and easier follow up items, history all in same format

AI-Integration

During physical inspection - On parts identification

Pictures of dataplates of avionics components , lavs , galleys, attendant seats, pax seats and any other plate read can be easily extracted and parametrized to fill in most of the report by just having the pictures.

DAE has a vast base of pictures of previous inspections,and records. This can feed an LLM that is local, not shared with any vendor

On records review

With a local AI tool with agents developed asking the right questions it is possible to feed the reports (OCCM, LLPs, AD, LDND , B2B , shop visits) and detect fast incoherences in data, make the typical checks that an auditor will do, extract SN and populate the report where the auditor only has to verify and not enter (reduce copying errors). This can be later extrapolated to initial records review on deliveries, prebuy inspections