Environmental Aspects of Aviation Maintenance and Operation

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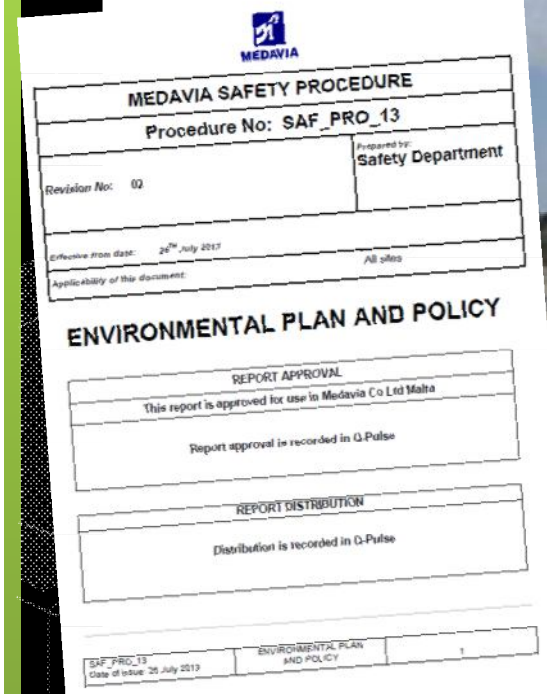
Medavia's operating environments are hostile, diverse and seemingly far removed from base operations. These can have an impact on home base environmental management. **As an industry we are used to thinking about the wider environment.** (Macro view)

So what about environmental considerations at home base? (Micro view)

Consideration of the environment is a standard part of the RISK ASSESSMENT process at Medavia


MEDAVIA

MEDAVIA SAFETY PROCEDURE

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ENVIRONMENTAL PLAN AND POLICY

REPORT APPROVAL

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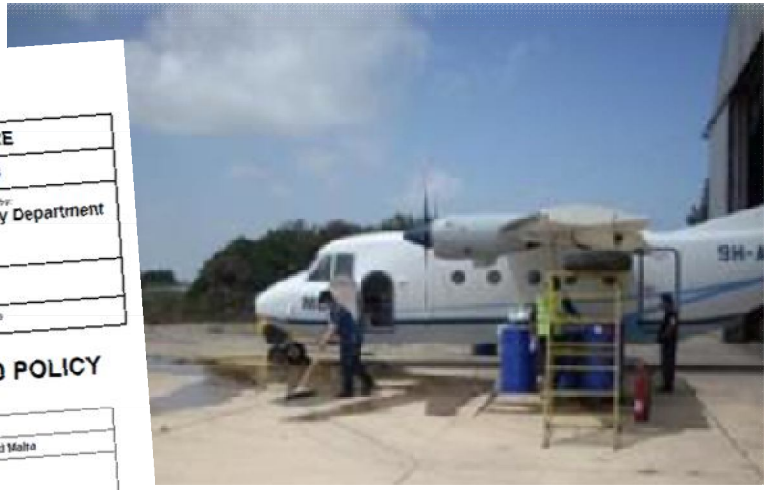


Why is that relevant to carbon costs?

Consequence of the Incident

Rating	People	Environment	Assets	Reputation	Security
	P	E	A	R	S
A	Multiple Fatality	Massive Effect	Extensive Damage € 7.5M+	Internat-ional Impact	Massive Effect
B	Single Fatality	Major Effect	Major Damage € 1M-7.5M	National Impact	Major Effect
C	Serious Injury	Localized Effect	Local Damage € 25k- 1M	Conside-rable Impact	Localized Effect
D	Minor Injury	Minor Effect	Minor Damage € 5- 25K	Limited Impact	Minor Effect
E	Slight Injury	Slight Effect	Slight Damage € 0-5K	Slight Impact	Slight Impact
F	No Injury	Zero Effect	Zero Damage	No Impact	No Impact

Medavia SMS Risk Assessment Matrix (RAM) ss3rev2

SAMPLE

Increasing Probability/Likelihood

Rating	Unknown in the Aviation Industry	Known in the Aviation Industry	Known of in the Company	<3 incidents /PA in the Company	≥3 incidents /PA at Location
	1	2	3	4	5
A	1A	2A	3A	4A Stop	5A Safety Case
B	1B	2B	3B Mitigate	4B	5B
C	1C	2C	3C	4C	5C
D	1D Acceptable	2D	3D	4D	5D
E	1E	2E	3E	4E	5E
F	1F	2F	3F	4F	5F

Medavia SMS Risk Assessment Matrix (RAM) ss3rev2

PetroAir, DHC6 Sirte

Accidents ALWAYS have an environmental cost too! *Probably why safety departments get lumped with environment issues*

Tractor fire

Mitigation = 22 firex's

Scope: Medavia

- Landside
  Head office

- Airside New
  Hanger

- Airside Old
  Hanger (SRT)

Insulation & Thermal loss prevention

Building:

Constructed with cavity wall insulation throughout and polystyrene (jablo) beads pumped into the concrete mix for roof pours – light and thermally stable structure.

Glazing:

All new glazing including doors are double glazed. Windows flip and hinge allowing ventilation and easy of access for cleaning from the inside.

Linked A/C units:

Office A/C units linked in sets of 3 and limited to a max heating temperature setting.

Solar Tubes

Solar tubes are used extensively within the facility. These allow natural light to reach almost 95% of the facility where it would other wise be impossible to have external windows

LED technology

The shift from Fluorescent tube to LED technology is expected to reduce energy consumption by 75%

Selection of diffused and/or direct beam units as required.

Changing standard lights to save 65% of energy. Investment should be recouped within 2 ½ years.

Reservoir

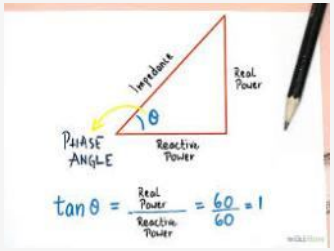
The new hangar build at Medavia invested heavily in reservoir and run off catchment, both from hangar roofs, SAP common areas and TWY Bravo (B)*.

Transport

As far as possible company vehicles both airside and landside are to Euro3 / 4 but this is an ongoing process to upgrade to higher EU specifications.

Our scissors lifter has been changed from a diesel powered unit to an electric one and we plan to change our diesel forklift to LPG or electric in the very near future.

Staff are encouraged to join in on ‘bike-2-work’ schemes and other initiatives to reduce external carbon costs and resolve the ‘final mile’. Medavia has an active relationship with BAG(Malta).



Future Projects - Electrical

Lighting:

Reduction of excessive lighting in our hangar (400lux) also reducing light stress.

This is achieved by integrating an intelligent electrical panel (set lux value) that also extends the life expectancy of the lamp by 20%.

Electrical:

The installation of power factor correction technology.

Future Projects - PV Panels

Photovoltaic panels are under test on the roof of Medavia's hangar.

It is proposed to install 2500 PV panels that will generate 120% of the electrical power currently* consumed

Future PV projects are the replacement of vehicle parking canopies with PV units.

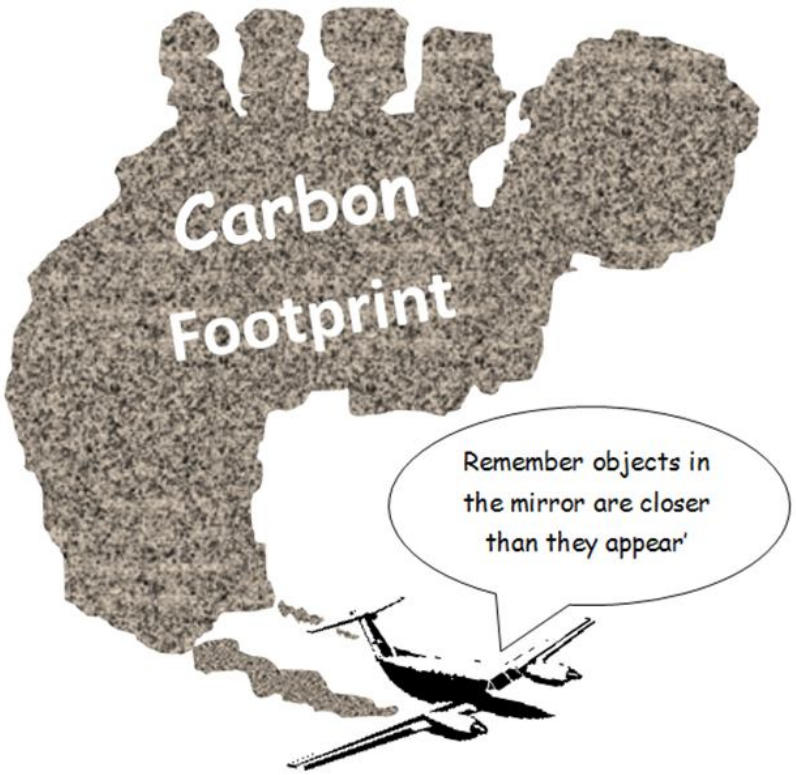
(*Before any other savings).

Future Projects - Fuel Cell

Assisting helicopter customer CHC in the positioning and installation of a 2,900 litre fuel cell will reduce unnecessary trips made by Enemata to SAP across the RWY.

In Conclusion

Closer than you think



Not that difficult to get right