



A StandardAero Company

Cleaning Bay Maintenance Checks & Schedule

VAIL-OPS-123

Affected Departments	
Engines Business Unit	

	Role	Date
Originator	Cleaning Bay Team Leader	09 May 2023
Reviewer	Repair Manager	09 May 2023
Process Owner	Repair Manager	09 May 2023
Approved By	Repair Manager	09 May 2023
Authorised for Publishing	Quality Engineer	26 Jun 2023

Issue Number	3
Revision Number	0
Date	26 Jun 2023
Supersedes	2.0

OFFICIAL

Uncontrolled copy when printed

Issue/Rev Number	Summary of Update	Date Incorporated
1.0	Initial Issue	25 Mar 2020
1.1	Minor Update to Table one	05 May 2020
2.0	New Template in line with VAIL-QAS-013. Process owner. Correction. Form updates.	27 May 2021
3.0	Para's 4.8 and 4.9 added to include details on media storage	09 May 2023

List of Abbreviations	
VAIL	Vector Aerospace International Limited (a StandardAero Company)
PPE	Personnel Protection Equipment

Reference Documents	

Forms	
VAIL-OPS-123F01	Line A Check
VAIL-OPS-123F02	Line B Check
VAIL-OPS-123F03	Line C Check
VAIL-OPS-123F04	Line D Check
VAIL-OPS-123F05	Varsol Wash
VAIL-OPS-123F06	Pressure Flush Rig
VAIL-OPS-123F07	Plastic Media
VAIL-OPS-123F08	Glass Bead
VAIL-OPS-123F09	Dry Grit
VAIL-OPS-123F10	Aqua Blast
VAIL-OPS-123F11	Probes & Filters
VAIL-EHS-03401	Pre-use Overhead Crane Check List

OFFICIAL

Uncontrolled copy when printed

1.0 Purpose

- 1.1 To identify the required maintenance checks the time schedule and the recording & archiving requirements.

2.0 Scope

- 2.1 This procedure applies to the Engine Shop Cleaning Bay sited at the Companies Fleetlands Facility

3.0 Responsibility/ies

- 3.1 It is the responsibility of the Cleaning Bay staff and Local Supervision to ensure all relative maintenance checks are carried out as the procedure details. The time schedule for the checks is identified in this procedure in Table 1 and all checks should be undertaken before work is processed on the day or month stated. Monthly checks should be undertaken on the first working day of the month.

4.0 Action

- 4.1 In order to keep abrasive blasting machines running in optimum condition, they must be checked by the operator prior to use. Refer to the relevant equipment pre-use check sheet on each machine for details of the necessary checks.

4.2 PPE & HEALTH AND SAFETY

- 4.2.1 When performing any task in the Cleaning Bay be it processing work or maintenance the correct PPE Personal Protective Equipment must be worn at all times.

Local Signage details the PPE to be worn



4.3 Chemical Hazard awareness

- 4.3.1 Please note the signage on the tanks and beware of the chemical in use and the possible danger to operators from the solutions.



www.shutterstock.com · 149423294



4.4 Maintenance & Control schedule and checks.

- 4.4.1 Maintenance manuals, standard practices and audit requirements have helped identify required maintenance requirements.
- 4.4.2 Maintenance manuals, standard practices and audit requirements have helped to identify required maintenance requirements.

4.5 Calibration

- 4.5.1 Gauges, timers and all items requiring calibration must be checked to ensure the calibration has been performed and is in date before use and the due date for next calibration is stated.

4.6 Shelf Life and Batch Numbers

- 4.6.1 Batch numbers from chemicals and media should be displayed where possible on Chemical tanks and on Blast machines.
- 4.6.2 Shelf life of all chemicals, fluids and media should be displayed and not used after the shelf life has expired.

4.7 Chemical Storage and Spills

- 4.7.1 Chemicals waiting to make up new tanks or top up existing tanks should be on Bunds or a Bunded area to ensure any spillage or leakage is captured. Designated spill kits are in place in the area to capture any leakage or spills

4.8 Media Receipt and Storage

- 4.8.1 All media being receipted must be checked to ensure it is clearly labelled on all packaging. This is to contain media type, batch number and supplier.

4.9 Blast Cabinet Media Change

- 4.9.1 When changing media in blast cabinets you must ensure the media being put in the cabinet is the correct media as per the SPOP signage. If the media type is being changed then the SPOP signage must be changed to show this. Multiple SPOP signage may be required if it covers multiple SPOP's. Any media being removed to be re used must be correctly labelled with type and batch number.

4.10 Checks and Schedule**Table 1**

Maintenance & Control Check	Form Number	FREQUENCY				
		DAILY	WEEKLY	MONTHLY	SIX MONTHLY	Paragraph
Line Check A	VAIL-OPS-123F01	X				5
Line Check B	VAIL-OPS-123F02	X				5
Line Check C	VAIL-OPS-123F03	X				5
Line Check D	VAIL-OPS-123F04	X				5
PRE-USE-CRANE	FQ90 Ver.3	X				5.2
VAR SOL WASH	VAIL-OPS-123F05		X			6.1
PRESSURE FLUSH	VAIL-OPS-123F06		X			6.2
PLASTIC MEDIA	VAIL-OPS-123F07		X			6.3
GLASS BEAD	VAIL-OPS-123F08		X			6.4
DRY GRIT	VAIL-OPS-123F09		X			6.5
AQUA BLAST	VAIL-OPS-123F10		X			6.6
SCRUBBER PROBES	VAIL-OPS-123F11		X			6.7
INLINE FILTER SCRUBBERS	VAIL-OPS-123F11		X			6.8
CLEANING LINE FILTER CHAMBERS	VAIL-OPS-123F11			X		6.9
SUMP 12 & 15 FILTERS	VAIL-OPS-123F11			X		7.6

5.0 Daily**5.1 Line Checks**

5.1.1 Line checks are a daily requirement and recorded on forms

VAIL-OPS-123F01

VAIL-OPS-123F02

VAIL-OPS-123F03

VAIL-OPS-123F04

5.1.2 The checks record the tank temperature twice daily

- Pipe work for leaks
- Top up Floats
- Forms are to be scanned and saved on the R:\Engine Services\Engine Shop\Cleaning Bay

5.2 Pre Use overhead Crane Check

5.2.1 VAIL-EHS-034F01 details an 8 point check for the Crane/hoist in use including an Emergency Stop Check.

5.2.2 Completed forms are to be saved in the R:\Engine Services\Engine Shop\Cleaning Bay

6.0 Weekly

6.1 Varsol wash tank (Varsol 60)

6.1.1 The Varsol wash check is a weekly check. The details and requirements of the checks are on page 2 of 2 on Form VAIL-OPS-123F05

- Record any comments and findings on page 1.
- Completed forms are to be saved in the R:\Engine Services\Engine Shop\Cleaning Bay
- Dispose of used dirty Varsol in a 25L drum and label as waste Varsol.
- Add Safety Data sheet and take to Fleetlands waste and disposal Depot

6.2 Pressure Flush Rig

6.2.1 The Pressure flush Rig should be checked before use for any obvious defects like cracked screen, split hose or leaks.

6.2.2 A weekly check is to completed with the details of the checks and the results to be confirmed on Form VAIL-OPS-123F06

6.2.3 Ensure Gauge Calibrations have been done and in date before use.

6.2.4 The Flushing Fluid used in the rig is HDL 500 FF HDL 500FF Flush Rig Liquid

6.2.5 HDL-500FF is a flushing liquid formulated to remove small debris, light oil, etc., from aircraft structures (engines, fuel injectors, etc.).

6.2.6 HDL-500FF is a translucent liquid solution of mild organic materials, corrosion inhibitors and wetting agents.

- **Approval Pratt & Whitney**



6.3 Plastic Media Blast

- 6.3.1 Check the Plastic Media for signs of obvious damage before use and on initial use and perform weekly checks as stated on Form VAIL-OPS-123F07
- 6.3.2 Media is Wheelabrator Type 2 grade 12/20 Type II urea formaldehyde
- 6.3.3 The unique attribute of plastic media, which can be used in wet and dry blast
- 6.3.4 Equipment is the ability to remove organic coatings such as epoxy and other wear resistant paints while imparting negligible damage to both metallic and non-metallic substrates.
- 6.3.5 Ensure Gauges are in calibration before use.
- 6.3.6 Completed forms are to be saved in the R:\Engine services\Engines Shop\Cleaning Bay

6.4 Glass Bead

- 6.4.1. Check the Plastic Media for signs of obvious damage before use and on initial use and perform weekly checks as stated on Form VAIL-OPS-123F07
- 6.4.2. Glass Bead media grade is 53-105
- 6.4.3. Ensure all Gauge Calibrations are in date before use.
- 6.4.4. Completed forms are to be saved in the R:\Engine Services\Engine Shop\Cleaning Bay

- 6.4.5. Glass beads are used for several different types of blasting, including finishing, cleaning, deburring and peening.
- 6.4.6. Finishing refers to the process of texturing a material after it has already been coated, giving it a light burnish.

6.5. Dry Grit

- 6.5.1. Check Dry Grit for obvious damage before use and on initial use. Weekly checks are recorded on Form VAIL-OPS-123F09. The required checks are stated on page 2 of 2.
- 6.5.2. Completed forms are to be saved in the R:\Engine Services\Engine Shop\Cleaning Bay
- 6.5.3. In use media is Aluminum Oxide grade 120/220

6.6. Aqua Blast (wet blast)

- 6.6.1. Check the Aqua Blast Machine Before use for leaks or obvious damage and complete weekly checks as stated on Form VAIL-OPS-123F10.
- 6.6.2. Completed forms are to be saved in the R:\Engine Services\Engine Shop\Cleaning Bay.
- 6.6.3. Media is Vaquashene Glass Bead Media Grade 53-105 premium quality glass beads are manufactured to, and conform to all major aerospace specifications.
- 6.6.4. Approvals - Vaquashene conforms with and is approved to all major Aerospace. MOD & Nuclear Specifications.
- 6.6.5. When not in use is it recommended that the door of the Blast Machine is left slightly open.

6.7. Scrubber Poles

- 6.7.1. Check and clean the scrubber probes weekly. If the probes are dirty it could affect the water Auto Top up of the scrubbers.
- 6.7.2. Clean the probes with a clean cloth or for more stubborn areas lightly rub with Scotchbrite paying particular attention to the Probe Tip.
- 6.7.3. FORM VAIL-OPS-123F11



6.8. Inline Scrubber Filters

6.8.1. Check inline filter for contamination of the gauze and general condition.

6.8.2. Form VAIL-OPS-123F11



6.9. Cleaning Line Filter Chambers

6.9.1. Filters to be checked and replaced monthly if required or if the pressure rises above 2 bar. Form VAIL-OPS-123F11.

6.9.2. Filters on A Line & B Line.

6.9.3. Wear PPE when changing the Line Filters.

7.0. Procedure for Replacement

- 7.1. The day before replacement of filters position valves to bypass the filter chamber. When the chamber is cool enough drain the filter housing from the drain valve located at the bottom into a container and pour back into the tank.
- 7.2. Once the chamber is drained remove lid taking care not to damage the o ring. Remove the centre cap securing wing nut carefully as the cap is spring loaded, once the cap is removed the filters can be lifted out.
- 7.3. The contaminated filters must be disposed of by double bagging in clear polythene bags & placing in a waste barrel with the appropriate safety data sheet.
- 7.4. Insert new filters over the holding rods & refit the cap ensuring the springs & locating lugs are correctly positioned then screw down the wing nut so that suitable pressure is on the springs. Refit the o ring & filter chamber lid.
- 7.5. Open valves to allow fluid to flow through the filters & bleed the chamber from valve on the lid until there is an air free flow of fluid. Finally check for leaks.



7.6 Sump 12 & Sump 15 Inline Filters

Note: These Filters are under the walk way of A line and you should only try and access the Filter if you feel you can do it safely. This task should be done by two people with one person staying on the walk way in case the other person needs assistance.

7.6.1. If you feel you cannot access the filter chamber area please inform supervision or raise a maintenance request.

7.6.2. Wash filter and remove any debris from the gauze or replace filter gauze if it is damaged.

Sump 15 Filter Removed

