

## STATEMENT OF BASIS

For the issuance of Draft Air Permit # 1876-AOP-R14 AFIN: 60-00617

1. PERMITTING AUTHORITY:

Division of Environmental Quality  
5301 Northshore Drive  
North Little Rock, Arkansas 72118-5317

2. APPLICANT:

Dassault Falcon Jet Corp.  
3801 East 10th Street  
Little Rock, Arkansas 72202

3. PERMIT WRITER:

John Mazurkiewicz

4. NAICS DESCRIPTION AND CODE:

NAICS Description: Aircraft Manufacturing  
NAICS Code: 336411

5. ALL SUBMITTALS:

The following is a list of ALL permit applications included in this permit revision.

Date of Application	Type of Application (New, Renewal, Modification, Deminimis/Minor Mod, or Administrative Amendment)	Short Description of Any Changes That Would Be Considered New or Modified Emissions
12/9/2020	Administrative Amendment	Add a UV line as an A-5 Insignificant Activity

6. REVIEWER'S NOTES:

- Various formatting changes have been made to the Permit and Statement of Basis.

7. COMPLIANCE STATUS:

The following summarizes the current compliance of the facility including active/pending enforcement actions and recent compliance activities and issues.

There are no active or pending air enforcement actions or issues at this time. The last inspection was conducted on October 10, 2019. No areas of concern or compliance issues were noted. A review of ECHO revealed no CAA violations in the last twelve quarters.

8. PSD/GHG APPLICABILITY:

a) Did the facility undergo PSD review in this permit (i.e., BACT, Modeling, etc.)? No. If yes, were GHG emission increases significant? N/A.

b) Is the facility categorized as a major source for PSD? No.

- *Single pollutant ≥ 100 tpy and on the list of 28 or single pollutant ≥ 250 tpy and not on list*

If yes for 8(b), explain why this permit modification is not PSD. N/A.

9. SOURCE AND POLLUTANT SPECIFIC REGULATORY APPLICABILITY:

Source	Pollutant	Regulation (NSPS, NESHAP or PSD)
SN-80	PM <sub>10</sub> , VOC, CO, NO <sub>x</sub> , HAPs	NSPS III, NESHAP ZZZZ
SN-81	HAPs	NESHAP ZZZZ
SN-82	HAPs	NESHAP CCCCCC
Facility	HAPs	NESHAP HHHHHH
Facility	HAPs	NESHAP WWWWWW

10. UNCONSTRUCTED SOURCES:

Unconstructed Source	Permit Approval Date	Extension Requested Date	Extension Approval Date	If Greater than 18 Months without Approval, List Reason for Continued Inclusion in Permit
None.				

11. PERMIT SHIELD – TITLE V PERMITS ONLY:

Did the facility request a permit shield in this application? No.

(Note - permit shields are not allowed to be added, but existing ones can remain, for minor modification applications or any Regulation 18 requirement.)

12. COMPLIANCE ASSURANCE MONITORING (CAM) – TITLE V PERMITS ONLY:

List sources potentially subject to CAM because they use a control device to achieve compliance and have pre-control emissions of at least 100 percent of the major source level. List the pollutant of concern and a brief summary of the CAM plan (temperature monitoring, CEMs, opacity monitoring, etc.) and frequency requirements of § 64.

Source	Pollutant Controlled	Cite Exemption or CAM Plan Monitoring and Frequency
None.		

13. EMISSION CHANGES AND FEE CALCULATION:

See emission change and fee calculation spreadsheet in Appendix A.

14. AMBIENT AIR EVALUATIONS:

The following are results for ambient air evaluations or modeling.

a) NAAQS

A NAAQS evaluation is not required under the Arkansas State Implementation Plan, National Ambient Air Quality Standards, Infrastructure SIPs and NAAQS SIP per Ark. Code Ann. § 8-4-318, dated March 2017 and the DEQ Air Permit Screening Modeling Instructions.

b) Non-Criteria Pollutants:

The non-criteria pollutants listed below were evaluated. Based on Division of Environmental Quality procedures for review of non-criteria pollutants, emissions of all other non-criteria pollutants are below thresholds of concern.

1<sup>st</sup> Tier Screening (PAER)

Estimated hourly emissions from the following sources were compared to the Presumptively Acceptable Emission Rate (PAER) for each compound. The Division of Environmental Quality has deemed the PAER to be the product, in lb/hr, of 0.11 and the Threshold Limit Value (mg/m<sup>3</sup>), as listed by the American Conference of Governmental Industrial Hygienists (ACGIH).

Pollutant	TLV (mg/m <sup>3</sup> )	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
Acrolein	2.29E-01	2.52E-02	3.39E-04	Yes
Acetone	1.19E03	1.31E02	4.95E01	Yes
Arsenic	1.00E-02	1.10E-03	1.50E-05	Yes
Beryllium	5.00E-05	5.50E-06	9.00E-07	Yes
Cadmium	1.00E-02	1.10E-03	8.25E-05	Yes
Chromium Compounds	5.00E-01 <sup>1</sup> 5.00E-02 <sup>2</sup>	5.5E-02 5.5E-03	1.05E-04 6.00E-03	No

Pollutant	TLV (mg/m <sup>3</sup> )	PAER (lb/hr) = 0.11 × TLV	Proposed lb/hr	Pass?
	1.00E-02 <sup>3</sup>	1.1E-03	1.50E-04	
Cobalt	2.00E-02	2.20E-03	6.30E-06	Yes
Hexamethylene Diisocyanate	3.44E-02	3.78E-03	1.20E-02	No
Manganese	2.00E-01	2.20E-02	2.85E-05	Yes
Mercury	2.50E-02	2.75E-03	1.95E-05	Yes
POM	2.00E-01	2.20E-02	6.62E-06	Yes
Selenium	2.00E-01	2.20E-02	1.80E-06	Yes
Toluene Diisocyanate	3.56E-02	3.90E-03	3.24E-03	Yes

<sup>1</sup> Metal and Cr III compounds<sup>2</sup> Water-soluble Cr VI compounds<sup>3</sup> Insoluble Cr VI compounds2<sup>nd</sup> Tier Screening (PAIL)

AERMOD air dispersion modeling was performed on the estimated hourly emissions from the following sources, in order to predict ambient concentrations beyond the property boundary. The Presumptively Acceptable Impact Level (PAIL) for each compound has been deemed by the Division of Environmental Quality to be one one-hundredth of the Threshold Limit Value as listed by the ACGIH.

Pollutant	PAIL (µg/m <sup>3</sup> ) = 1/100 of Threshold Limit Value	Modeled Concentration (µg/m <sup>3</sup> )	Pass?
Chromium Compounds	5.00E-01*	9.77E-02	Yes
Hexamethylene Diisocyanate	3.44E-01	2.28E-01	Yes

\*Water-soluble Cr VI compounds

c) H<sub>2</sub>S Modeling: N/A

## 15. CALCULATIONS:

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
01	Mass Balance	VOC 5.1 lb/hr			
08A	Mass Balance	VOC			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
08B		19.7 lb/hr			
08C					
08D					
08E					
08F					
09	Mass Balance	VOC 10.2 lb/hr			
10	Mass Balance	VOC 12.8 lb/hr			
12	Mass Balance	VOC 14.4 lb/hr			
17	Mass Balance	VOC 2.2 lb/hr			
18	Mass Balance	VOC 2.2 lb/hr			
19	Mass Balance	VOC 2.2 lb/hr			
25	Mass Balance	VOC 59.3 lb/hr			
26A	Mass Balance	VOC 5.0 lb/hr			
26B					
27	Mass Balance	VOC 1.7 lb/hr			
33	TANKS 4.0.9d	VOC 0.6 lb/hr			
34	TANKS 4.0.9d	VOC 0.6 lb/hr			
35	TANKS 4.0.9d	VOC 0.3 lb/hr			
37	Mass Balance	VOC 17.9 lb/hr			
39	Mass Balance	VOC 64.0 lb/hr			
40	Mass Balance	VOC 64.0 lb/hr			
42	Mass Balance	VOC 9.9 lb/hr			
43	Mass Balance	VOC 9.9 lb/hr			
45	Mass Balance	VOC 9.9 lb/hr			
46	Mass Balance	VOC 9.9 lb/hr			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
48	Mass Balance	VOC 1.8 lb/hr			
49	Mass Balance	VOC 12.3 lb/hr			
50	Mass Balance	VOC 12.8 lb/hr			
59	Mass Balance	VOC 9.9 lb/hr			
60	Mass Balance	VOC 9.9 lb/hr			
61	Mass Balance	VOC 9.9 lb/hr			
62	Mass Balance	VOC 9.9 lb/hr			
63	Mass Balance	VOC 9.9 lb/hr			
64	Mass Balance	VOC 9.9 lb/hr			
65	Mass Balance	VOC 42.6 lb/hr			
66	Mass Balance	VOC 42.6 lb/hr			
67	Mass Balance	VOC 1.8 lb/hr			
68	Mass Balance	VOC 1.8 lb/hr			
69	Mass Balance	VOC 0.2 lb/hr			
70	Mass Balance	VOC 0.2 lb/hr			
71	Mass Balance	VOC 3.4 lb/hr			
72	Mass Balance	VOC 3.4 lb/hr			
73	Mass Balance	VOC 3.4 lb/hr			
74	Mass Balance	VOC 2.9 lb/hr			
76	Mass Balance	VOC 0.2 lb/hr			
77	Mass Balance	VOC 0.2 lb/hr			
78	AP-42 Section 1 - Tables 1.4-1 through 1.4-4	PM/PM <sub>10</sub> 7.6 lb/MMcf			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
		SO <sub>2</sub> 0.6 lb/MMcf VOC 5.5 lb/MMcf CO 84 lb/MMcf NO <sub>x</sub> 100 lb/MMcf			
79	Mass Balance	VOC 42.6 lb/hr			
80	AP-42 Section 3 - Tables 3.3-1, 3.3-2, and certification	PM/PM <sub>10</sub> 0.3 g/kW-hr SO <sub>2</sub> 0.00205 g/kW-hr VOC 0.00205 g/kW-hr CO 5.0 g/kW-hr NO <sub>x</sub> 4.0 g/kW-hr			158 hp 500 hr/yr operation
81	AP-42 Section 3 - Table 3.3-1 and 3.3-2	PM/PM <sub>10</sub> 0.0022 lb/hp-hr SO <sub>2</sub> 0.00205 lb/hp-hr VOC 0.00247 lb/hp-hr CO 0.00668 lb/hp-hr NO <sub>x</sub> 0.031 lb/hp-hr			Two Engines 183 hp, each 500 hr/yr operation
82	TANKS 4.0.9d	VOC 11.9 lb/hr			
83A	Mass Balance	VOC			
83B		1.4 lb/hr			
84A	Mass Balance	VOC			
84B		1.0 lb/hr			
85A	Mass Balance	VOC			
85B		12.1 lb/hr			
86A	Mass Balance	VOC			

SN	Emission Factor Source (AP-42, testing, etc.)	Emission Factor (lb/ton, lb/hr, etc.)	Control Equipment	Control Equipment Efficiency	Comments
86B		12.1 lb/hr			
87	Mass Balance	VOC 1.9 lb/hr			
88	Mass Balance	VOC 1.9 lb/hr			
89	Mass Balance	VOC 1.9 lb/hr			
90	Mass Balance	VOC 1.9 lb/hr			
91	Mass Balance	VOC 10.3 lb/hr			
92	Mass Balance	VOC 12.3 lb/hr			
93	Mass Balance	VOC 5.7 lb/hr			
94					
95					
96A	Mass Balance	VOC 2.8 lb/hr			
96B					
96C					
96D					
96E					
97	Mass Balance	VOC 4.9 lb/hr			
98	Mass Balance	VOC 4.9 lb/hr			
99	Mass Balance	VOC 1.0 lb/hr			
100A	Mass Balance	VOC 2.0 lb/hr			
100B					
101A	AP-42 Section 12 - Table 12.20-2	PM/PM <sub>10</sub> 4.2 gr/hr-ft <sup>2</sup>			
101B	AP-42 Section 12 - Table 12.20-2	PM/PM <sub>10</sub> 4.2 gr/hr-ft <sup>2</sup>			
102	Mass Balance	PM/PM <sub>10</sub> 0.01 lb/hr VOC 0.2 lb/hr	Mobile Paint Booth	PM/PM <sub>10</sub> 99.78% VOC 90%	
103	Mass Balance	PM/PM <sub>10</sub> 0.8 lb/hr VOC 0.7 lb/hr			



16. TESTING REQUIREMENTS:

The permit does not require stack testing.

17. MONITORING OR CEMS:

This permit does not require monitoring devices or CEMS.

18. RECORDKEEPING REQUIREMENTS:

The following are items (such as throughput, fuel usage, VOC content, etc.) that must be tracked and recorded.

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
facility wide	VOC content and purchases of VOC containing materials	165.0 tpy of VOC emissions	monthly	Y
facility wide	HAP content and purchases of HAP containing materials	9.6 tpy - single HAP 22.0 tpy - combined	monthly	N
facility wide	VOC and HAP credit, amount of VOC and HAP shipped off-site to a Hazardous Disposal Facility	There is no applicable limit for this requirement.	quarterly	N
facility wide	VOC and HAP credit, amount of VOC and HAP contained in materials that have exceeded their shelf life	There is no applicable limit for this requirement	monthly	N
facility wide	natural gas usage	150 MMscf per consecutive twelve month period	monthly	N
facility wide	Surface Coating Operation	Annual Notification of Changes Report	N/A	N
facility wide	Paint Stripping Operations	Less than 1 ton per year of methyl chloride	annually	N

SN	Recorded Item	Permit Limit	Frequency	Report (Y/N)
facility wide	Records described in § 63.11177	N/A	as necessary	N
facility wide	Electrolytic Operations	Maintain tank cover 95% of electrolytic process time	daily	N
facility wide	Polishing Operations	Capture and control system manufacturer's specifications and instructions and inspections	N/A	N
facility wide	Electrolytic Operations and Polishing Operations	Annual Compliance Certification Report	N/A	N
80	Hours of Operation	500 hr/yr	monthly	Y
	Fuel Specification	Maximum 15 ppm wt% S and either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume	Per Fuel Shipment	N
81	Hours of Operation	500 hr/yr	monthly	Y
82	Monthly Throughput of Gasoline per MACT 6C	10,000 gal/mo 120,000 gal/yr	monthly	N

19. OPACITY:

SN	Opacity	Justification for limit	Compliance Mechanism
All Sources*	5%	§18.501	Natural gas only
80, 81	20%	§19.503(B)	Daily observation for events lasting 24 hours or more otherwise annual

SN	Opacity	Justification for limit	Compliance Mechanism
			observation

20. DELETED CONDITIONS:

Former SC	Justification for removal
	None.

21. GROUP A INSIGNIFICANT ACTIVITIES:

The following is a list of Insignificant Activities including revisions by this permit.

Source Name	Group A Category	Emissions (tpy)						
		PM/PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	
							Single	Total
Mold Machine Shop (Manufacturing Shop) Nat. Gas Fired Curing Oven	A-1	0.02	0.002	0.02	0.25	0.30	0.02	0.02
Mold Machine Shop (Manufacturing Shop) Nat. Gas Fired Curing Oven	A-1	0.04	0.003	0.03	0.43	0.52	0.03	0.03
Machine Shop (Manufacturing Shop) Nat. Gas Fired Oven	A-1	0.03	0.003	0.02	0.36	0.43	0.02	0.02
Wastewater Evaporator	A-1	0.05	0.004	0.04	0.54	0.64	0.04	0.04
Wastewater Evaporator	A-1	0.02	0.002	0.02	0.27	0.32	0.02	0.02
Natural gas fired pressure washers (2)	A-1	0.03	0.002	0.02	0.30	0.36	0.02	0.02
Total	A-1	0.19	0.016	0.15	2.15	2.57	0.15	0.15
Diesel Storage Tank (1,000 gal)	A-3	0.001	-	-	-	-	0.001	0.001
Laboratory UV	A-5	-	-	0.38	-	-	0.38	0.38

Source Name	Group A Category	Emissions (tpy)						
		PM/PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	
							Single	Total
Line								
FAA Burn Test Room	A-13	0.10	-	-	-	-	-	-
Cabinet Shop - Vacuum Filter No. 1	A-13	0.03	-	-	-	-	-	-
Cabinet Shop - Vacuum Filter No.2	A-13	0.03	-	-	-	-	-	-
Production Warehouse - Vacuum Filter	A-13	0.03	-	-	-	-	-	-
Machine Shop (Manufacturing Shop) drilling and cutting	A-13	-	-	0.28	-	-	-	-
Gel-Coat Booth	A-13	-	-	1.86	-	-	0.63	0.96
Cabinet Shop - Polish Room, Detail Polish Room and Buffing Room	A-13	0.08	-	-	-	-	-	-
Welding Inspection Booth	A-13	-	-	0.09	-	-	-	-
Wastewater Aeration	A-13	-	-	-	-	-	-	-
Machine Shop (Manufacturing Shop) Welding	A-13	-	-	-	-	-	-	-
Plating Shop - Diffuse Particulate Filter	A-13	Filtered air is blown back into the Plating Shop. No emissions are released to the atmosphere from the diffuse particulate						

Source Name	Group A Category	Emissions (tpy)						
		PM/PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs	
							Single	Total
		filter.						
Service Center- Dust Collector/Filter	A-13	Filtered air is blown back into the Service Center. No emissions are released to the atmosphere by the dust collector/filter.						
Cabinet Shop - Sanding Room Baghouses (2)	A-13	0.25	-	-	-	-	-	-
Cabinet Shop - Six Diffuse Particulate Filters	A-13	Filtered air is blown back into the Cabinet Shop. No emissions are released to the atmosphere from the diffuse particulate filters.						
Cabinet Shop - Dust Collector with Fabric Filter	A-13	0.15	-	-	-	-	-	-
Manufacturing Area- Dust Collector with Fabric Filter	A-13	0.04	-	-	-	-	-	-
Headliner Shop - Sanding Booths (2)	A-13	0.08	-	-	-	-	-	-
OptiFlex Laser Cutter	A-13	0.78	-	0.23	-	-	0.23	0.23
Total	A-13	1.57	-	2.46	-	-	0.86	1.19

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22. VOIDED, SUPERSEDED, OR SUBSUMED PERMITS:

The following is a list of all active permits voided/superseded/subsumed by the issuance of this permit.

Permit #
1876-AOP-R13

## APPENDIX A – EMISSION CHANGES AND FEE CALCULATION

## Fee Calculation for Major Source

Revised 03-11-16

Facility Name: Dassault Falcon Jet Corp.  
 Permit Number: 1876-AOP-R14  
 AFIN: 60-00617

\$/ton factor	23.93	Annual Chargeable Emissions (tpy)	<u>250.5</u>
Permit Type	AA	Permit Fee \$	<u>0</u>

Minor Modification Fee \$	500
Minimum Modification Fee \$	1000
Renewal with Minor Modification \$	500
Check if Facility Holds an Active Minor Source or Minor Source General Permit	<input type="checkbox"/>
If Hold Active Permit, Amt of Last Annual Air Permit Invoice \$	0
Total Permit Fee Chargeable Emissions (tpy)	0
Initial Title V Permit Fee Chargeable Emissions (tpy)	

*HAPs not included in VOC or PM: Chlorine, Hydrazine, HCl, HF, Methyl Chloroform, Methylene Chloride, Phosphine, Tetrachloroethylene, Titanium Tetrachloride*

*Air Contaminants: All air contaminants are chargeable unless they are included in other totals (e.g., H2SO4 in condensable PM, H2S in TRS, etc.)*

Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
PM		4.4	4.4	0		
PM <sub>10</sub>		4.4	4.4	0	0	4.4
PM <sub>2.5</sub>		0	0	0		
SO <sub>2</sub>		0.4	0.4	0	0	0.4
VOC		165	165	0	0	165
CO		7.4	7.4	0		
NO <sub>x</sub>		10.7	10.7	0	0	10.7
Total HAPs	<input type="checkbox"/>	22	22	0		



Pollutant (tpy)	Check if Chargeable Emission	Old Permit	New Permit	Change in Emissions	Permit Fee Chargeable Emissions	Annual Chargeable Emissions
Acetone	<input checked="" type="checkbox"/>	70	70	0	0	70