

## Check Sheet

Company Name: Kennedy Space Center  
Permit Number: AC 05-176221  
PSD Number: \_\_\_\_\_  
Permit Engineer: \_\_\_\_\_

### Application:

- ☒ Initial Application
- ☐ Incompleteness Letters
- ☐ Responses
- ☐ Waiver of Department Action
- ☐ Department Response
- ☐ Other

### Cross References:

☐

☐

☐

### Intent:

- ☒ Intent to Issue
- ☒ Notice of Intent to Issue
- ☒ Technical Evaluation
- ☐ BACT Determination
- ☒ Unsigned Permit

#### Correspondence with:

- ☐ EPA
- ☐ Park Services
- ☐ Other

#### ☒ Proof of Publication

- ☐ Petitions - (Related to extensions, hearings, etc.)
- ☐ Waiver of Department Action
- ☐ Other

### Final Determination:

- ☒ Final Determination
- ☒ Signed Permit
- ☐ BACT Determination
- ☐ Other

### Post Permit Correspondence:

- ☐ Extensions/Amendments/Modifications
- ☐ Other

**SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.  
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to: James D. Phillips Director of Eng. Development John F Kennedy Space Ctr Kennedy Space Center, FL 32899	4. Article Number P256 396 184
5. Signature — Address X	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> .COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
6. Signature — Agent X [Signature]	Always obtain signature of addressee or agent and DATE DELIVERED.
7. Date of Delivery 8/30/90	8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Mar. 1988

\* U.S.G.P.O. 1988-212-865

DOMESTIC RETURN RECEIPT

P 256 396 184

# RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
NOT FOR INTERNATIONAL MAIL  
(See Reverse)

U.S.G.P.O. 1989-234-555

PS Form 3800, June 1985

Sent to	James D. Phillips
Street and No.	25C
P.O., State and ZIP Code	KSC, FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	8-28-90 AC 05-176221



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

### STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF PERMIT

Mr. James D. Phillips  
Director of Engineering Development  
John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

August 28, 1990

Enclosed is construction permit No. AC 05-176221 for the National Aeronautic and Space Administration to construct a TPS Small Parts Processing Paint Booth at the Kennedy Space Center in Brevard County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this permit is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
C. H. Fancy, P.E.  
Chief  
Bureau of Air Regulation

Copy furnished to:

Charles Collins, Central Dist.  
David Buff, P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby  
certifies that this NOTICE OF INTENT TO ISSUE and all copies were  
mailed before the close of business on 8-28-90.

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to  
§120.52(9), Florida Statutes, with  
the designated Department Clerk,  
receipt of which is hereby  
acknowledged.

Fernando  
Clerk

8-28-90  
Date

Final Determination

John F. Kennedy Space Center  
Brevard County, Florida

TPS Small Parts Processing Paint Booth  
Permit No. AC 05-176221

Department of Environmental Regulation  
Division of Air Resources Management  
Bureau of Air Regulation

August 24, 1990

### Final Determination

The Technical Evaluation and Preliminary Determination for the permit to construct a TPS Small Parts Processing Paint Booth at the Kennedy Space Center in Brevard County, Florida, was distributed on March 23, 1990. The Notice of Intent to Issue was published in the Florida Today Newspaper on July 20, 1990. Copies of the evaluation were available for public inspection at the Department's offices in Orlando and Tallahassee.

No comments were submitted on the Department's Intent to Issue the permit. The final action of the Department will be to issue construction permit No. AC 05-176221 as proposed in the Technical Evaluation and Preliminary Determination.



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**

John F. Kennedy Space Center  
Kennedy Space Center,  
Florida 32899

Permit Number: AC 05-176221

Expiration Date: May 1, 1991

County: Brevard

Latitude/Longitude: 28°33'43"N  
80°39'36"W

Project: TPS Small Parts  
Processing Spray Booth

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construction of 10'-8"W x 9'-8"L x 7'-6"H custom design Binks Paint Booth equipped with 99% efficient inlet and outlet particulate matter filters, that exhaust 8700 acfm of makeup air to the existing vent system. The booth shall be used for the application of Rustoleum, Akzo/Sikkens, Hypalon topcoat, Alodine anodizing agent, along with trichloroethane solvent by disposable rollers or brushes to small parts during the refurbishment of solid rocket boosters. The paint booth will be located inside the ARF building. The UTM coordinates of this building are Zone 17, 533.3 km E and 3159.3 km N.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received February 9, 1990



PERMITTEE:  
John F. Kennedy Space Center

Permit Number: AC 05-176221  
Expiration Date: May 1, 1991

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.



PERMITTEE:  
John F. Kennedy Space Center

Permit Number: AC 05-176221  
Expiration Date: May 1, 1991

**GENERAL CONDITIONS:**

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

PERMITTEE:  
John F. Kennedy Space Center

Permit Number: AC 05-176221  
Expiration Date: May 1, 1991

**GENERAL CONDITIONS:**

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and

PERMITTEE:  
John F. Kennedy Space Center

Permit Number: AC 05-176221  
Expiration Date: May 1, 1991

**GENERAL CONDITIONS:**

records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

**SPECIFIC CONDITIONS:**

1. This paint booth may be operated continuously, 8760 hrs/yr.
2. Volatile organic compounds emissions from the booth shall not exceed 4.4 tons during any 12 month period and 1.2 tons during any 3 month period or the following:

<u>Material</u>	<u>gal/yr</u>	<u>gal/quarter</u>
Rustoleum:		
Primer	6.0	1.5
Paint	6.0	1.5
Akzo/Sikkens:		
Primer & Catalyst	18.0	4.5
Topcoat & Catalyst	9.6	2.4
Hypalon Topcoat	648.0	162.0
Alodine Anodizing Agent	3.1	0.8
<u>1,1,1-trichloroethane</u>	<u>213.6</u>	<u>53.4</u>

Compliance shall be determined by maintaining a log on the quantity of material used in the booth and its VOC content. The

PERMITTEE:

John F. Kennedy Space Center

Permit Number: AC 05-176221

Expiration Date: May 1, 1991

SPECIFIC CONDITIONS:

permittee shall report the monthly VOC emissions (DER Form 17-1.202(6)) from this source annually.

3. Waste paints, chemicals, and solvents shall be stored in a sealed containers.

4. Filters controlling particulate matter emissions and visible emissions shall be properly maintained.

5. Visible emissions from this source shall not exceed 5 percent opacity. EPA Method 9 tests (40 CFR 60, Appendix A, July 1, 1988) shall be conducted by the permittee upon a written request by the Department.

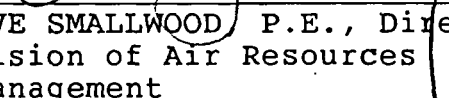
6. The permittee shall not allow the discharge of air pollutants from this operation that cause or contribute to objectionable odors.

7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

8. An application for an operation permit must be submitted to the Department's Central District office in Orlando at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this 28 day  
of August, 1990

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

*for*   
STEVE SMALLWOOD P.E., Director  
Division of Air Resources  
Management

Reply to Attn of

DF-EMS

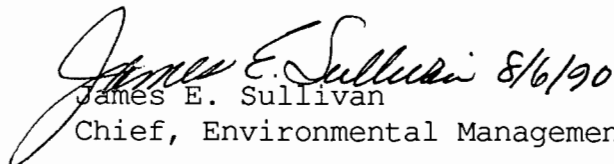
RECEIVED  
AUG 10 1990  
DER-BAQM

Florida Dept. of Environmental Regulation  
Attn: Mr. Claire Fancy  
2600 Blair Stone Road  
Tallahassee, FL 32399

SUBJECT: Legal Advertisement for Construction Permit for the TPS  
Small Parts Processing

Enclosed is a copy of the subject legal advertisement.

Any questions you have concerning this permit should be directed to  
Mr. Mario Busacca of my staff

  
James E. Sullivan 8/6/90  
Chief, Environmental Management Staff

Enclosure

C: W. Hanks

# CAPE PUBLICATIONS, INC.

**The Times**

Published Weekly on Wednesday

**THE TRIBUNE**

Published Weekly on Wednesday



**Published Daily**

## STATE OF FLORIDA COUNTY OF BREVARD

Before the undersigned authority personally appeared Cynthia Frith who on

oath says that he/she is Legal Advertising Clerk

of the FLORIDA TODAY, a newspaper published in Brevard County,

Florida; that the attached copy of advertising being a Legal Notice

in the matter of Intent to issue permit to John F. Kennedy Space Center  
to construct a TPS

in the \_\_\_\_\_ Court

was published in the FLORIDA TODAY NEWSPAPER

in the issues of July 20, 1990

Affiant further says that the said FLORIDA TODAY NEWSPAPER

is a newspaper published in said Brevard County, Florida and that the said newspaper has  
heretofore been continuously published in said Brevard County, Florida regularly as stated above,

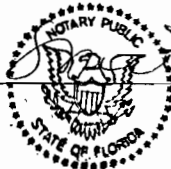
and has been entered as second class mail matter at the post office in COCOA,

said Brevard County, Florida for a period of one year next preceeding the first publication of the  
attached copy of advertisement; and affiant further says that he has neither paid nor promised any  
person, firm or corporation any discount, rebate, commission or refund for the purpose of securing  
this advertisement for publication in said newspaper.

Cynthia Frith  
Sworn and subscribed to before me this

—20— day of July A.D., 19—90

Leah Smith



**OFFICIAL SEAL**

LEAH SMITH  
MY COMMISSION EXPIRES  
JUNE 07, 1992

BRANCH  
ACCOUNTING  
NASA-KSC

JUL 25 8 36 AM '90

INCOMING

State of Florida  
Department of  
Environmental Regulation  
Notice of Intent to Issue  
The Department of Environ-  
mental Regulation hereby gives  
notice of its intent to issue a per-  
mit to the John F. Kennedy Space  
Center, Brevard County, Florida  
32899, to construct a TPS (ther-  
mal protection system) small  
parts processing paint booth at  
the SRB Assembly and Refur-  
bishment Facility. Up to 4.410  
TPY VOC pollutants will be emit-  
ted from the booth. The VOC  
emissions from this source will  
not violate any ambient air quali-  
ty standard. A determination of  
Best Available Control Technol-  
ogy (BACT) was not required.  
The Department is issuing this  
intent to issue for the reasons  
stated in the Technical Evalua-  
tion and Preliminary  
Determination.

A person whose substantial in-  
terests are affected by the de-  
partment's proposed permitting  
decision may petition for an ad-  
ministrative proceeding (hear-  
ing) in accordance with Section  
120.57, Florida Statutes. The peti-  
tion must contain the information  
set forth below and must be filed  
(received) in the Office of Gen-  
eral Counsel of the Department at  
2600 Blair Stone Road, Tallahas-  
see, Florida 32399-2400, within  
fourteen (14) days of publication  
of this notice. Petitioner shall  
mail a copy of the petition to the  
applicant at the address indicat-  
ed above at the time of filing.  
Failure to file a petition within  
this time period shall constitute a  
waiver of any right such person  
may have to request an adminis-  
trative determination (hearing)  
pursuant to Section 120.57, Flori-  
da Statutes.

The petition shall contain the  
following information:

(a) The name, address, and  
telephone number of each peti-  
tioner, the applicant's name and  
address, the Department Permit  
File Number and the county in  
which the project is proposed;

(b) A statement of how and  
when each petitioner received  
notice of the Department's action  
or proposed action;

(c) A statement of how each  
petitioner's substantial interests  
are affected by the Department's  
action or proposed action;

(d) A statement of the material  
facts disputed by Petitioner, if  
any;

(e) A statement of facts which  
petitioner contends warrant re-  
versal or modification of the De-  
partment's action or proposed  
action;

(f) A statement of which rules  
or statutes petitioner contends  
require reversal or modification  
of the Department's action or  
proposed action; and

(g) A statement of the relief  
sought by petitioner, stating pre-  
cisely the action petitioner wants  
the Department to take with re-  
spect to the Department's action  
or proposed action.

If a petition is filed, the admin-  
istrative hearing process is de-  
signed to formulate agency ac-  
tion. Accordingly, the  
Department's final action may be  
different from the position taken  
by it in this Notice. Persons  
whose substantial interests will  
be affected by any decision of the  
Department with regard to the  
application have the right to peti-  
tion to become a party to the pro-  
ceeding. The petition must con-  
form to the requirements  
specified above and be filed (re-  
ceived) within 14 days of publica-  
tion of this notice in the Office of  
General Counsel at the above ad-  
dress of the Department. Failure  
to petition within the allowed time  
frame constitutes a waiver of any  
right such person has to request a  
hearing under Section 120.57,  
F.S., and to participate as a party  
to this proceeding. Any subse-  
quent intervention will only be at  
the approval of the presiding offi-  
cer upon motion filed pursuant to  
Rule 28-5.207, F.A.C.

The application is available for  
public inspection during normal  
business hours, 8:00 a.m. to 5:00  
p.m., Monday through Friday ex-  
cept legal holidays, at:  
Department of Environmental  
Regulation  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Department of Environmental  
Regulation  
Central District  
3319 Maguire Blvd., Suite 232  
Orlando, Florida 32803-3767

Any person may send written  
comments on the proposed action  
to Mr. Bill Thomas at the Depart-  
ment's Tallahassee address. Al-  
though comments mailed within 14 days  
of the publication of this notice  
will be considered in the Depart-  
ment's final determination.  
T0105125-1T-7/20, 1990, Friday

● **SENDER:** Complete Items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. (Extra charge) 2. ☐ Restricted Delivery (Extra charge)

<b>3. Article Addressed to:</b> Mr. James D. Phillips Director of Engineering Dev. John F. Kennedy Space Center Kennedy Space Center, FL 32899		<b>4. Article Number</b> P 938 762 853
		<b>Type of Service:</b> <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
		Always obtain signature of addressee or agent and <b>DATE DELIVERED.</b>
<b>5. Signature — Address</b> X		<b>8. Addressee's Address (ONLY if requested and fee paid)</b>
<b>6. Signature — Agent</b> X <i>[Signature]</i>		
<b>7. Date of Delivery</b> 3-26-90		

PS Form 3811, Mar. 1988

★ U.S.G.P.O. 1986-212-865

DOMESTIC RETURN RECEIPT

P 938 762 853

### RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

Sent to	
Mr. James D. Phillips, NASA	
Street and No.	
John F. Kennedy Space Center KSC	
P.O., State and ZIP Code	
Kennedy Space Center, FL 32899	
Postage	\$ 32.89
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	
Mailed: 3-23-90	
Permit: AC 05-176221	

PS Form 3800, June 1985



## Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

March 22, 1990

CERTIFIED MAIL-RETURN RECEIPT REQUESTED


Mr. James D. Phillips  
Director of Engineering Development  
John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

Dear Mr. Phillips:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit to construct the TPS Small Parts Processing Paint Booth in the SRB Assembly and Refurbishment Facility at Kennedy Space Center, Brevard County, Florida.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Bill Thomas of the Bureau of Air Regulation.

Sincerely,

  
C. H. Fancy, P.E.  
Chief  
Bureau of Air Regulation

CHF/WH/plm

Attachments

c: Charles Collins, Central Dist.  
David Buff, P.E.





BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of  
Application for Permit by:

John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

DER File No. AC 05-176221

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, John F. Kennedy Space Center, applied on February 7, 1990, to the Department of Environmental Regulation for a permit to construct a TPS (thermal protection system) Small Parts Processing Paint Booth in the Assembly and Refurbishment Facility (ARF) at the Kennedy Space Center, Schwartz Road and Kennedy Parkway, Brevard County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an air construction permit is required for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department, at the address specified within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and

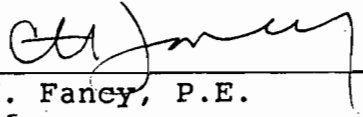
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application(s) have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office in General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such

person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
\_\_\_\_\_  
C. H. Fancy, P.E.  
Chief  
Bureau of Air Regulation

Copies furnished to:

Charles Collins, Central District  
David Buff, P.E.

State of Florida  
Department of Environmental Regulation  
Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to the John F. Kennedy Space Center, Brevard County, Florida 32899, to construct a TPS (thermal protection system) small parts processing paint booth at the SRB Assembly and Refurbishment Facility. Up to 4.410 TPY VOC pollutants will be emitted from the booth. The VOC emissions from this source will not violate any ambient air quality standard. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

The application is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Department of Environmental Regulation  
Central District  
3319 Maguire Blvd., Suite 232  
Orlando, Florida 32803-3767

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

Technical Evaluation  
and  
Preliminary Determination

John F. Kennedy Space Center  
Brevard County, Florida

TPS Small Parts Processing Paint Booth  
File No. AC 05-176221

Department of Environmental Regulation  
Division of Air Resources Management  
Bureau of Air Regulation

March 22, 1990

## I. General Information

A. John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

### B. Request

Mr. James D. Phillips, Director of Engineering Development, submitted an application for permit to construct a paint booth in the Assembly and Refurbishment Facility on February 7, 1990. The application was considered complete on receipt (February 9, 1990). The proposed booth will be located at the Kennedy Space Center, Schwartz Road and Kennedy Parkway, Brevard County, Florida. The UTM coordinates of this facility are Zone 17, 533.3 km E and 3159.3 km N.

### C. Project

The applicant is proposing to construct a new paint booth at this facility. Ventilation air for the booth (8,700 ACFM) will be filtered prior to entering and before leaving the booth. The ventilation air, containing volatile organic compounds (VOC) fumes from the coating solvents used in the booth, are exhausted to the atmosphere through the existing ventilation system serving this area of the plant.

### D. Process and Emissions

Coatings are applied to the small parts with disposable brushes or rollers. The solvents in the coatings are evaporated and exhausted from the booth with the ventilation air. The 99% efficient filters serving the booth capture only the particulate matter. No equipment is used to capture the VOC fumes. The VOC emissions from the booth are directly related to the amount of coatings and solvents used in the booth. The applicant estimates these emissions to be 4.41 TPY of VOC. This will increase permitted VOC emissions from the SRB facility from 105 to 109.41 TPY.

## II. Rule Applicability

The proposed project, construction of a paint booth (SIC 3761), is subject to preconstruction review under the provisions of Chapter 403, Florida Statutes, and Chapter 17-2, Florida Administrative Code (F.A.C.).

The existing facility is located in an area (Brevard County) designated attainment for all of the criteria pollutants.

The Kennedy Space Center is a major facility because permitted VOC emissions exceed 100 TPY VOC. The permitted emissions are less than 250 TPY VOC and space vehicle manufacture

is not on the list of major facility categories (F.A.C. Rule 17-2, Table 500-1). The increase in emissions from the proposed source are less than the significant emissions rates listed in F.A.C. Rule 17-2, Table 500-2. Thus, the new booth is not subject to the PSD regulations, F.A.C. Rule 17-2.500. The new source is subject to F.A.C. Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements. The allowable VOC emissions are based on F.A.C. Rule 17-2.620(1). Higher emissions could subject this project to other regulations.

### III. Technical Evaluation

Air leaving the booth will pass through a filter that removes 99 percent of the particulate matter. This filter will adequately control the particulate matter emissions from the booth.

The filter will not reduce VOC emissions. The VOC emissions will be controlled by limiting the quantity of coatings and solvents that are used in this booth. This limit will result in an allowable emission of 4.410 TPY VOC. The applicant will be required to keep records on the quantity and analysis of the materials used to confirm compliance with this limit.

Clean up solvent consumption is minimized because of the use of disposable brushes and rollers.

### IV. Ambient Air Impact

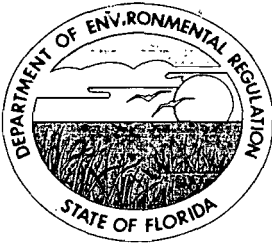
It is the judgement of the Department that the allowable emissions from this project will not violate any ambient air quality standard.

### V. Conclusion

Based on the information provided by the National Aeronautics and Space Administration, the Department has reasonable assurance that the proposed construction of the TPS Small Parts Processing Paint Booth at the Kennedy Space Center, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.







## Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtman, Secretary

John Shearer, Assistant Secretary

**PERMITTEE:**

John F. Kennedy Space Center  
Kennedy Space Center,  
Florida 32899

Permit Number: AC 05-176221

Expiration Date: May 1, 1991

County: Brevard

Latitude/Longitude: 28°33'43"N  
80°39'36"W

Project: TPS Small Parts  
Processing Spray Booth

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Construction of 10'-8"W x 9'-8"L x 7'-6"H custom design Binks Paint Booth equipped with 99% efficient inlet and outlet particulate matter filters, that exhaust 8700 acfm of makeup air to the existing vent system. The booth shall be used for the application of Rustoleum, Akzo/Sikkens, Hypalon topcoat, Alodine anodizing agent, along with trichloroethane solvent by disposable rollers or brushes to small parts during the refurbishment of solid rocket boosters. The paint booth will be located inside the ARF building. The UTM coordinates of this building are Zone 17, 533.3 km E and 3159.3 km N.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received February 9, 1990

PERMITTEE:  
John F. Kennedy Space Center

Permit Number: AC 05-176221  
Expiration Date: May 1, 1991

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:  
John F. Kennedy Space Center

Permit Number: AC 05-176221  
Expiration Date: May 1, 1991

GENERAL CONDITIONS:

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

PERMITTEE:  
John F. Kennedy Space Center

Permit Number: AC 05-176221  
Expiration Date: May 1, 1991

**GENERAL CONDITIONS:**

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and

PERMITTEE:  
John F. Kennedy Space Center

Permit Number: AC 05-176221  
Expiration Date: May 1, 1991

**GENERAL CONDITIONS:**

records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

**SPECIFIC CONDITIONS:**

1. This paint booth may be operated continuously, 8760 hrs/yr.

2. Volatile organic compounds emissions from the booth shall not exceed 4.41 tons during any 12 month period and 1.2 tons during any 3 month period or the following:

<u>Material</u>	<u>gal/yr</u>	<u>gal/quarter</u>
Rustoleum:		
Primer	6.0	1.5
Paint	6.0	1.5
Akzo/Sikkens:		
Primer & Catalyst	18.0	4.5
Topcoat & Catalyst	9.6	2.4
Hypalon Topcoat	648.0	162.0
Alodine Anodizing Agent	3.1	0.8
1,1,1-trichloroethane	213.6	53.4

Compliance shall be determined by maintaining a log on the quantity of material used in the booth and its VOC content. The

PERMITTEE:  
John F. Kennedy Space Center

Permit Number: AC 05-176221  
Expiration Date: May 1, 1991

**SPECIFIC CONDITIONS:**

permittee shall report the monthly VOC emissions (DER Form 17-1.202(6)) from this source annually.

3. Waste paints, chemicals, and solvents shall be stored in a sealed container and disposed of in a waste facility permitted to handle this material.

4. Filters controlling particulate matter emissions and visible emissions shall be properly maintained.

5. Visible emissions from this source shall not exceed 5 percent opacity. Method 9 tests (40 CFR 60, Appendix A, July 1, 1988) shall be conducted by the permittee upon a written request by the Department.

6. The permittee shall not allow the discharge of air pollutants from this operation that cause or contribute to objectionable odors.

7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

8. An application for an operation permit must be submitted to the Department's Central District office in Orlando at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1990

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

\_\_\_\_\_  
STEVE SMALLWOOD, P.E., Director  
Division of Air Resources  
Management

National Aeronautics and  
Space Administration



John F. Kennedy Space Center  
Kennedy Space Center, Florida 32899

RECEIVED  
DER - MAIL ROOM

1990 FEB -9 AM 9:13

Reply to Attn of

DF-EMS

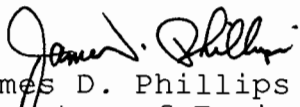
Florida Department of Environmental Regulation  
Attn: Mr. Claire Fancy  
Bureau of Air Quality  
2600 Blair Stone Road  
Tallahassee, FL 32301-8241

FEB 7 1990  
RECEIVED  
FEB 9 1990  
DER-BAQM

SUBJECT: Construction Permit Application for the TPS Small Parts  
Processing Spray Booth at the SRB Assembly and Refurbish-  
ment Facility (ARF) on Kennedy Space Center, FL

Attached are four (4) copies of the subject application and a  
check for \$250.00 for the processing fee.

Any questions concerning this permit application should be  
directed to Mr. Mario Busacca of my staff at 407 867-4049.

  
James D. Phillips  
Director of Engineering Development

Enclosure

cc: C. Collins, c Dist.



UNITED  
TECHNOLOGIES  
USBI

Best Available Copy

USBI  
P.O. Box 21212  
Kennedy Space Center, Florida 32815

74-1292  
724

CHECK NO.  
00066108

066108

TWO HUNDRED FIFTY DOLLARS NO CENTS

PAY TO THE ORDER OF

FLORIDA DEPT. OF ENVIRONMENTAL  
REGULATION  
3312 MAGUIRE BOULEVARD  
ORLANDO, FL. 32803

DATE

CHECK AMOUNT

1-26-90 \*\*\*\*\*250.00

*[Signature]*  
AUTHORIZED SIGNATURE

AUTHORIZED COUNTERSIGNATURE

NBD DEARBORN BANK, N.A.  
611 WOODWARD, DETROIT, MICHIGAN 48226

USBI  
OPERATION ACCOUNT

⑈066108⑈ ⑆072412927⑆

00045956⑈

SUBJECT: Construction Permit Application for the TPS Small Parts  
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Any questions concerning this permit application should be  
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*[Signature]*  
James D. Phillips  
Director of Engineering Development

Enclosure

001031



STATE OF FLORIDA

## DEPARTMENT OF ENVIRONMENTAL REGULATION

RECEIVED

FEB 9 1990

DER-BAQM



AC 05-176221

#250pd-  
3400  
Rept. # 151103

## APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

Solid Rocket Booster

SOURCE TYPE: Assembly and Refurbishment Facility New<sup>1</sup> [ ] Existing<sup>1</sup>

APPLICATION TYPE: [x] Construction [ ] Operation [ ] Modification

COMPANY NAME: National Aeronautics and Space Administration COUNTY: BrevardIdentify the specific emission point source(s) addressed in this application (i.e. Lime  
Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) TPS Small Parts Processing  
Spray BoothSOURCE LOCATION: Street Schwartz Road and Kennedy Parkway City Kennedy Space CenterUTM: East 17-533.3 km North 3159.3 kmLatitude 28 ° 33 ' 43 "N Longitude 80 ° 39 ' 36 "WAPPLICANT NAME AND TITLE: James D. Phillips, Director of Engineering DevelopmentAPPLICANT ADDRESS: DE/Kennedy Space Center, FL 32899

## SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

## A. APPLICANT

I am the undersigned owner or authorized representative\* of National Aeronautics and  
Space Administration

I certify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. Further I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

\*Attach letter of authorization

Signed: James D. PhillipsDirector of Engineering Development

Name and Title (Please Type)

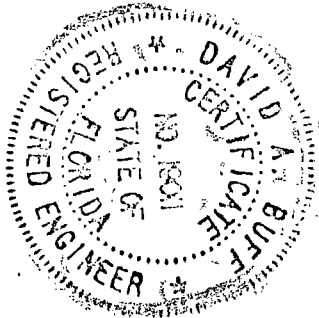
Date FEB 07 1990 Telephone No. \_\_\_\_\_

## B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in this permit application. There is reasonable assurance, in my professional judgment, that

<sup>1</sup> See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.



Signed

David A. BuffDavid A. Buff

Name (Please Type)

KBN Engineering and Applied Sciences, Inc.

Company Name (Please Type)

1034 NW 57th Street, Gainesville, FL 32605

Mailing Address (Please Type)

Florida Registration No. 19011Date: 1/18/90Telephone No. 904-331-9000

## SECTION II: GENERAL PROJECT INFORMATION

- A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Refer to Attachment A.

- B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction upon permit issuance Completion of Construction 1 year after permit issuance

- C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

\$6,000 for spray booth.

- D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

Not applicable.

E. Requested permitted equipment operating time: hrs/day 24; days/wk 7; wks/yr 52  
if power plant, hrs/yr \_\_\_\_\_; if seasonal, describe: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

F. If this is a new source or major modification, answer the following questions.  
(Yes or No)

1. Is this source in a non-attainment area for a particular pollutant? No  
a. If yes, has "offset" been applied? \_\_\_\_\_  
b. If yes, has "Lowest Achievable Emission Rate" been applied? \_\_\_\_\_  
c. If yes, list non-attainment pollutants. \_\_\_\_\_

2. Does best available control technology (BACT) apply to this source?  
If yes, see Section VI. No

3. Does the State "Prevention of Significant Deterioration" (PSD)  
requirement apply to this source? If yes, see Sections VI and VII. No

4. Do "Standards of Performance for New Stationary Sources" (NSPS)  
apply to this source? No

5. Do "National Emission Standards for Hazardous Air Pollutants"  
(NESHAP) apply to this source? No

H. Do "Reasonably Available Control Technology" (RACT) requirements apply  
to this source? No

a. If yes, for what pollutants? \_\_\_\_\_

b. If yes, in addition to the information required in this form,  
any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justifi-  
cation for any answer of "No" that might be considered questionable.

**SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)**

**A. Raw Materials and Chemicals Used in your Process, if applicable:**

Refer to Attachment A

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

**B. Process Rate, if applicable: (See Section V, Item 1)**

1. Total Process Input Rate (lbs/hr): N/A

2. Product Weight (lbs/hr): N/A

**C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)**

Refer to Attachment A

Name of Contaminant	Emission <sup>1</sup>		Allowed <sup>2</sup> Emission Rate per Rule 17-2	Allowable <sup>3</sup> Emission lbs/hr	Potential <sup>4</sup> Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/XX hr	T/yr	

<sup>1</sup>See Section V, Item 2.

<sup>2</sup>Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

<sup>3</sup>Calculated from operating rate and applicable standard.

<sup>4</sup>Emission, if source operated without control (See Section V, Item 3).

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Binks Spray Booth	Particulate	99%	>1 um	Design

E. Fuels Not Applicable

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

\*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: \_\_\_\_\_ Percent Ash: \_\_\_\_\_

Density: \_\_\_\_\_ lbs/gal Typical Percent Nitrogen: \_\_\_\_\_

Heat Capacity: \_\_\_\_\_ BTU/lb \_\_\_\_\_ BTU/gal

Other Fuel Contaminants (which may cause air pollution): \_\_\_\_\_

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average Not applicable Maximum \_\_\_\_\_

G. Indicate liquid or solid wastes generated and method of disposal.

Waste paint and solvent will be drummed and disposed off-site.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: 47 ft. Stack Diameter: 2.67 ft.  
 Gas Flow Rate: 8,700 ACFM 8,080 DSCFM Gas Exit Temperature: 90 °F.  
 Water Vapor Content: 5 % Velocity: 25.9 FPS

SECTION IV: INCINERATOR INFORMATION

Not Applicable

Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq. & Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste \_\_\_\_\_

Total Weight Incinerated (lbs/hr) \_\_\_\_\_ Design Capacity (lbs/hr) \_\_\_\_\_

Approximate Number of Hours of Operation per day \_\_\_\_\_ day/wk \_\_\_\_\_ wks/yr. \_\_\_\_\_

Manufacturer \_\_\_\_\_

Date Constructed \_\_\_\_\_ Model No. \_\_\_\_\_

	Volume (ft) <sup>3</sup>	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: \_\_\_\_\_ ft. Stack Diameter: \_\_\_\_\_ Stack Temp. \_\_\_\_\_

Gas Flow Rate: \_\_\_\_\_ ACFM \_\_\_\_\_ DSCFM\* Velocity: \_\_\_\_\_ FPS

\*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: ☐ Cyclone ☐ Wet Scrubber ☐ Afterburner

☐ Other (specify) \_\_\_\_\_

Brief description of operating characteristics of control devices: \_\_\_\_\_

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.): \_\_\_\_\_

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

#### SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]
2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.
3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).
4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)
5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).
6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.
7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.
10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

## SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

Not Applicable

- A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 61 applicable to the source?

☐ Yes ☐ No

Contaminant

Rate or Concentration


- B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

☐ Yes ☐ No

Contaminant

Rate or Concentration


- C. What emission levels do you propose as best available control technology?

Contaminant

Rate or Concentration


- D. Describe the existing control and treatment technology (if any).

1. Control Device/System:

2. Operating Principles:

3. Efficiency:\*

4. Capital Costs:

\*Explain method of determining



5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant

Rate or Concentration


10. Stack Parameters

a. Height: ft. b. Diameter: ft

c. Flow Rate: ACFM d. Temperature: °F

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:<sup>1</sup>

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:<sup>2</sup>

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:<sup>1</sup>

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:<sup>2</sup>

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

<sup>1</sup>Explain method of determining efficiency.

<sup>2</sup>Energy to be reported in units of electrical power - KWH design rate.

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:<sup>1</sup>

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:<sup>2</sup>

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:<sup>1</sup>

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:<sup>2</sup>

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:<sup>1</sup>

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:<sup>2</sup>

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

<sup>1</sup>Explain method of determining efficiency.

<sup>2</sup>Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:<sup>1</sup>

Contaminant

Rate or Concentration

(8) Process Rate:<sup>1</sup>

b. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:<sup>1</sup>

Contaminant

Rate or Concentration

(8) Process Rate:<sup>1</sup>

10. Reason for selection and description of systems:

<sup>1</sup>Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

## SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

Not Applicable

### A. Company Monitored Data

1. \_\_\_\_\_ no. sites \_\_\_\_\_ TSP \_\_\_\_\_ ( ) SO<sub>2</sub>\* \_\_\_\_\_ Wind spd/dir

Period of Monitoring \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
month day year month day year

Other data recorded \_\_\_\_\_

Attach all data or statistical summaries to this application.

\*Specify bubbler (B) or continuous (C).

## 2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? ☐ Yes ☐ No

b. Was instrumentation calibrated in accordance with Department procedures?

☐ Yes ☐ No ☐ Unknown

## B. Meteorological Data Used for Air Quality Modeling

1. \_\_\_\_\_ Year(s) of data from \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ to \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
month day year month day year

2. Surface data obtained from (location) \_\_\_\_\_

3. Upper air (mixing height) data obtained from (location) \_\_\_\_\_

4. Stability wind rose (STAR) data obtained from (location) \_\_\_\_\_

## C. Computer Models Used

1. \_\_\_\_\_ Modified? If yes, attach description.

2. \_\_\_\_\_ Modified? If yes, attach description.

3. \_\_\_\_\_ Modified? If yes, attach description.

4. \_\_\_\_\_ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

## D. Applicants Maximum Allowable Emission Data

Pollutant

Emission Rate

TSP \_\_\_\_\_ grams/sec

SO<sub>2</sub> \_\_\_\_\_ grams/sec

## E. Emission Data Used in Modeling

Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

## F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

ATTACHMENT A

USBI operates an existing facility at Kennedy Space Center which refurbishes and assembles solid rocket boosters (SRBs) for the space shuttle program. SRBs are recovered after each space shuttle launch, brought back to Kennedy Space Center, and are refurbished for use on a future flight. The refurbishment process consists of several steps, including stripping of old paint and insulation, cleaning, metal pretreatment, priming, painting and curing. Both large and small parts are processed. USBI has received either air pollution construction or operating permits for the facility, which cover all air emitting sources at the main processing facility [Assembly and Refurbishment Facility (ARF)] and at Hangar AF.

USBI is currently proposing to construct and operate an additional air emission source at the ARF. This source is the Thermal Protection System (TPS) Small Parts Spray Booth. Small parts from the refurbishment process will be primed and painted in this booth. Up to 200 parts per flight are expected to be processed through the spray booth. However, quantities of paints and solvents used are relatively small. Materials and chemicals utilized in the booth are identified in Table A-1. Also shown are annual quantities of each chemical, the volatile organic compounds (VOC) present in each, and the annual VOC emissions. Total VOC emissions are 4.410 tons per year.

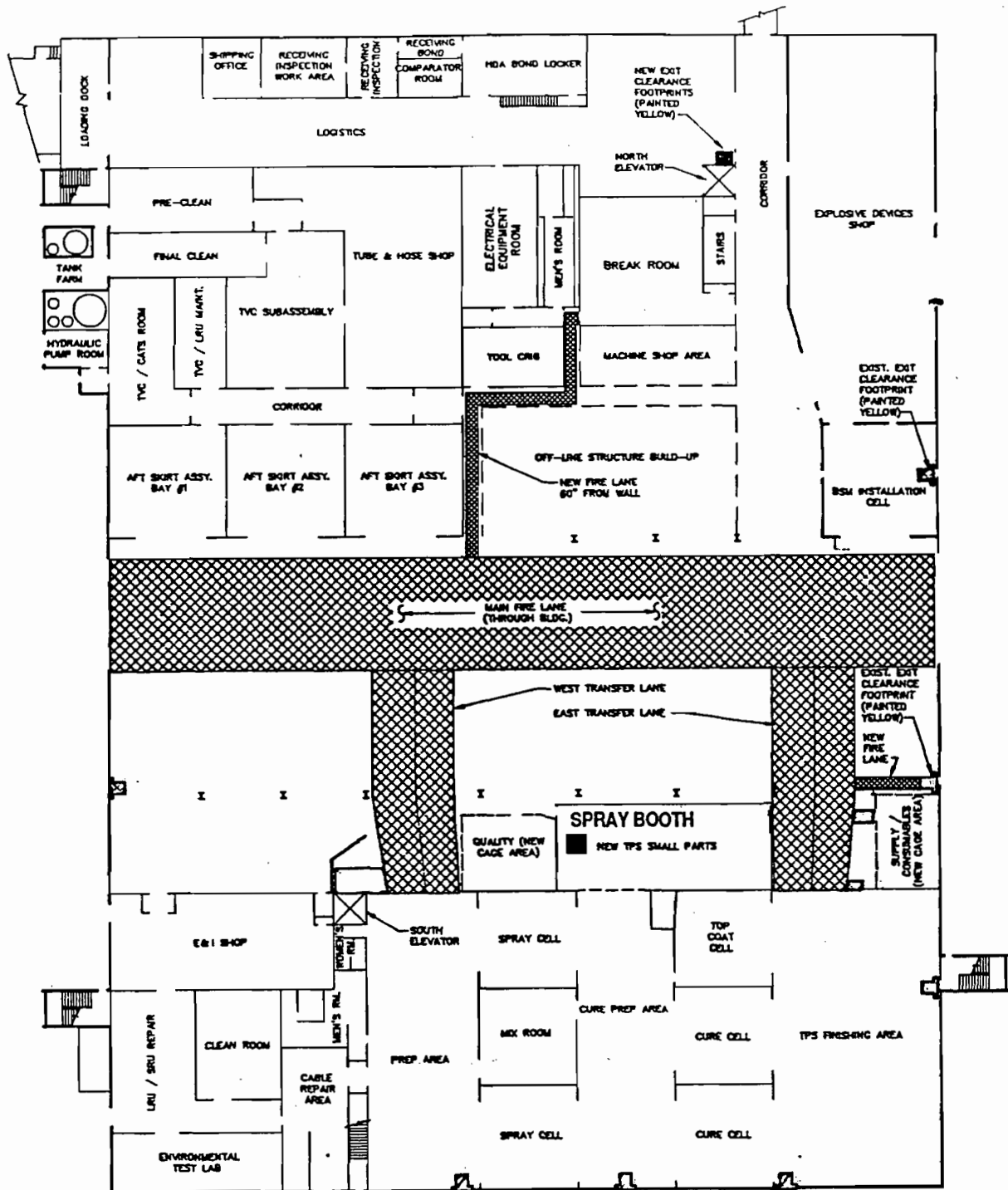
Paints will be applied to the small parts manually by means such as paint brush or roller. As such, there will essentially be no emissions of particulate matter from the spray booth, except fugitive particulate which may be entrained in the makeup air for the booth. The booth will be located inside the ARF building (see attached figure). Make-up air for the booth will come from the TPS small parts processing area, which may contain some particulate matter from other activities in the building.

Table A-1. Material Usage and VOC Emission Rates for TPS Small Parts Spray Booth

Material/Chemical	Density (lb/gal)	Utilization Rate			VOC (% by wt.)	VOC Emissions (tons/yr)
		gal/flight	gal/yr	tons/yr		
PAINTS						
-----						
Rustoleum: Primer	19.3	0.25	6.0	0.058	58.0 <sup>a</sup>	0.034
Paint	10.4	0.25	6.0	0.031	56.0 <sup>a</sup>	0.017
Akzo/Sikkens:						
Primer + Catalyst	9.59	0.75	18.0	0.086	56.5	0.049
Topcoat + Catalyst	9.86	0.40	9.6	0.047	49.8	0.024
Hypalon topcoat	12.9	27.00	648.0	4.180	74.0	3.093
CHEMICALS						
-----						
Alodine anodizing agent	8.35	0.13	3.1	0.013	0	0.000
SOLVENTS						
-----						
1,1,1-trichloroethane	11.18	8.9	213.6	1.194	100	1.194
				-----		-----
TOTALS				5.609		4.410

<sup>a</sup>Represents percent volatile by volume, which is higher than percent volatile by weight.

USBISPSB  
1/1/90



MANUFACTURING BUILDING — FIRST FLOOR PLAN

SCALE: 1/32"=1'-0"



LOCATION OF NEW TPS SMALL PARTS  
SPRAY BOOTH

**NASA/USBI**

The spray booth will be a custom design Binks spray booth, equipped with paint arrestor filter pads. Filter pads will also be located on the air inlet to the booth, which are located on the doors of the booth. These filter pads will filter makeup air to the booth. Dimensions of the booth are shown in the attached drawings. The booth will be ducted to an existing exhaust vent, designated as M-222, located on the roof of the ARF.

The proposed new source at USBI does not require Prevention of Significant Deterioration (PSD) review. The USBI facility, under Florida Administration Code Chapter 17-2 rules, does not belong to one of the 28 listed major source categories, and total emissions from the facility after modification are less than 250 tons per year. Current USBI permits allow up to 130 tons per year VOC emissions. The proposed new source will increase potential VOC emissions to 134.4 tons per year. As a result, the proposed modification is exempted from PSD review under F.A.C. Rule 17-2.500 (2)(d)4.b.



## **MATERIAL SAFETY DATA SHEETS**

\*\*\*\*\*MATERIAL SAFETY DATA SHEET\*\*\*\*\*  
FOR COATINGS, RESINS AND RELATED MATERIALS  
(APPROVED BY U.S. DEPT. OF LABOR "ESSENTIALLY SIMILAR" TO FORM OSHA-20)

SECTION I

MANUFACTURER: RUST-OLEUM CORPORATION  
ADDRESS: 11 HAWTHORN PARKWAY  
VERNON HILLS, IL 60061  
EMERGENCY TELE: (312)367-7700  
INFORMATION TELE: (312)367-7700

PRODUCT CLASS: POLYAMIDE CONVERTED EPOXY-ZINC MODIFIED  
MANUFACTURERS CODE NO.: 9334

TRADE NAME: HEAVY DUTY EPOXY GREEN ZINC-SELE (PRIMER)

SECTION II-HAZARDOUS INGREDIENTS

INGREDIENT	WT %	TLV-PPM	MG/M	LEL	MM HG@20C
XYLOL	20%*	100	SKIN	1.0	9.5
PROPYLENE GLYCOL METHYL ETHER	<5%	100		NA	10.9
N-BUTYL ALCOHOL	<1%	50	SKIN	1.4%	4.4

-----\* NEAREST 5%-----

SECTION III-PHYSICAL DATA

BOILING RANGE: 243-284F (117-140) VAPOR DENSITY: HEAVIER LIGHTER THAN AIR  
EVAPORATION RATE: FASTER % VOLATILE: 58% WT/GAL: 19.3 LBS.  
(ETHER=1) SLOWER (BY VOLUME)

SECTION IV-FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: OSHA CLASS IC FLASHPOINT: 84.5F (TCC)  
FLAMMABLE LIQUID  
EXTINGUISHING MEDIA: NFPA CLASS B EXTINGUISHERS (CARBON DIOXIDE, DRY CHEMICAL OR FOAM)  
SPECIAL FIRE FIGHTING PROCEDURES:  
FULL PROTECTIVE EQUIPMENT INCLUDING SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED. WATER SPRAY MAY BE INEFFECTIVE. WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT PRESSURE BUILD-UP AND POSSIBLE AUTOIGNITION OR EXPLOSION. IF WATER IS USED, FOG NOZZLES ARE PREFERRED

UNUSUAL FIRE AND EXPLOSION HAZARDS:

KEEP CONTAINERS TIGHTLY CLOSED. ISOLATE FROM HEAT, ELECTRICAL EQUIPMENT SPARKS AND OPEN FLAME. CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT. DO NOT APPLY TO HOT SURFACES.

## MATERIAL SAFETY DATA SHEET

NPCA 1

FOR COATINGS, RESINS AND RELATED MATERIALS

DATE OF PREP 10/16/80 RAC

(Approved by U.S. Department of Labor - Essentially Similar to Form OSHA-20)

## Section I

MANUFACTURER'S NAME Rust-Oleum Corporation

STREET ADDRESS 11 Hawthorn Parkway CITY, STATE, AND ZIP CODE Vernon Hills, Illinois 60061

EMERGENCY TELEPHONE NO. (312) 367-7700

INFORMATION TELEPHONE NO. (312) 367-7700

PRODUCT CLASS Polyamide, Epoxy; High Gloss

MANUFACTURER'S CODE IDENTIFICATION 9392

TRADE NAME Heavy Duty Epoxy White (TOP COAT)

## Section II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT	TLV		LEL	VAPOR PRESSURE
		PPM	mg/m <sup>3</sup>		mm Hg @20°C
Xylene	21.36	100		1.0	9.5
Cellosolve	10.7	100			5.3
Methyl Cellosolve	4.4	25			9.7
Hi-Sol 135	1.7	100		0.9	<1

## Section III - PHYSICAL DATA

BOILING RANGE 281 - 410° F.

VAPOR DENSITY ☒ HEAVIER. ☐ LIGHTER THAN AIREVAPORATION RATE ☐ FASTER ☒ SLOWER THAN ETHER

PERCENT VOLATILE BY VOLUME 56.0 WEIGHT PER GALLON 10.39 lbs.

## Section IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION Red Label, Flammable, Less than 100° F. FLASH POINT Lowest Flashing Component 81° F. LEL See II

EXTINGUISHING MEDIA Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or foam) designed to extinguish NFPA Class 1B liquid fires.

## UNUSUAL FIRE AND EXPLOSION HAZARDS

Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Closed containers may explode when exposed to extreme heat. Do not apply to hot surfaces.

## SPECIAL FIRE FIGHTING PROCEDURES

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

DATE OF PREP: 3/01/88

IPL # 20014

## SECTION I

## MANUFACTURERS NAME:

SIKKENS AEROSPACE FINISHES  
DIVISION OF AKZO COATINGS AMERICA INC.

## STREET ADDRESS:

20846 S. NORMANDIE AVE  
TORRANCE, CA 90502

## EMERGENCY TELEPHONE NO.:

(213) 320-6800

## MANUFACTURERS CODE IDENTIFICATION:

443030001

## TRADE NAME:

EPOXY TOPCOAT GLOSS - WHIT

Use with Catalyst X-304

## SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	* PCT *	* BY WT *	* TLV *		* PEL *		* VAPOR *	
				PPM	MG/M3	PPM	MG/M3	PPM	MG/M3
BUTYL ACETATE	123-86-4	* 5*		150.00	710.00*	150.00	710.00*	8.0	
ESTER SOLVENT									
2-BUTOXYETHANOL	111-76-2	* 5*	SKIN	25.00	120.00*	50.00	240.00*	.6	
BUTYL CELLOSOLVE									
2-BUTOXYETHYL ACETATE	112-07-2	* 5*		—	—*	—	—*	.3	
BUTYL CELLOSOLVE ACETATE									
METHYL ETHYL KETONE	78-93-3	* 20-35*		200.00	590.00*	200.00	590.00*	70.0	
MEK									
TOLUENE	108-88-3	* 10-25*		100.00	375.00*	200.00	—*	22.0	
TOLUOL									
TITANIUM DIOXIDE	13463-67-7	* 20-35*		—	5.00*	—	15.00*	NA	
XYLENE	1330-20-7	* 5*		100.00	435.00*	100.00	435.00*	9.5	
XYLOL									

## SECTION III - PHYSICAL DATA

## BOILING RANGE:

175 - 367 DEG. F

## VAPOR DENSITY VS. AIR:

HEAVIER THAN AIR

## EVAPORATION RATE VS. ETHER:

SLOWER

## PERCENT VOLATILE BY VOLUME:

61.1

## WEIGHT PER GALLON:

9.86 LBS.

Maximum Mixed VOC = 589 g/l  
= 49.8 % by weight

DATE OF PREP: 1/26/88

## MATERIAL SAFETY DATA SHEET

BEST AVAILABLE COPY<sub>S</sub>

IPL # 20065

6273

## SECTION I

## MANUFACTURERS NAME:

SIKKENS AEROSPACE FINISHES  
DIVISION OF AKZO COATINGS AMERICA INC.

## STREET ADDRESS:

20846 S. NORMANDIE AVE.  
TORRANCE, CA 90502

## EMERGENCY TELEPHONE NO.:

(213) 320-6800

The California Safe Drinking Water and Toxic Act of 1986, Proposition 65, requires that potentially exposed individuals be informed of the presents of a chemical that has been determined to cause cancer or reproductive harm. As part of Akzo Coatings' responsibility under this law such notice is hereby given.

## MANUFACTURERS CODE IDENTIFICATION:

X 304

## TRADE NAME:

EPOXY CATALYST - COMPOSITE

## SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	* PCT *	* BY WT *	* PPM	* TLV	* MG/M3	* PEL	* PPM	* MG/M3	* VAPOR	* PRESS
BUTYL ACETATE	123-86-4	*20-35*	*	150.00		710.00*		150.00	710.00*	8.0	
ESTER SOLVENT		* *	*			*			*		
2-BUTOXYETHANOL	111-76-2	*10-25*	SKIN	25.00		120.00*		50.00	240.00*	.6	
BUTYL CELLOSOLVE		* *	*			*			*		
N-BUTYL ALCOHOL	71-36-3	*20-35*	SKIN	50.00		150.00*		100.00	300.00*	4.4	
N-BUTANOL		* *	*			*			*		
METHYL ETHYL KETONE	78-93-3	*20-35*		200.00		590.00*		200.00	590.00*	70.0	
MEK		* *	*			*			*		
DIETHYLENE TRIAMINE	111-40-0	* 5-20*	SKIN	1.00		4.00*		—	—*	22.0	
TOLUENE	108-88-3	* 5*		100.00		375.00*		200.00	—*	22.0	
TOLUOL		* *	*			*			*		

## SECTION III - PHYSICAL DATA

## OILING RANGE:

175 - 405 DEG. F

## VAPOR DENSITY VS. AIR:

HEAVIER THAN AIR

## VAPORATION RATE VS. ETHER:

SLOWER

## PERCENT VOLATILE BY VOLUME:

83.7

## WEIGHT PER GALLON:

7.31 LBS.

Maximum Mixed VOC: See Base

## SECTION I

## MANUFACTURERS NAME:

AKZO COATINGS INC.

AEROSPACE FINISHES

## STREET ADDRESS:

434 WEST MEATS AVE.

ORANGE, CA 92665

## EMERGENCY TELEPHONE NO.:

(313) 589-3660

(8:00AM-4:45PM EASTERN TIME ZONE)

(313) 855-7313

(AFTER HOURS)

The California Safe Drinking Water and Toxic Act of 1986, Proposition 65, requires that potentially exposed individuals be informed of the presence of a chemical that has been determined to cause cancer or reproductive harm. As part of Akzo Coatings' responsibility under this law such notice is hereby given

## TRADE NAME:

GREEN EPOXY PRIMER

Use with Catalyst X-306

## SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	* PCT *	* TLV *		* PEL *		* VAPOR *	
			* PPM	MG/M3 *	PPM	MG/M3 *	PPM	MG/M3 *
XYLENE	1330-20-7	* 20-35*	* 100.00	435.00*	100.00	435.00*	9.5	
XYLOL		* * *						
2-ETHOXYETHYL ACETATE	111-15-9	* (5* SKIN *	* 5.00	27.00*	-----	-----*	2.0	
CELLOSOLVE ACETATE		* * *						
CALCIUM CHROMATE	13765-19-0	* (5*	* -----	.05*	-----	.50*	NA	
ETHYL BENZENE	100-41-4	* (5*	* 100.00	435.00*	100.00	435.00*	10.0	
AROMATIC SOLVENT		* * *						
LEAD CHROMATE-LEAD SULFATE	1344-37-2	* (5*	* -----	.05*	-----	-----*	NA	
CHROME YELLOW		* * *						
METHYL ETHYL KETONE	78-93-3	* 10-25*	* 200.00	590.00*	200.00	590.00*	70.0	
MEK		* * *						
METHYL ISOBUTYL KETONE	108-10-1	* 5-20*	* 50.00	205.00*	100.00	410.00*	16.0	
MIBK		* * *						
TOLUENE	108-88-3	* (5*	* 100.00	375.00*	200.00	-----*	22.0	
TOLUOL		* * *						
TITANIUM DIOXIDE	13463-67-7	* 5-20*	* -----	10.00*	-----	15.00*	NA	
TALC	14807-96-6	* 15-30*	* -----	2.00*	-----	-----*	NA	
HYDROUS MAGNESIUM SILICATE		* * *						

## SECTION III - PHYSICAL DATA

## BOILING RANGE:

175 - 313 DEG. F

## VAPOR DENSITY VS. AIR:

HEAVIER THAN AIR

## EVAPORATION RATE VS. ETHER:

SLOWER

## PERCENT VOLATILE BY VOLUME:

73.4

## WEIGHT PER GALLON:

9.59 LBS.

Maximum Mixed VOC: 650 = 56.5% by weight  
(grams/liter)

# SECTION I

MANUFACTURERS NAME:  
AKZO COATINGS INC.  
AEROSPACE FINISHES  
STREET ADDRESS:  
434 WEST MEATS AVE.  
ORANGE, CA 92665

The California Safe Drinking Water and Toxic Act of 1986, Proposition 65, requires that potentially exposed individuals be informed of the presence of a chemical that has been determined to cause cancer or reproductive harm. As part of Akzo Coatings' responsibility under this law such notice is hereby given

EMERGENCY TELEPHONE NO.:  
(313) 589-3660  
(8:00AM-4:45PM EASTERN TIME ZONE)  
(313) 855-7313  
(AFTER HOURS)

MANUFACTURERS CODE IDENTIFICATION:  
X 306

TRADE NAME:  
CAT. FOR 463-6-3 OR 463-6-5

## SECTION II - HAZARDOUS INGREDIENTS

HAZARDOUS INGREDIENTS:	C.A.S. NO.	* PCT * *BY WT*	* TLV *		* PEL *		* VAPOR
			* PPM	MG/M3 *	PPH	MG/M3 *	* PRESS
ISOPROPYL ALCOHOL	67-63-0	*40-55*	* 400.00	980.00*	400.00	980.00*	33.0
ISOPROPANOL		* * *					
XYLENE	1330-20-7	*40-55*	* 100.00	435.00*	100.00	435.00*	9.5
XYLOL		* * *					

## SECTION III - PHYSICAL DATA

BOILING RANGE:  
180 - 498 DEG. F

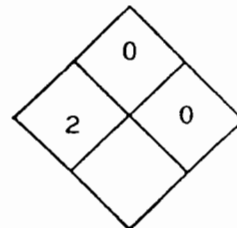
VAPOR DENSITY VS. AIR:  
HEAVIER THAN AIR

EVAPORATION RATE VS. ETHER:  
SLOWER

PERCENT VOLATILE BY VOLUME:  
90.6

WEIGHT PER GALLON:  
7.00 LBS.

Maximum Mixed VOC: See Base  
(grams/liter)



# MATERIAL SAFETY DATA SHEET

PRODUCT TRADE NAME	Alodine 1201		
D.O.T. PROPER SHIPPING NAME	Not Regulated		
D.O.T. HAZARD CLASSIFICATION	None		
TECHNICAL CONTACT (NAME)	Charles Gruszka		
TELEPHONE NUMBER	(215) 628-1364	EMERGENCY NUMBER	(215) 628-1000

## 1 HAZARDOUS INGREDIENTS

MATERIAL	CAS NO.	CONTENT(% WT/WT)	HAZARD	TLV
Chromic Acid	1333-82-0	<1	Carcinogen NTP	0.05mg/M <sup>3</sup>

## 2 PHYSICAL DATA

APPEARANCE	Amber liquid	SOLUBILITY IN WATER	Complete
ODOR	None	pH OF CONCENTRATE @ 60° F	N/A
SPECIFIC GRAVITY @ 60° F	1.00-1.02	BOILING POINT °F	>212°F.
OTHER:	N/A		

## 3 FIRE AND EXPLOSION DATA

FLASH POINT	None	TEST METHOD	EXTINGUISHING MEDIA	Water
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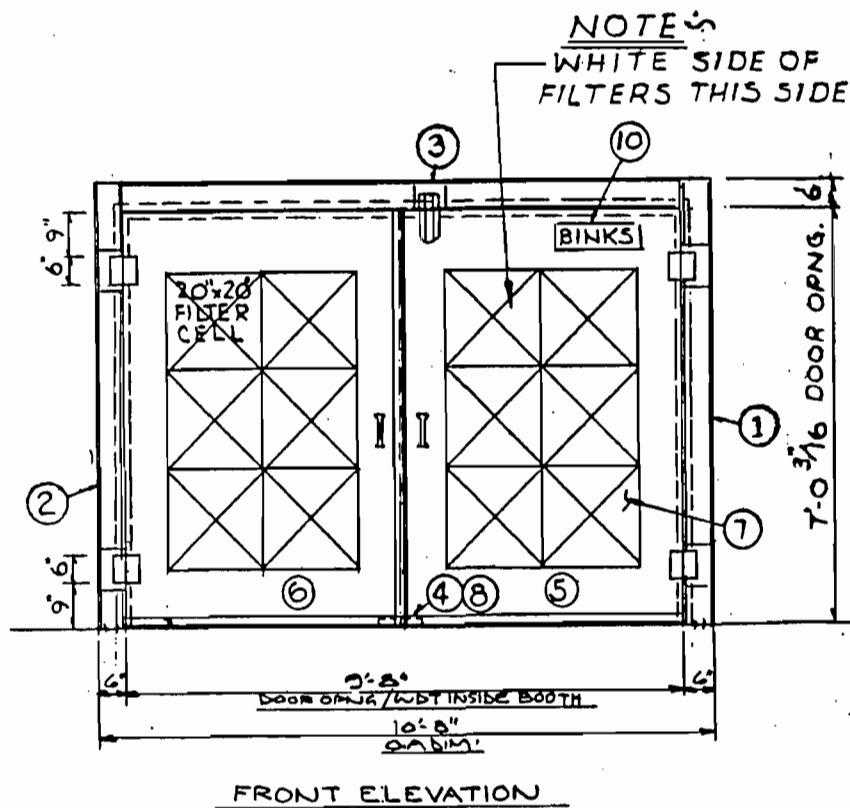
UNUSUAL FIRE OR EXPLOSION HAZARDS If organic material such as rags, paper, sawdust, etc., become saturated with this material and then dried, spontaneous combustion may result.

SPECIAL FIRE FIGHTING PROCEDURES	None
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## **SPRAY BOOTH DESIGN DRAWINGS**

709105



ITEM	PART NO.	DESCRIPTION	QTY	CHANGES
1	DJ-1	DOOR JAMB - R.H. - 10 GA.	1	
2	DJ-2	" " - L.H. - 10 GA.	1	
3	DH-3	" HEADER - 10 GA.	1	
4	27-5306	" STOP - FLOOR	1	
5	FD-5	FILTER DOOR - R.H.	1	
6	FD-6	" " - L.H.	1	
7	29-486	FILTER AIR - 20"x20"x1"	12	
8	20-3290	FLOOR ANCHOR - 1/4"x1"	8	
9	20-2533	5/16" x 3/4" LG. R.H. BOLT & NUT	50	
10	29-1075	BINKS NAME PLATE	1	
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

IMPORTANT NOTES:  
UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS GIVEN IN INCHES  
TOLERANCES  
DECIMAL ± .004 FRACTIONAL ± .008  
CONCENTRICITY .008 INDICATOR  
THREADS MUST FIT GAUGE  
BREAK ALL SHARP CORNERS  
REMOVE ALL BURRS  
CERTIFIED ONLY FOR:

FILTER DOORS  
FOR  
10-7 FLOOR  
TYPE FILTER  
BOOTH

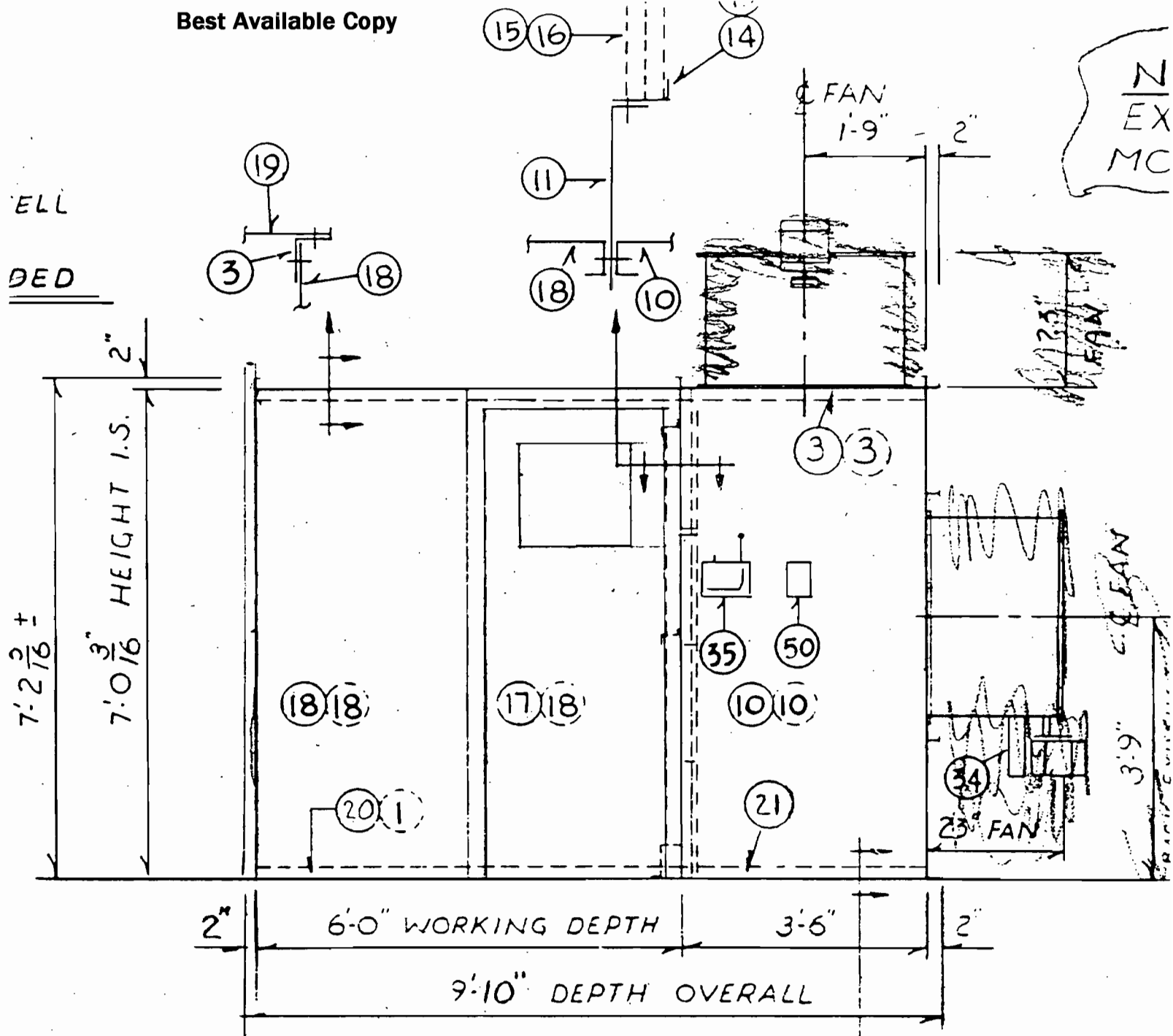
CUSTOMER  
U. S. GOVERNMENT  
BINKS INV # 25251

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ASSEMBLY REFERENCE

BINKS MANUFACTURING CO.  
ENGINEERS & MANUFACTURERS  
FRANKLIN PARK, IL 60131

SCALE: FILE NO.  
DRAWN BY: pgt 501604  
CHECKED BY:  
DATE: 10-3-89



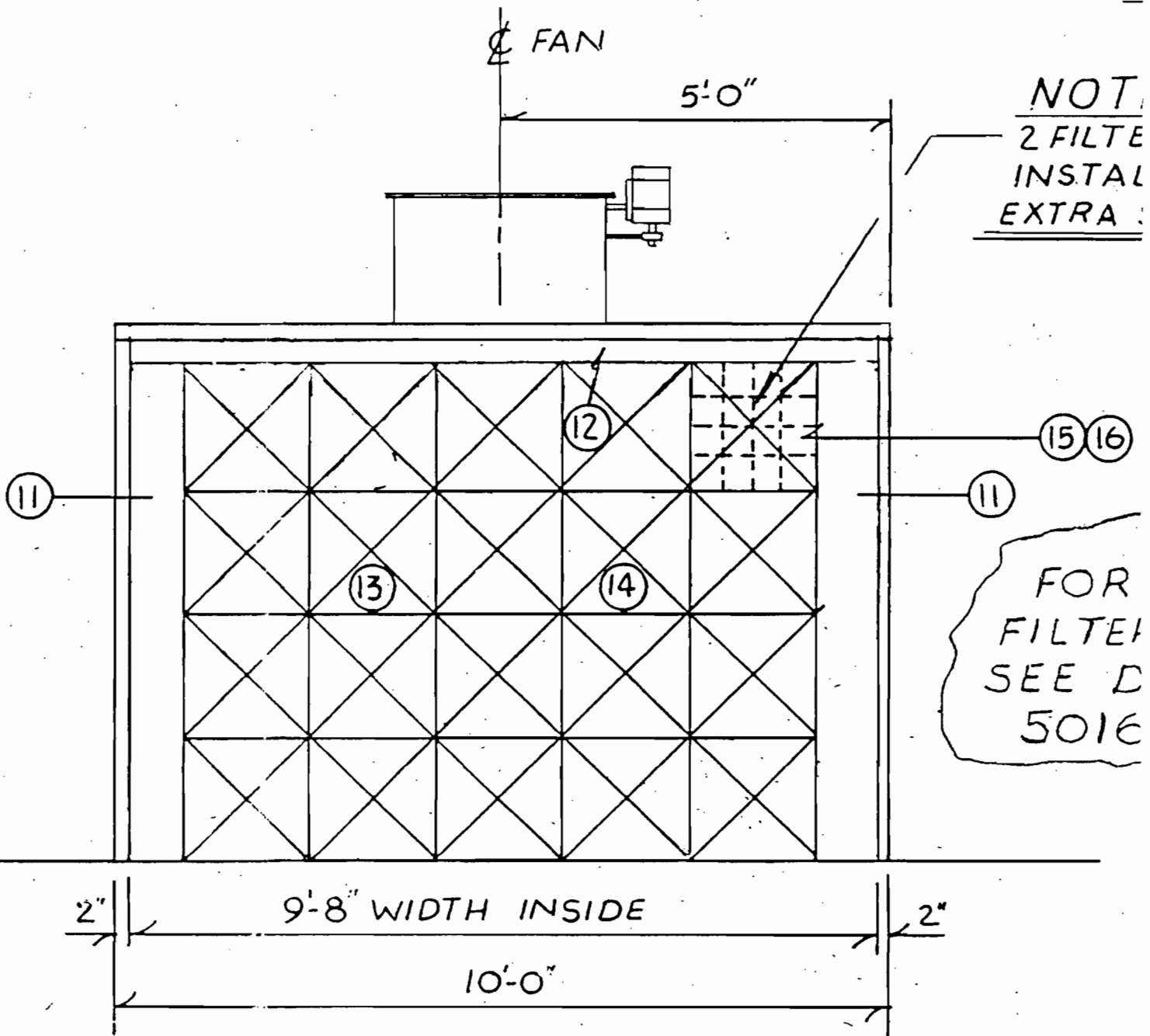
SIDE ELEVATION

NOTE:

PANELS (5) AND (6) ARE INTERCHANGEABLE FOR TOP OR  
 LEVEL AND ANCHOR ITEMS (1) (2) AND (20) TO FLOOR WITH  
 (21)

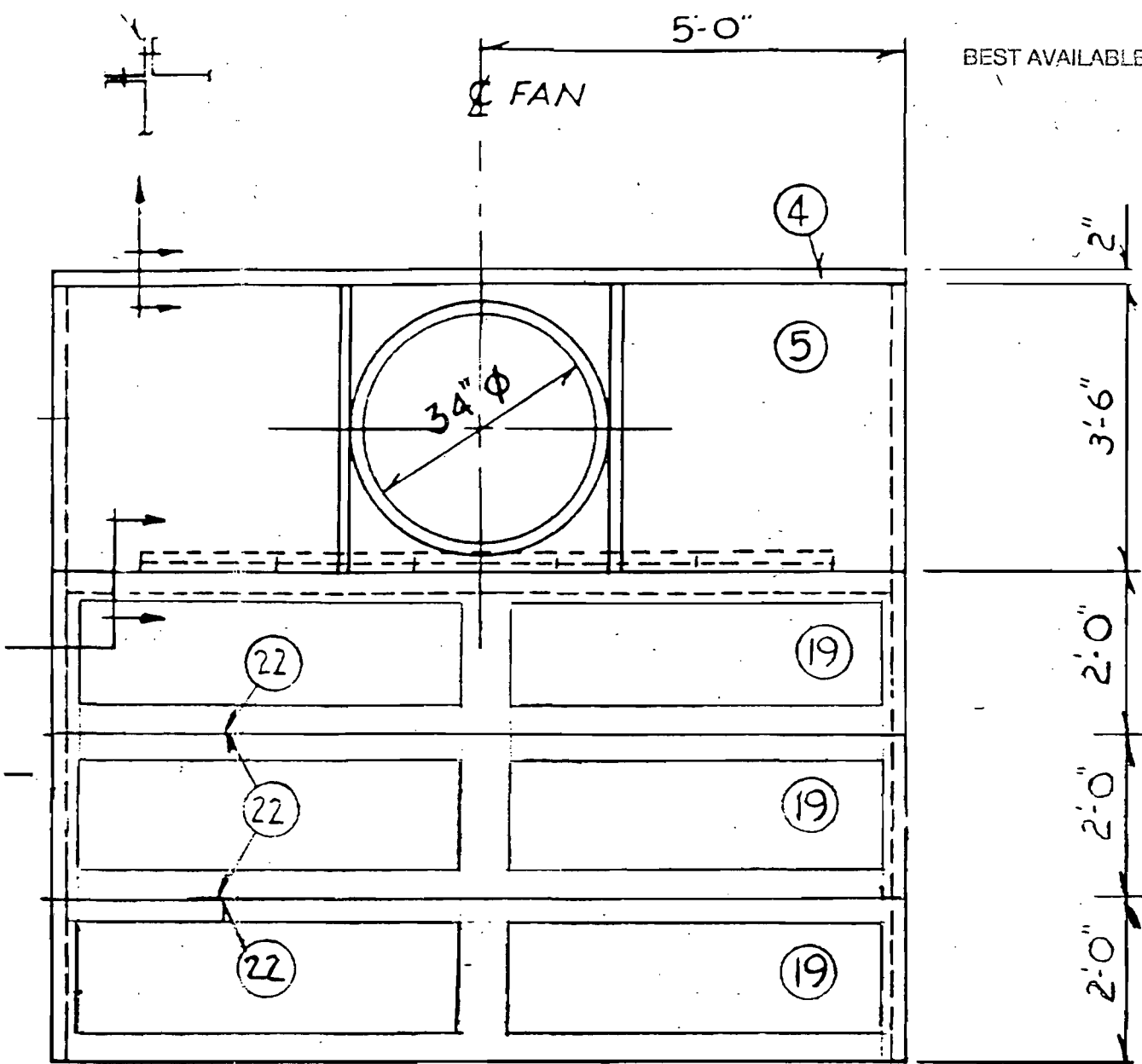
1. AVERAGE FACE VELOCITY 130 F.P.M.

6  
4  
7  
A  
=

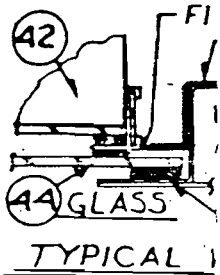


FRONT ELEVATION

BEST AVAILABLE COPY



PLAN VIEW

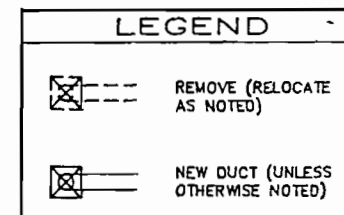
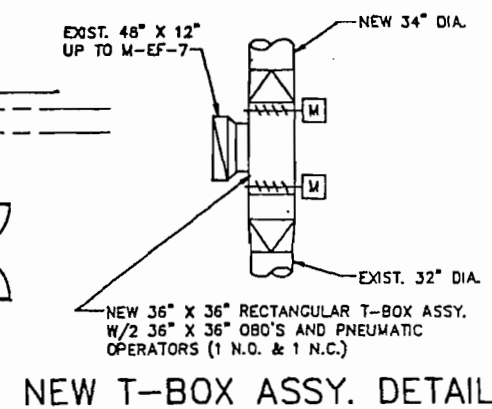
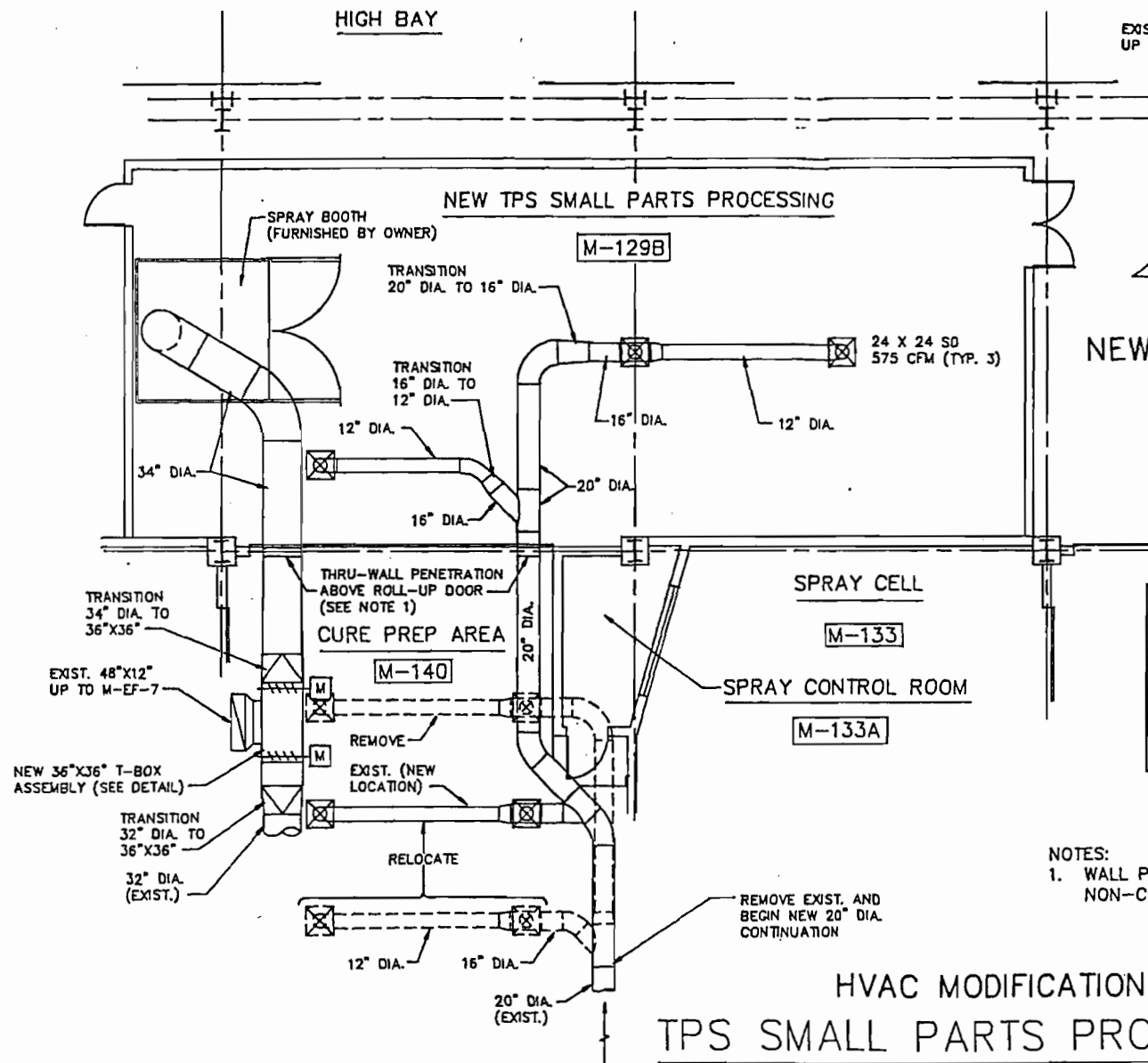


CL FAN

5'-0"

NOTE:

2 FILTERS AND  
INSTALL CDI



NOTES:  
1. WALL PENETRATION SHALL BE SEALED USING NON-COMBUSTIBLE MATERIALS.

# HVAC MODIFICATIONS TPS SMALL PARTS PROCESSING

SCALE: 1/8"=1'-0"



PROJECT SOLID ROCKET BOOSTER ASSEMBLY AND REFURBISHMENT FACILITY	UNITED TECHNOLOGIES 		REPORT NO.
	DATE 7-18-89	DATE 7-18-89	FER-339
	DRAWN BY JORIS HINES	ENGINEERING	DRAWING NO. FAC-0188
	CHECKED BY	REVISIONS	SHEET 4 OF 9
SHEET TITLE HVAC MODIFICATIONS TPS SMALL PARTS PROCESSING		SCALE 1/8"=1'-0"	