

**PACIFIC AIR PRODUCTS CO.**

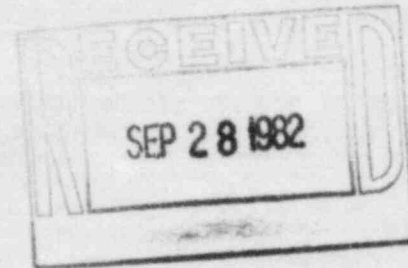
3133 West Harvard Street · Santa Ana, California 92704 · P.O. Box 5277 · Telephone 714/557-1710 · Telex No. 67-8319

September 30, 1982

Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive/Suite 1000  
Arlington, Texas 76011

Attention: Uldis Potapovs, Chief  
Vendor Program Branch

Reference: Docket No. 99900769/82-02  
Dated August 23, 1982



Gentlemen:

The referenced docket report requested a written response, to Non Conformance findings, containing:

- (1) A description of steps that have been or will be taken to correct each item.
- (2) A description of steps that have been or will be taken to prevent recurrence.
- (3) The date corrective actions and preventive measures were or will be completed.

Appendix A of the referenced letter contains six (6) Non Conformances. Pacific Air Products response will treat them individually in the order of the reference.

B210190372 B21014  
PDR GA999 EMVPACAP  
99900769 PDR

- A-1: Calibration date labels used on micrometers, calipers and the Porta-Lab were replaced during the week of July 26, 1982.
- A-2: Calibration records are maintained with engraved identity numbers as well as assigned instrument numbers for each micrometer or caliper and the Porta-Lab leak testing console, to provide a permanent record of the calibration date of these items independent of the label sticker.
- Effective immediately, Quality Control inspection of these items will be conducted every three months to inspect and replace illegible sticker labels.
- A-3: Corrective action and preventive measures were completed on September 17, 1982.
- B-1: Most micrometers and calipers have individual cases and during the week of July 26, 1982, were returned to the individual cases. All instruments of this type are stored in a pull-out drawer of a tool box or in the Quality Control desk drawer when not in use.
- B-2: Unscheduled inspections of all MT&E items are being used to monitor the handling & storage of these items as required by Procedure 12.0, Paragraph 26 of the Q.A. Manual.
- B-3: Corrective action and preventive measures were completed on September 17, 1982.
- C-1: The broken air pressure gauge was tagged on July 15, 1982.
- C-2: All air pressure gauges have been removed from the shop and stored in the Quality Control office except when in use.
- C-3: Corrective action and preventive measures were completed on September 17, 1982.

- D-1: Two NCR's 6291-1 dated 3-23-82 and 6351-1 dated 5-10-82 were signed off/completed on 5-14-82 and 5-31-82 respectively.
- D-2: A daily review of items on "hold" is now in operation and the records maintained in the Non Conformance file. Open Non Conformances are sighted on a daily basis effective 8-9-82.
- D-3: Corrective action and preventive measures were completed on September 17, 1982.
- E-1: The internal audit was completed and formalized on September 20, 1982.
- E-2: Internal audits have been scheduled as a full scope audit on an annual basis. Inability to meet the schedule has been occasioned by vacations, external audit and inspection trips, (Non availability of qualified auditors). Moving the scheduled audit to September will avoid this conflict and permit timely completion of the internal audit.
- E-3: Corrective action and preventive measures were completed on September 20, 1982.
- F-1: Exhibit 18.0-1 has not been used recently due to problems with it. A simplified annual schedule of audits is being developed to replace it. (copies attached)
- Exhibit 18.0-2 is being used only for less than full scope audits, which will include most of the approved vendors. (copy attached)
- Exhibit 18.0-3 has not been used because audit reports prior to 1982 did not have any findings.
- Exhibit 18.0-4 is a quality audit log of quality audit findings and has not been used due to no audit findings having been reported prior to 1982.

F-2: Exhibit 18.0-1 is being revised.

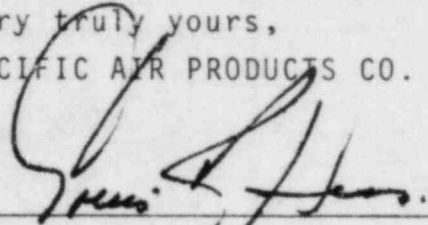
Exhibit 18.0-2 will continue to be used for less than full scope audits.

Exhibit 18.0-3 is being used and will continue in the Q.A. Manual as is.

Exhibit 18.0-4 is being used and will continue in the Q.A. Manual as is.

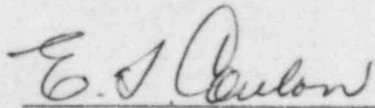
F-3: All corrective action and preventive measures will be complete and effective December 1, 1982.

Very truly yours,  
PACIFIC AIR PRODUCTS CO.



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Louis R. Hess, President



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E.T. Conlon, Q. A. Manager

Enclosures: Exhibit 18.0-1, 18.0-2  
Experimental Audit Schedules (2)

LRH/ETC:dg

PACIFIC AIR PRODUCTS CO.  
NUCLEAR DIVISION

QUALITY ASSURANCE  
Operating Procedure

ISSUE  
1-28-77

REVISED DATE  
12-28-79

Rev. No. 2

Page 4 of 7

Title

AUDITS

EXHIBIT 18.0-1

Procedure No. 18.0

QUALITY AUDIT SCHEDULE

Distribution

Page      of     

Project	Job No.	Issue Date	Rev.	Date	Quality Program Elements	Checklist Number	J	F	M	A	M	J	J	A	S	O	N	D							
10CFR50 18 Crit.							J	F	M	A	M	J	J	A	S	O	N	D							

19      19     

President

*Paula Hess*

Quality Assurance

*Paula Hess*

DESIGNATED ORIGINAL

Certified By *Rheanne Taut*

Scheduled Audit  
 Completed Audit  
 Rescheduled Audit  
 Prepared By \_\_\_\_\_ Approved By \_\_\_\_\_

Audit Result Legend

- NA - Not Audited
- ND - No Discrepancy
- DN - Discrepancy Noted

QUALITY AUDIT CHECKLIST

Page \_\_\_\_\_ of \_\_\_\_\_

Controlling Document	Audit Activity	Type of Audit		Procedure Reference	Check List Number	Rev.
Document Reference		Scheduled <input type="checkbox"/>	PAPCO <input type="checkbox"/>			
		Non-Scheduled <input type="checkbox"/>	Supplier <input type="checkbox"/>			

Char. No.	Element Characteristic	Procedure Para. No.	Method of Verification	Audit Results

Prepared By \_\_\_\_\_ Date \_\_\_\_\_ Approved By \_\_\_\_\_  
Director, Q. A.

EXHIBIT 18.0-2

# Audit Schedule

1982

EXH. 18.0-3(x)

\*\* Next Audit to be schedule if  
mat'l ordered.

Jan.	LAST	NEXT	Feb.	LAST	NEXT
ITT General Controls	1-4-81	1-20-82	Contromatics	1-13-81	2-23-82
Nat. Test Stds.	11-7-81	1-19-82			
Mar.			April		
No Audits Scheduled			No Audits Scheduled.		
				REVIEWED BY <u>                    </u> DATE	<u>3-26-82</u> DATE
May			June		
Pacific Air Prod. Internal Audit	7-31-81	5-28-82	Nat. Test Labs (AETL)	6-4-81	6-7-82
July			Aug.		
D. Torque	7-23-81	7-26-82	Raymond Controls	7-16-81	8-2-82
Honeywell	7-22-81	7-27-82	Bettis	7-27-81	8-3-82
ASCO	7-21-81	7-27-82			
Johnson Contr.	7-17-81	7-29-82			
Boothe Twining	7-28-81	7-16-82			
Air Balance	7-24-81	**			
NAMCO	7-20-81	7-28-82			
Sept.			Oct.		
Homer Dulin	9-22-81	9-22-82	V.B. Anderson	10-31-81	10-29-82
Accurate Weld Test	9-25-81	9-20-82	Joslyn Galvanizing	10-28-81	10-28-82
Gauge Repair	9-21-81	9-21-82			
Durkee Lab	9-22-81	9-22-82			
Nov.			Dec.		
Robert Lawson	11-13-81	11-12-82	Pacific Air Products Internal Evaluation		
Contromatics	5-18-82	11-15-82			
				REVIEWED BY <u>                    </u> DATE	<u>1-11-82</u> DATE

PACIFIC AIR PRODUCTS CO. AUDIT SCHEDULE

1982

<u>MONTH</u>	<u>SUPPLIER</u>	<u>ITEM</u>	<u>LAST AUDIT</u>	<u>SCHED. AUDIT</u>
January	ITT Gen. Controls Nat. Test Stds.	Actuators Matl. Tests	1-4-81 11-7-81	1-20-82 1-19-82
February	Contromatics	Actuators	1-13-81	2-23-82
March	No Audits Scheduled			
April	No Audits Scheduled			
May	PAPCo. Internal		7-31-81	5-28-82
June	Nat. Test Labs Management Review	Seismic Test Procedure 2 (Para. 7.2)	6-4-81	6-7-82
July	Limitorque Honeywell ASCO Johnson Contr. Boothe Twining Air Balance NAMCO	Actuators Positioners Solenoids Damper Comp. NDE Tests Fire Dampers Limit Switch.	7-23-81 7-22-81 7-21-81 7-17-81 7-28-81 7-24-81 7-20-81	7-26-82 7-27-82 7-27-82 7-29-82 7-16-82 ** 7-28-82
August	Raymond Control Bettis Corp.	Actuators Actuators	7-16-81 7-27-81	8-2-82 8-3-82
September	Homer Dulin Accurate Weld Test Gauge Repair Durkee Lab	Calibration Weld Testing Calibration Material Test	9-22-81 9-25-81 9-21-81 9-22-81	9-22-82 9-20-82 9-21-82 9-22-82
October	V.B. Anderson Joslyn	Weld Suppls. Galvanizing	10-31-81 10-28-81	10-29-82 10-28-82
November	Robert Lawson	Struct. Engr.	11-13-81	11-12-82
December	Management Review	Procedure 2 (Para. 7.2)		

NOVEMBER

CONTRAMATICS

REAUDIT  
11-15-82

5-18-82

11-15-82 <sup>517</sup> 606

REVIEWED BY

J 3-26-82  
DATE

EXH 18.0-3

REVIEWED BY

ETS 1-11-82  
DATE

\*\* Next audit to be scheduled if Mat'l ordered.



PACIFIC AIR PRODUCTS COMPANY

NUCLEAR DIVISION

I N T E R N A L    A U D I T

PROCEDURE NUMBER: 1.0 ORGANIZATION  
DEPARTMENT: Engr. Q.A. /Production/Purchasing  
PERSONNEL CONTACTED/TITLE: G.Hess/E.T.Conlon/W.Mair/F.Neal/P.Hess  
PROCEDURE AUDITOR: L.R.Hess/E.T.Conlon

PROCEDURE NUMBER: 2.0 QUALITY ASSURANCE PROGRAM  
DEPARTMENT: Q.A.  
PERSONNEL CONTACTED/TITLE: E.T. Conlon  
PROCEDURE AUDITOR: L.R.Hess

PROCEDURE NUMBER: 3.0 DESIGN CONTROL  
DEPARTMENT: Engineering/Q.A./Production  
PERSONNEL CONTACTED/TITLE: G.Hess/E.T.Conlon/W.Mair/F.Neal  
PROCEDURE AUDITOR: L.R.Hess/E.T.Conlon

PROCEDURE NUMBER: 4.0 PROCUREMENT DOCUMENT CONTROL  
DEPARTMENT: Production/Purchasing/Q.A./Engineering  
PERSONNEL CONTACTED/TITLE: W.Mair/F.Neal/G.Hess/P.Hess  
PROCEDURE AUDITOR: L.R.Hess/E.T.Conlon

PROCEDURE NUMBER: 5.0 INSTRUCTIONS, PROCEDURES AND  
DRAWINGS  
DEPARTMENT: Production/Q.A.  
PERSONNEL CONTACTED/TITLE: W.Mair/E.T.Conlon  
PROCEDURE AUDITOR: L.R.Hess/E.T.Conlon

PROCEDURE NUMBER: 6.0 DOCUMENT CONTROL  
DEPARTMENT: Q.A./Engineering/Production/Purchasing  
PERSONNEL CONTACTED/TITLE: E.T.Conlon/G.Hess/W.Mair/F.Neal  
PROCEDURE AUDITOR: L.R.Hess/E.T.Conlon

PROCEDURE NUMBER: 7.0 CONTROL OF PURCHASED MATERIAL,  
EQUIPMENT AND SERVICES  
DEPARTMENT: Q.A./Purchasing  
PERSONNEL CONTACTED/TITLE: E.T. Conlon/F.Neal  
PROCEDURE AUDITOR: L.R.Hess/E.T.Conlon

PROCEDURE NUMBER: 8.0 IDENTIFICATION AND CONTROL OF  
MATERIALS, PARTS AND COMPONENTS  
DEPARTMENT: Production/Inspection/Q.A.  
PERSONNEL CONTACTED/TITLE: W.Mair/J.Dodson/E.T.Conlon  
PROCEDURE AUDITOR: L.R.Hess/E.T.Conlon

PROCEDURE NUMBER: 9.0 CONTROL OF SPECIAL PROCESSES  
DEPARTMENT: W.Mair/J.Dodson/E.T.Conlon  
PERSONNEL CONTACTED/TITLE: L.R.Hess/E.T.Conlon  
PROCEDURE AUDITOR: \_\_\_\_\_

PROCEDURE NUMBER: 9.1 WELDING  
DEPARTMENT: Production/Inspection/Q.A.  
PERSONNEL CONTACTED/TITLE: W.Mair/J.Dodson/E.T.Conlon  
PROCEDURE AUDITOR: L.R.Hess/E.T.Conlon

PROCEDURE NUMBER: 10.0 INSPECTION  
DEPARTMENT: Production/Inspection/Q.A.  
PERSONNEL CONTACTED/TITLE: W.Mair/J.Dodson/E.T.Conlon  
PROCEDURE AUDITOR: L.R.Hess/E.T.Conlon

PROCEDURE NUMBER: 10.1 QUALIFICATION OF QUALITY CONTROL PERSONNEL  
DEPARTMENT: Q.A.  
PERSONNEL CONTACTED/TITLE: E.T. Conlon  
PROCEDURE AUDITOR: L.R. Hess

PROCEDURE NUMBER: 11.0 TEST CONTROL  
DEPARTMENT: Engineering/Q.A.  
PERSONNEL CONTACTED/TITLE: G. Hess/E.T. Conlon  
PROCEDURE AUDITOR: L.R.Hess/E.T. Conlon

PROCEDURE NUMBER: 12.0 CONTROL OF MEASURING AND TEST EQUIPMENT  
DEPARTMENT: Q.A./Production/Inspection  
PERSONNEL CONTACTED/TITLE: E.T. Conlon/J. Dodson  
PROCEDURE AUDITOR: L.R. Hess/E.T. Conlon

PROCEDURE NUMBER: 13.0 HANDLING, STORAGE AND SHIPPING  
DEPARTMENT: Engineering/Production/Q.A.  
PERSONNEL CONTACTED/TITLE: G.Hess/W. Mair/E.T. Conlon  
PROCEDURE AUDITOR: L.R. Hess/E.T. Conlon

PROCEDURE NUMBER: 14.0 INSPECTION, TEST AND OPERATING STATUS  
DEPARTMENT: Production/Inspection/Q.A.  
PERSONNEL CONTACTED/TITLE: W.Mair/J. Dodson/ E.T. Conlon  
PROCEDURE AUDITOR: L.R. Hess/E.T. Conlon

PROCEDURE NUMBER: 15.0 NONCONFORMING MATERIALS, PARTS OR COMPONENTS  
DEPARTMENT: Q.A./Engineering/Inspection  
PERSONNEL CONTACTED/TITLE: E.T. Conlon/G.Hess/J. Dodson  
PROCEDURE AUDITOR: L.R. Hess/E.T. Conlon

PROCEDURE NUMBER: 16.0 CORRECTIVE ACTION  
DEPARTMENT: Q.A.  
PERSONNEL CONTACTED/TITLE: E.T.Conlon  
PROCEDURE AUDITOR: L.R.Hess

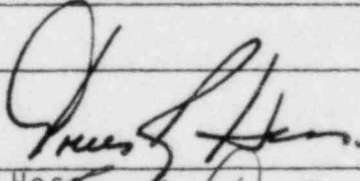
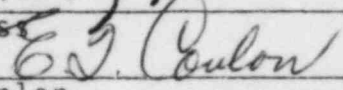
PROCEDURE NUMBER: 17.0 QUALITY ASSURANCE RECORDS  
DEPARTMENT: Q.A.  
PERSONNEL CONTACTED/TITLE: E.T.Conlon  
PROCEDURE AUDITOR: L.R.Hess

PROCEDURE NUMBER: 18.0 AUDITS  
DEPARTMENT: Q.A.  
PERSONNEL CONTACTED/TITLE: E.T.Conlon/J.Dodson/F.Neal  
PROCEDURE AUDITOR: L.R.Hess/E.T.Conlon

PROCEDURE NUMBER: 18.1 QUALITY AUDIT TRAINING PROGRAM  
DEPARTMENT: Q.A.  
PERSONNEL CONTACTED/TITLE: E.T.Conlon  
PROCEDURE AUDITOR: L.R.Hess

AUDIT RESULTS: \_\_\_\_\_

\_\_\_\_\_

AUDITOR SIGNATURE:  DATE: 9/20/82  
L.R.Hess  DATE: 9/20/82  
E.T.Conlon

REVIEWED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
\_\_\_\_\_ DATE: \_\_\_\_\_

LEGEND: S=Satisfactory X=Omission N/A=Not Applicable FV=Field Verification (1)  
 U=Unsatisfactory A=Additional Information Required

EXHIBIT 18.0.2 REV. 1

PACIFIC AIR PRODUCTS COMPANY  
 SUPPLIER QUALITY PROGRAM

Supplier Internal Audit  
 Q.A. Manual Rev. No. 11  
 Date 9-17-82

FACILITY SURVEY/AUDIT CHECKLIST

Quality Elements	Quality Program References	FV	Results
<u>1.0 ORGANIZATION</u>			
1.1 Are the responsibilities associated with the Quality Assurance Program established in writing?	PROCEDURE 1.0		S
1.2 Are the authority, duties and independence of persons and organizations performing QA functions delineated in writing?	PROC. 1.0 SECT.3.0		S
1.3 Is the reporting level of the QA Manager on at least the same organizational level as the highest line manager directly responsible for quality affecting activities?	PROC. 1.0 Exhibit 0-1		S
1.4 Do persons and organizations performing quality assurance functions have sufficient authority and organizational freedom to identify quality problems, to initiate, recommend or provide solutions to verify implementation of solutions and to control the further processing of nonconforming material, equipment and parts until proper disposition has occurred?	PROC. 1.0 Sect. 3.3		S
COMMENT: _____			
<u>2.0 QA PROGRAM</u>			
2.1 Is the quality program documented in a Quality Assurance Manual or written procedures, policies and instructions which were written to meet the requirements of 10CFR50 Appendix B?	Q.A. Manual Rev. 10 (8-10-82)		S
2.2 Are all detailed quality activities described in written procedures and instructions?	PROCEDURE 2.0		S
2.3 Does the program provide for indoctrination and training of personnel performing quality affecting activities?	PROC. 2.0 Sect. 8.0		S
COMMENT: Clarification of Q.A. procedures by Q.A. supplemental procedure or memorandum for temporary conditions is being developed.			
<u>3.0 DESIGN CONTROL</u>			
3.1 Are the following activities performed during the design process including changes to designs:			

LEGEND: S=Satisfactory X=Omission N/A=Not Applicable FV=Field Verification (2)  
 U=Unsatisfactory A=Additional Information Required

PACIFIC AIR PRODUCTS COMPANY Supplier Internal Audit  
 SUPPLIER QUALITY PROGRAM Q.A. Manual Rev. No. 11  
 FACILITY SURVEY/AUDIT CHECKLIST Date 9-17-82

Quality Elements	Quality Program References	FV	Results
3.1.1 Translation of design and regulatory requirements into design documents such as specifications, drawings, written procedures and instructions.	PROCEDURE 3.0		S
3.1.2 The inclusion of quality standards in the design documents?	PROC. 3.0 Sect. 3.2		S
3.1.3 The independent verification of the adequacy of the design by any of the following methods: (a) Design review (b) calculation methods (c) qualification testing	PROC. 3.0 Sect. 2.4	X	S
3.2 Are the individuals or groups responsible for design verification or checking other than those performing the original design? COMMENT: Rev. 10 of Q.A. Manual Clarified PROC. 3.0 Sect. 4.1b			
4.0 <u>PROCUREMENT DOCUMENT CONTROL</u>			
4.1 Do procurement documents contain technical and regulatory requirements?	PROC. 4.0	X	S
4.2 Are quality requirements such as the following prescribed in procurement documents to subcontractors and suppliers. (a) applicable 10CFR50 Appendix B criteria or a description of the QA program requirements (b) right of access to a supplier's and subcontractors facilities and records (c) requirements for the retentions, control and maintenance of records	Exhibit 4.0-2 Checklist		S S S
4.3 Are procurement documents reviewed for inclusion of quality requirements?	By Q.A.	X	S
4.4 Are changes to procurement documents subject to the same review and approval as the original purchase documents? COMMENT: _____ _____ _____			S

LEGEND: S=Satisfactory X=Omission N/A=Not Applicable FV=Field Verification  
 U=Unsatisfactory A=Additional Information Required (3)

PACIFIC AIR PRODUCTS COMPANY  
 SUPPLIER QUALITY PROGRAM  
 FACILITY SURVEY/AUDIT CHECKLIST

Supplier Internal Audit  
 Q.A. Manual Rev. No. 11  
 Date 9-17-82

Quality Elements	Quality Program References	FV	Results
5.0 <u>INSTRUCTIONS, PROCEDURES AND DRAWINGS</u>			
5.1 Are documented instructions, procedures and drawings available which describe all quality activities such as inspections, tests, machining, wiring, special processes, shipping, etc?	PROCEDURE 5.0		S
5.2 Do instructions, procedures and drawings provide for the inclusion of quantitative (dimensions, tolerances, etc.) and qualitative (workmanship standards, etc.) acceptance criteria, when applicable for determining that activities can be satisfactorily accomplished? COMMENT: <u>Wiring not applicable.</u>	SECT. 2.1 thru SECT. 2.5		S
6.0 <u>DOCUMENT CONTROL</u>			
Does a documented system exist which provides for:	PROCEDURE 6.0		S
6.1.1 The review and approval of documents such as instructions, procedures and drawings by authorized personnel?	SECT. 3.0 3.1 thru 3.5		S
6.1.2 The release and control of documents?			S
6.1.3 Control of changes to documents in the same manner as the original documents?	SECT. 2.5		S
COMMENT: _____			
7.0 <u>CONTROL OF PURCHASED MATERIAL, EQUIPMENT AND SERVICES</u>			
7.1 Does a documented system exist which provides for the evaluation and selection of sub-contractors and suppliers quality assurance programs prior to the issuance of purchase orders/contracts?	PROCEDURE 7.0 SECT. 2.0		S
7.2 During receipt inspection, are components, parts, or system inspected to the requirements of the purchase order?	SECT. 6/PROC. 8.0 and PROC. 10.0		S
7.3 During receipt inspection, is qualitative/quantitative inspection data recorded?	PROC. 10.0 Exhibit 10.0-1		S

LEGEND: S=Satisfactory X=Omission N/A=Not Applicable FV=Field Verification (4)  
 U=Unsatisfactory A=Additional Information Required

PACIFIC AIR PRODUCTS COMPANY Supplier Internal Audit  
 SUPPLIER QUALITY PROGRAM Q.A. Manual Rev. No. 11  
 FACILITY SURVEY/AUDIT CHECKLIST Date 9-17-82

Quality Elements	Quality Program References	FV	Results
7.4 After receipt inspection acceptance, is the status of the accepted component(s) clearly marked on the item(s) or associated documents? COMMENT: _____ _____ _____	SEE PROC. 14.0 & PROC. 15.0		S
8.0 IDENTIFICATION AND CONTROL OF MATERIAL, PARTS AND COMPONENTS	PROCEDURE 8.0		S
8.1 Does a documented system exist which provides for the identification and control of each component, part or system during fabrication, manufacturing, inspection, test, and final acceptance by application of heat numbers, part numbers, serial numbers, or other appropriate means to each component, part, or system so that they can be traced to associated documentation? COMMENT: <u>Materials are purchased on different levels of vendor approval; independent lab tests are sometimes</u> required.			S
9.0 CONTROL OF SPECIAL PROCESSES			
9.1 Are qualified procedures, equipment and personnel utilized in the performance of special processes such as welding, heat treating and nondestructive testing when required by the purchase order/specification?	PROCEDURE 9.0 NDE is a buyout.		S
9.2 Are procedures, equipment and personnel which are utilized for special processes qualified in accordance with applicable codes, standards specification or other procedures when required by the purchase order/specification?			S
9.3 Are results of special processes documented? COMMENT: <u>Special processes are customized per job. Job files contain such documentation.</u>			S
10.0 INSPECTION			
10.1 Is there a system that assures that areas requiring inspections are identified?	PROCEDURE 10.0	X	S
10.2 Are the process and final inspections performed in accordance with detailed written procedures?	Recommend improvement of Proc. for Sect. 5.3.	X	S



LEGEND: S=Satisfactory X=Omission N/A=Not Applicable FV=Field Verification (5)  
 U=Unsatisfactory A=Additional Information Required

PACIFIC AIR PRODUCTS COMPANY  
 SUPPLIER QUALITY PROGRAM  
 FACILITY SURVEY/AUDIT CHECKLIST

Supplier Internal Audit  
 Q.A. Manual Rev. No. 11  
 Date 9-17-82

Quality Elements	Quality Program References	FV	Results
10.3 Are inspection results documented and evaluated by qualified personnel for all inspections performed and do they become part of the final acceptance records?	PROCEDURE 10.0 Sect. 5.1		S
10.4 Are mandatory inspection "hold" points identified during the inspection process when required?  COMMENT: <u>A standard procedure for carrying out Sect. 5.3 would be helpful.</u>	PROCEDURE 10.0 Sect. 5.1 & 5.2	X	S
11.0 TEST CONTROL			
11.1 Is a documented test program established and executed?	PROCEDURE 11.0 Sect. 2.0		S S
11.2 Are all tests performed utilizing detailed instruction or procedures?			
11.3 Do test procedures include the following: (a) prerequisites such as calibrated equipment, trained personnel, suitable environmental conditions. (b) instructions for performing the tests (c) acceptance/rejection criteria (d) test data to be taken	Yes (Special Processes)  Yes (Special Processes) Yes (Special Processes)	X	S  S
11.4 Are test results documented and evaluated by qualified personnel?  COMMENT: <u>Coordination of specification review with special process development could be improved.</u>	Sect. 3.0	X	S
12.0 CONTROL OF MEASURING AND TEST EQUIPMENT			
12.1 Are measuring and testing devices utilized in inspecting, testing, and accepting components, parts, or systems calibrated and maintained at periodic intervals?	PROCEDURE 12.0 Limited Use	X	S
12.2 Are calibrations performed and recorded in accordance with written procedures utilizing nationally recognized calibration standards?  COMMENT: _____	YES		S

LEGEND: S=Satisfactory X=Omission N/A=Not Applicable FV=Field Verification  
 U=Unsatisfactory A=Additional Information Required (6)

PACIFIC AIR PRODUCTS COMPANY  
 SUPPLIER QUALITY PROGRAM  
 FACILITY SURVEY/AUDIT CHECKLIST

Supplier Internal Audit  
 Q.A. Manual Rev. No. 11  
 Date 9-17-82

Quality Elements	Quality Program References	FV	Results
<p>13.0 <u>HANDLING, STORAGE AND SHIPPING</u></p> <p>13.1 Are the adequate work and inspection instructions for handling, storage, preservation, packaging and shipping to protect the quality of products and prevent damage or deterioration?</p> <p>COMMENT: Standard practice in marking packages should be established and followed.</p>	<p>PROCEDURE 13.0</p>	<p>X</p>	<p>S</p>
<p>14.0 <u>INSPECTION, TEST AND OPERATING STATUS</u></p> <p>14.1 Does the quality program provide for the identification of the inspection, test and processing status of components and parts including nonconforming items during fabrication and manufacturing?</p> <p>COMMENT: _____</p>	<p>PROCEDURE 14.0 Sect. 2.2</p>	<p>X</p>	<p>S</p>
<p>15.0 <u>NONCONFORMING MATERIALS, PARTS OR COMPONENTS</u></p> <p>15.1 Do written procedures require control of nonconforming materials, parts of components to avoid inadvertent use?</p> <p>15.2 Does the program <sup>provide</sup> for the identification, documentation and segregation of nonconforming material, parts and components?</p> <p>15.3 Is a repair of nonconforming items performed in accordance with documented procedures?</p> <p>COMMENT: _____</p>	<p>PROCEDURE 15.0</p>	<p>X</p>	<p>S</p>
<p>16.0 <u>CORRECTIVE ACTION</u></p> <p>16.1 Is there a system by which conditons such as deficiencies, failures, and deviations from contract requirements identified as being adverse to quality are detected and corrected in order to prevent recurrence?</p>	<p>PROCEDURE 16.0</p>	<p>X</p>	<p>S</p>

LEGEND: S=Satisfactory X=Omission N/A=Not Applicable FV=Field Verification (7)  
 U=Unsatisfactory A=Additional Information Required

PACIFIC AIR PRODUCTS COMPANY  
 SUPPLIER QUALITY PROGRAM  
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Quality Elements	Quality Program References	FV	Results
16.2 Does the system provide for:			
16.2.1 The determination of cause(s) of each condition adverse to quality?	SECTION 3.2	X	S
16.2.2 The documentation and reporting of corrective actions?	SECTION 3.1	X	S
16.2.3 The evaluation of correction action?		X	S
16.3 Does the system provide for the extension of corrective action controls to subcontractors and suppliers?	SECTION 2.0		S
COMMENT: <u>Quality Assurance responsibility.</u>			
<u>17.0 QUALITY ASSURANCE RECORDS</u>			
17.1 Are quality assurance records maintained concerning quality affecting activities?	PROCEDURE 17.0	X	S
17.2 Do these records include as a minimum when required by purchase order/specification:			S
17.2.1 Processing logs and results of reviews, inspections, test, audits, and surveys?			
17.2.2 Qualification of personnel, procedures and equipment?		X	S
17.2.3 Material analysis?		X	S
17.2.4 Instructions, procedures and drawings?		X	S
17.3 Are records identifiable and retrievable to material, parts, components or services?		X	S
17.4 Is the minimum retention period established for each type of record?		X	S
COMMENT: _____			
<u>18.0 AUDITS</u>			
18.1 Is there a planned schedule of periodic audits which identifies when and what areas of the Quality Program are to be audited in the future?	PROCEDURE 18.0	X	S
18.2 Are these audits performed in accordance with preplanned checklist or procedures which identify the specific items to be audited?		X	S

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18.3 Are these audits performed by personnel not having direct responsibilities in the areas being audited?		X	S
18.4 Are audit results documented and reviewed by Management?		X	S
18.5 Is there a system for follow-up action, including re-audit of deficient areas?		X	S
COMMENT: Forms - Exhibit 18.0-1, 18.0-2, 18.0-3, 18.0-4 are seldom used. Review of audit procedures and forms is recommended.			