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## ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT

601991

2. To: (Receiving Organization) Information Resource Management		3. From: (Originating Organization) PFP Infrastructure Support			4. Related EDT No.: N/A						
5. Proj./Prog./Dept./Div.: 110740/B000		6. Design Authority/ Design Agent/Cog Engr.: W. F. White			7. Purchase Order No.: N/A						
8. Originator Remarks: Initial release of supporting document.					9. Equip./Component No.: N/A						
					10. System/Bldg./Facility: 15B//PFP						
11. Receiver Remarks:		11A. Design Baseline Document? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			12. Major Assm. Dwg. No.: N/A						
					13. Permit/Permit Application No.: N/A						
					14. Required Response Date: N/A						
15. DATA TRANSMITTED						(F)	(G)	(H)	(I)		
(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted		Approval Designator	Reason for Transmittal	Originator Disposition	Receiver Disposition		
1	HNF-6116	all	0	PFP Public Automatic Exchange (PAX) Commercial Grade Item Critical Characteristics		SQ	2	1			
16. KEY											
Approval Designator (F)		Reason for Transmittal (G)				Disposition (H) & (I)					
E, S, Q, D or N/A (see WHC-CM-3-5, Sec.12.7)		1. Approval 2. Release 3. Information		4. Review 5. Post-Review 6. Dist. (Receipt Acknow. Required)		1. Approved 2. Approved w/comment 3. Disapproved w/comment		4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledged			
17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures)											
(G) Reason	(H) Disp	(J) Name	(K) Signature	(L) Date	(M) MSIN	(G) Reason	(H) Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN
2	1	Design Authority	WF White	3/28/00	T4-20	3	1	Ind. Rev.	MS Busch	Mark Busch	3/28/00
		Design Agent									
		Cog. Eng.									
2	1	Cog. Mgr.	RA Burk	3/28/00	T4-20						
2	1	QA	DR Groth	3/29/00	T4-15						
2	1	Safety	S. E. Nunn	4-03-00	T5-11						
		Env.									
18. <i>WF White 3/28/00</i>		19.			20. <i>WF White 3/28/00</i>		21. DOE APPROVAL (if required) Ctrl. No. _____				
Signature of EDT Originator		Authorized Representative for Receiving Organization			Date	WF White Design Authority/ Cognizant Manager	Date	<input type="checkbox"/> Approved <input type="checkbox"/> Approved w/comments <input type="checkbox"/> Disapproved w/comments			

# **PFP PUBLIC AUTOMATIC EXCHANGE (PAX) COMMERCIAL GRADE ITEM CRITICAL CHARACTERISTICS**

Prepared for the U.S. Department of Energy  
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the  
U.S. Department of Energy under Contract DE-AC06-96RL13200

**Fluor Hanford**  
P.O. Box 1000  
Richland, Washington

# **PFP PUBLIC AUTOMATIC EXCHANGE (PAX) COMMERCIAL GRADE ITEM CRITICAL CHARACTERISTICS**

**W. F. White**  
Fluor Hanford Company

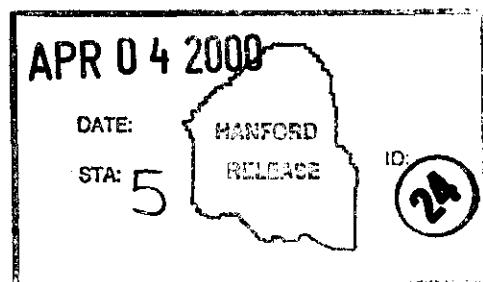
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Release Approval Date



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Rev. O

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## 1.0 PURPOSE

This document specifies the critical characteristics for Commercial Grade Items (CGI) procured for use within the safety envelope of PFP's PAX system as required by HNF-PRO-268 and HNF-PRO-1819. These are the minimum specifications that the equipment must meet in order to properly perform its safety function. There may be several manufacturers or models that meet the critical characteristics for any one item.

## 2.0 BACKGROUND

PFP's PAX System includes the eleven (11) amplifiers, numerous speakers, relays and their associated hardware. Not all items within the PAX system are within the safety envelope. Those that are outside of the envelope are purchased as general service items. This document includes all parts within the safety envelope. Specific safety envelope boundaries and justifications are contained in HNF-SD-CP-SDD-009, "Definition and Means of Maintaining the Emergency Notification and Evacuation System Portion of the PFP Safety Envelope." The procurement requirements associated with the system necessitates procurement of some system equipment as Commercial Grade Items in accordance with HNF-PRO-268, "Control of Purchased Items and Services."

## 3.0 SCOPE

The following list of critical characteristics details the minimum specifications for the standard industry equipment used in the system. The critical characteristics are verified through a combination of receipt inspections and installation testing.

The following characteristics assume the new part is either the same manufacturer and part number or a replacement part specified by the vendor. Further information for the listed equipment is available from the appropriate Vendor Information (VI) files.

## 4.0 CRITICAL CHARACTERISTIC LISTING

### 1. Resistors (generic item)

Critical Characteristics:

- Specified resistance
- Power rating
- Tolerance

### 2. Fuse Holders (generic item)

Critical Characteristics:

- Holds specified sized fuse
- Specified connections

### **3. Fuses (generic item)**

**Critical Characteristics:**

- Specified size (e.g., 3AG)
- Specified amperage rating (e.g., 10 amp, slow blow)
- Specified voltage rating (e.g., 250 VAC)

### **4. Transistors/Diodes (generic items)**

**Critical Characteristics:**

- Transistor or diode designation

### **5. Relays (generic item)**

**Critical Characteristics:**

- Base or socket configuration as specified.
- Contact rating as specified.
- Coil voltage as specified.
- 80% Pickup voltage.

### **6. Wire (generic item)**

**Critical Characteristics:**

- Specified wire size
- Insulation
- Number of conductors

### **7. Connector (generic item)**

**Critical Characteristics**

- Insert configuration
  1. Pins or sockets,
  2. Number and orientation of connections
  3. Wire size of connections
- Shell configuration
  1. Receptacle or plug

### **8. PAX Amplifier (generic item)**

**Critical Characteristics:**

- Voltage rating: 120VAC
- Output power rating: 250 watts
- Output to a 70 volt system

**9. PAX Speaker (generic item)**

Critical Characteristics:

- Provides specified audio power output
- Operates from a 70 volt audio line
- Adjustable output volume

**10. Microphone (generic item)**

Critical Characteristics:

- Connections configured as specified.
- Desk microphone.
- Usable with a Valcom<sup>1</sup> V-9939A Microphone Adapter.

<sup>1</sup> Valcom is the trademark of Valcom, Inc. Roanoke, VA.

## **5.0 REFERENCES**

- A. HNF-PRO-268, "Control of Purchased Items and Services," Rev. 3.**
- B. HNF-PRO-1819, "PHMC Engineering Requirements," Rev. 3.**
- C. HNF-SD-CP-SDD-009, "Definition and Means of Maintaining Emergency Notification and Evacuation System Portion of the PFP Safety Envelope"**

## PAGINATION SHEET

Document HWF-6114 Rev. 0

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Number of Originals \_\_\_\_\_



## Halftone



## Foldout



## Reduction

Verso

**Recto**

Verso

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