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C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.120.8.h 8 O’Clock (PEER 17) ODH Tests

C-A-OPM Procedures in which this Attachment is used.		
4.120.8		

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Approved: _____ *Signature on File* _____
 Collider-Accelerator Department Chairman Date

V. Castillo

4.120.8.h 8 O’Clock (PEER 17) ODH Tests

PASS ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title: _____ Checksum: _____

Division B Software Filename and Checksum: Title: _____ Checksum: _____

Initial testing complete:

Test Team Leader’s Name (Print): _____ Life Number: _____

Test Team Leader’s Name (Sign): _____ Date: ____/____/____

Acceptance test procedure complete (following repairs and retesting if required):

Test Team Leader’s Name (Print): _____ Life Number: _____

Test Team Leader’s Name (Sign): _____ Date: ____/____/____

Test results reviewed by:

Safety Section Head’s Name (Print): _____ Life Number: _____

Safety Section Head’s Name (Sign): _____ Date: ____/____/____

Test results accepted by Radiation Safety Committee:

RSC Member’s Name (Print): _____ Life Number: _____

RSC Member’s Name (Sign): _____ Date: ____/____/____

1.1 Conduct a visual check on Peer 17 Crash and Crash/ODH boxes following Table 1 below
 √ = ok, x = problem

BOXES		Verify mechan condn. ok	Verify elec. condn. ok	Crash/ODH boxes only				Verify all X's corrected
CRASH	Crash/ODH			Division A		Division B		
				Lcd Rdg	Tp2 – Tp4 Vltg	Lcd Rdg	Tp2 – Tp4 Vltg	
7CB1		<input type="checkbox"/>	<input type="checkbox"/>	N/A	N/A	N/A	N/A	<input type="checkbox"/>
7CB2		<input type="checkbox"/>	<input type="checkbox"/>	N/A	N/A	N/A	N/A	<input type="checkbox"/>
	7CB3	<input type="checkbox"/>	<input type="checkbox"/>	%	V	%	V	<input type="checkbox"/>
	7CB4	<input type="checkbox"/>	<input type="checkbox"/>	%	V	%	V	<input type="checkbox"/>
	7CB5	<input type="checkbox"/>	<input type="checkbox"/>	%	V	%	V	<input type="checkbox"/>
	8CB1	<input type="checkbox"/>	<input type="checkbox"/>	%	V	%	V	<input type="checkbox"/>
	8CB2	<input type="checkbox"/>	<input type="checkbox"/>	%	V	%	V	<input type="checkbox"/>
	8CB3	<input type="checkbox"/>	<input type="checkbox"/>	%	V	%	V	<input type="checkbox"/>
8CB4		<input type="checkbox"/>	<input type="checkbox"/>	N/A	N/A	N/A	N/A	<input type="checkbox"/>
	8CB5	<input type="checkbox"/>	<input type="checkbox"/>	%	V	%	V	<input type="checkbox"/>
8XCB1		<input type="checkbox"/>	<input type="checkbox"/>	N/A	N/A	N/A	N/A	<input type="checkbox"/>
8XCB2		<input type="checkbox"/>	<input type="checkbox"/>	N/A	N/A	N/A	N/A	<input type="checkbox"/>
8XCB3		<input type="checkbox"/>	<input type="checkbox"/>	N/A	N/A	N/A	N/A	<input type="checkbox"/>
8XCB4		<input type="checkbox"/>	<input type="checkbox"/>	N/A	N/A	N/A	N/A	<input type="checkbox"/>
	8XCB5	<input type="checkbox"/>	<input type="checkbox"/>	%	V	%	V	<input type="checkbox"/>

Table 1 – Summary of visual check on Crash and Crash/ODH boxes in Peer 17

1.2 Verification of valid calibration of ODH sensors in Peer 17, following Table 2 below
 √ = ok, x = problem

ODH sensor	Verify valid calibration	Record calibration date	Verify all x's corrected	Record new calibration date
7AS1	<input type="checkbox"/>	____/____/____	<input type="checkbox"/>	____/____/____
7AS2	<input type="checkbox"/>	____/____/____	<input type="checkbox"/>	____/____/____
8AS1	<input type="checkbox"/>	____/____/____	<input type="checkbox"/>	____/____/____
8AS2	<input type="checkbox"/>	____/____/____	<input type="checkbox"/>	____/____/____
8AS3	<input type="checkbox"/>	____/____/____	<input type="checkbox"/>	____/____/____
8AS4	<input type="checkbox"/>	____/____/____	<input type="checkbox"/>	____/____/____
8XAS3	<input type="checkbox"/>	____/____/____	<input type="checkbox"/>	____/____/____

Table 2 – Verification of valid calibration of ODH sensors in Peer 17

1.3 Test of ODH sensor 7AS1 in 7CB3

- PLACE** Peer 17 in Mode 8
- VERIFY** Peer 17 is in Restricted Access **MODE 8**

- FLOW** Helium (or Nitrogen) gas across 7AS1
- RECORD** Oxygen trip level for Div A _____ %
- RECORD** Oxygen trip level for Div B _____ %
- VERIFY** MCR sees 7AS1 Div A **TRIPPED**
- VERIFY** MCR sees 7AS1 Div B **TRIPPED**
- VERIFY** Div A & B strobes on 7CB3 are **FLASHING**
- VERIFY** Div A & B sonalerts on 7CB3 are **SOUNDING**
- VERIFY** Fan 7EF2 is **ON**
- VERIFY** Vent 7AV1 is **OPEN**
- VERIFY** Vent 7AV2 is **OPEN**

- HALT** Flow of gas on 7AS1
- WAIT** For 7AS1 to clear (level ~ trip-level above)

- VERIFY** Div A & B strobes and sonalerts on 7CB3 are **OFF**
- VERIFY** Fan 7EF2 is **OFF**
- VERIFY** Vent 7AV1 is **CLOSED**
- VERIFY** Vent 7AV2 is **CLOSED**

- RESET** ODH in MCR
- VERIFY** MCR sees ODH as **RESET**

- Check for Test Acceptance of sensor 7AS1

1.4	Test of ODH sensor 7AS2 in 7CB4		
	PLACE	Peer 17 in Mode 8	
<input type="checkbox"/>	VERIFY	Peer 17 is in Restricted Access	MODE 8
	FLOW	Helium (or Nitrogen) gas across 7AS2	
	RECORD	Oxygen trip level for Div A	_____ %
	RECORD	Oxygen trip level for Div B	_____ %
<input type="checkbox"/>	VERIFY	MCR sees 7AS2 Div A	TRIPPED
<input type="checkbox"/>	VERIFY	MCR sees 7AS2 Div B	TRIPPED
<input type="checkbox"/>	VERIFY	Div A & B strobes on 7CB4 are	FLASHING
<input type="checkbox"/>	VERIFY	Div A & B sonalerts on 7CB4 are	SOUNDING
<input type="checkbox"/>	VERIFY	Fan 7EF3 is	ON
<input type="checkbox"/>	VERIFY	Vent 7AV2 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 7AV3 is	OPEN
	HALT	Flow of gas on 7AS2	
	WAIT	For 7AS2 to clear (level ~ trip-level above)	
<input type="checkbox"/>	VERIFY	Div A & B strobes and sonalerts on 7CB4 are	OFF
<input type="checkbox"/>	VERIFY	Fan 7EF2 is	OFF
<input type="checkbox"/>	VERIFY	Vent 7AV2 is	CLOSED
<input type="checkbox"/>	VERIFY	Vent 7AV3 is	CLOSED
	RESET	ODH in MCR	
<input type="checkbox"/>	VERIFY	MCR sees ODH as	RESET
<input type="checkbox"/>	Check for Test Acceptance of sensor 7AS2		

1.5	Test of ODH sensor 7AS3 in 7CB5		
	PLACE	Peer 17 in Mode 8	
<input type="checkbox"/>	VERIFY	Peer 17 is in Restricted Access	MODE 8
	FLOW	Helium (or Nitrogen) gas across 7AS3	
	RECORD	Oxygen trip level for Div A	_____ %
	RECORD	Oxygen trip level for Div B	_____ %
<input type="checkbox"/>	VERIFY	MCR sees 7AS3 Div A	TRIPPED
<input type="checkbox"/>	VERIFY	MCR sees 7AS3 Div B	TRIPPED
<input type="checkbox"/>	VERIFY	Div A & B strobes on 7CB5 are	FLASHING
<input type="checkbox"/>	VERIFY	Div A & B sonalerts on 7CB5 are	SOUNDING
<input type="checkbox"/>	VERIFY	Fan 7EF3 is	ON
<input type="checkbox"/>	VERIFY	Vent 7AV4 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 7AV5 is	OPEN
	HALT	Flow of gas on 7AS3	
	WAIT	For 7AS3 to clear (level ~ trip-level above)	
<input type="checkbox"/>	VERIFY	Div A & B strobes and sonalerts on 7CB5 are	OFF
<input type="checkbox"/>	VERIFY	Fan 7EF3 is	ON
<input type="checkbox"/>	VERIFY	Vent 7AV4 is	CLOSED
<input type="checkbox"/>	VERIFY	Vent 7AV5 is	CLOSED
	RESET	ODH in MCR	
<input type="checkbox"/>	VERIFY	MCR sees ODH as	RESET
<input type="checkbox"/>	Check for Test Acceptance of sensor 7AS3		

1.6	Test of ODH sensor 8AS1 in 8CB1	
	PLACE Peer 17 in Mode 8	
<input type="checkbox"/>	VERIFY Peer 17 is in Restricted Access	MODE 8
	FLOW Helium (or Nitrogen) gas across 8AS1	
	RECORD Oxygen trip level for Div A	_____ %
	RECORD Oxygen trip level for Div B	_____ %
<input type="checkbox"/>	VERIFY MCR sees 8AS1 Div A	TRIPPED
<input type="checkbox"/>	VERIFY MCR sees 8AS1 Div B	TRIPPED
<input type="checkbox"/>	VERIFY Div A & B strobes on 8CB1 are	FLASHING
<input type="checkbox"/>	VERIFY Div A & B sonalerts on 8CB1 are	SOUNDING
<input type="checkbox"/>	VERIFY Fan 8EF0 is	ON
<input type="checkbox"/>	VERIFY Vent 8AV0 is	OPEN
<input type="checkbox"/>	VERIFY Vent 8AV1 is	OPEN
	HALT Flow of gas on 8AS1	
	WAIT For 8AS1 to clear (level ~ trip-level above)	
<input type="checkbox"/>	VERIFY Div A & B strobes and sonalerts on 8CB1 are	OFF
<input type="checkbox"/>	VERIFY Fan 8EF0 is	OFF
<input type="checkbox"/>	VERIFY Vent 8AV0 is	CLOSED
<input type="checkbox"/>	VERIFY Vent 8AV1 is	CLOSED
	RESET ODH in MCR	
<input type="checkbox"/>	VERIFY MCR sees ODH as	RESET
<input type="checkbox"/>	Check for Test Acceptance of sensor 8AS1	

1.7	Test of ODH sensor 8AS2 in 8CB2	
	PLACE Peer 17 in Mode 8	
<input type="checkbox"/>	VERIFY Peer 17 is in Restricted Access	MODE 8
	FLOW Helium (or Nitrogen) gas across 8AS2	
	RECORD Oxygen trip level for Div A	_____ %
	RECORD Oxygen trip level for Div B	_____ %
<input type="checkbox"/>	VERIFY MCR sees 8AS2 Div A	TRIPPED
<input type="checkbox"/>	VERIFY MCR sees 8AS2 Div B	TRIPPED
<input type="checkbox"/>	VERIFY Div A & B strobes on 8CB2 are	FLASHING
<input type="checkbox"/>	VERIFY Div A & B sonalerts on 8CB2 are	SOUNDING
<input type="checkbox"/>	VERIFY Fan 8EF0 is	ON
<input type="checkbox"/>	VERIFY Vent 8AV2 is	OPEN
<input type="checkbox"/>	VERIFY Vent 8AV3 is	OPEN
	HALT Flow of gas on 8AS2	
	WAIT For 8AS2 to clear (level ~ trip-level above)	
<input type="checkbox"/>	VERIFY Div A & B strobes and sonalerts on 8CB2 are	OFF
<input type="checkbox"/>	VERIFY Fan 8EF0 is	OFF
<input type="checkbox"/>	VERIFY Vent 8AV2 is	CLOSED
<input type="checkbox"/>	VERIFY Vent 8AV3 is	CLOSED
	RESET ODH in MCR	
<input type="checkbox"/>	VERIFY MCR sees ODH as	RESET
<input type="checkbox"/>	Check for Test Acceptance of sensor 8AS2	

1.8	Test of ODH sensor 8AS3 in 8CB3	
	PLACE Peer 17 in Mode 8	
<input type="checkbox"/>	VERIFY Peer 17 is in Restricted Access	MODE 8
	FLOW Helium (or Nitrogen) gas across 8AS3	
	RECORD Oxygen trip level for Div A	_____ %
	RECORD Oxygen trip level for Div B	_____ %
<input type="checkbox"/>	VERIFY MCR sees 8AS3 Div A	TRIPPED
<input type="checkbox"/>	VERIFY MCR sees 8AS3 Div B	TRIPPED
<input type="checkbox"/>	VERIFY Div A & B strobes on 8CB3 are	FLASHING
<input type="checkbox"/>	VERIFY Div A & B sonalerts on 8CB3 are	SOUNDING
<input type="checkbox"/>	VERIFY Fan 8EF1 is	ON
<input type="checkbox"/>	VERIFY Vent 8AV3 is	OPEN
<input type="checkbox"/>	VERIFY Vent 8AV4 is	OPEN
	HALT Flow of gas on 8AS3	
	WAIT For 8AS3 to clear (level ~ trip-level above)	
<input type="checkbox"/>	VERIFY Div A & B strobes and sonalerts on 8CB3 are	OFF
<input type="checkbox"/>	VERIFY Fan 8EF1 is	OFF
<input type="checkbox"/>	VERIFY Vent 8AV3 is	CLOSED
<input type="checkbox"/>	VERIFY Vent 8AV4 is	CLOSED
	RESET ODH in MCR	
<input type="checkbox"/>	VERIFY MCR sees ODH as	RESET
<input type="checkbox"/>	Check for Test Acceptance of sensor 8AS3	

1.9	Test of ODH sensor 8AS4 in 8CB5	
	PLACE Peer 17 in Mode 8	
<input type="checkbox"/>	VERIFY Peer 17 is in Restricted Access	MODE 8
	FLOW Helium (or Nitrogen) gas across 8AS4	
	RECORD Oxygen trip level for Div A	_____ %
	RECORD Oxygen trip level for Div B	_____ %
<input type="checkbox"/>	VERIFY MCR sees 8AS4 Div A	TRIPPED
<input type="checkbox"/>	VERIFY MCR sees 8AS4 Div B	TRIPPED
<input type="checkbox"/>	VERIFY Div A & B strobes on 8CB5 are	FLASHING
<input type="checkbox"/>	VERIFY Div A & B sonalerts on 8CB5 are	SOUNDING
<input type="checkbox"/>	VERIFY Fan 9EF1 is	ON
<input type="checkbox"/>	VERIFY Vent 8AV4 is	OPEN
<input type="checkbox"/>	VERIFY Vent 9AV1 is	OPEN
	HALT Flow of gas on 8AS4	
	WAIT For 8AS4 to clear (level ~ trip-level above)	
<input type="checkbox"/>	VERIFY Div A & B strobes and sonalerts on 8CB5 are	OFF
<input type="checkbox"/>	VERIFY Fan 9EF1 is	OFF
<input type="checkbox"/>	VERIFY Vent 8AV4 is	CLOSED
<input type="checkbox"/>	VERIFY Vent 9AV1 is	CLOSED
	RESET ODH in MCR	
<input type="checkbox"/>	VERIFY MCR sees ODH as	RESET
<input type="checkbox"/>	Check for Test Acceptance of sensor 8AS4	

1.10 10-minute Activation test of sensor 7AS1 in sector 7

	PLACE	Peer 17 in Mode 8	
<input type="checkbox"/>	VERIFY	Peer 17 is in Restricted Access	MODE 8
	JUMPER	Tp2 and Tp4 on the Div A pcb in 7CB3	
	JUMPER	Tp2 and Tp4 on the Div B pcb in 7CB3	
<input type="checkbox"/>	VERIFY	MCR sees Peer 17 is in	MODE 2
<input type="checkbox"/>	VERIFY	MCR sees 7AS1 Div A	TRIPPED
<input type="checkbox"/>	VERIFY	MCR sees 7AS1 Div B	TRIPPED
<input type="checkbox"/>	VERIFY	Fan 7EF2 is immediately	ON
<input type="checkbox"/>	VERIFY	Vent 7AV1 is immediately	OPEN
<input type="checkbox"/>	VERIFY	Vent 7AV2 is immediately	OPEN
	AFTER	~ 30 secs	
	TURN	Bypass Switch to Bypass	
<input type="checkbox"/>	VERIFY	Strobes <input type="checkbox"/>, Sonalerts <input type="checkbox"/> and Fans (after ~90secs) <input type="checkbox"/>	STOP
	TURN	Bypass Switch from Bypass	
<input type="checkbox"/>	VERIFY	Strobes <input type="checkbox"/>, Sonalerts <input type="checkbox"/> and Fans (after ~30secs) <input type="checkbox"/>	CONTINUE
	BEGIN	10-minute timer	
	RECORD	Volume of air-flow at the inlet of fan 7EF2	_____ LFM
		<i>Target flow value ($\pm 10\%$)</i>	2078 LFM
<input type="checkbox"/>	VERIFY	Air flow at tell-tale of vent 7AV1 is	ADEQUATE
<input type="checkbox"/>	VERIFY	Air flow at tell-tale of vent 7AV2 is	ADEQUATE
	AFTER	~ 10 minutes	
	RECORD	Duration of timer	_____ mins
<input type="checkbox"/>	VERIFY	Fan 6EF1 is	ON
<input type="checkbox"/>	VERIFY	Fan 6EF2 is	ON
<input type="checkbox"/>	VERIFY	Fan 6EF3 is	ON
<input type="checkbox"/>	VERIFY	Fan 7EF1 is	ON
<input type="checkbox"/>	VERIFY	Fan 7EF3 is	ON
<input type="checkbox"/>	VERIFY	Vent 6AV1 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 6AV2 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 6AV3 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 7AV3 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 7AV4 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 7AV5 is	OPEN
	REMOVE	Jumper between Tp2 and Tp4 on the Div A pcb in 7CB3	
	REMOVE	Jumper between Tp2 and Tp4 on the Div B pcb in 7CB3	
<input type="checkbox"/>	VERIFY	Fan 7EF2 is	OFF
<input type="checkbox"/>	VERIFY	Vent 7AV1 is	CLOSED
<input type="checkbox"/>	VERIFY	Vent 7AV2 is	CLOSED
<input type="checkbox"/>	VERIFY	Fan 6EF1 is	OFF
<input type="checkbox"/>	VERIFY	Fan 6EF2 is	OFF
<input type="checkbox"/>	VERIFY	Fan 6EF3 is	OFF
<input type="checkbox"/>	VERIFY	Fan 7EF1 is	OFF

- | | | | |
|--------------------------|--|------------------------|---------------|
| <input type="checkbox"/> | VERIFY | Fan 7EF3 is | OFF |
| <input type="checkbox"/> | VERIFY | Vent 6AV1 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 6AV2 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 6AV3 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 7AV3 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 7AV4 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 7AV5 is | CLOSED |
| | RESET | ODH in MCR | |
| <input type="checkbox"/> | VERIFY | MCR sees ODH as | RESET |
| <input type="checkbox"/> | Check for Test Acceptance of sensor 7AS1 on for > 10 minutes | | |

1.11 Test Activation of multiple sensors, 7AS2 and 7AS3, in sector 7

- | | | | |
|--------------------------|---------------|---|-----------------|
| <input type="checkbox"/> | PLACE | Peer 17 in Mode 8 | |
| <input type="checkbox"/> | VERIFY | Peer 17 is in Restricted Access | MODE 8 |
| | JUMPER | Tp2 and Tp4 on the Div A pcb in 7CB4 | |
| | JUMPER | Tp2 and Tp4 on the Div B pcb in 7CB4 | |
| | JUMPER | Tp2 and Tp4 on the Div A pcb in 7CB5 | |
| | JUMPER | Tp2 and Tp4 on the Div B pcb in 7CB5 | |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 17 is in | MODE 2 |
| <input type="checkbox"/> | VERIFY | MCR sees 7AS2 Div A | TRIPPED |
| <input type="checkbox"/> | VERIFY | MCR sees 7AS2 Div B | TRIPPED |
| <input type="checkbox"/> | VERIFY | MCR sees 7AS3 Div A | TRIPPED |
| <input type="checkbox"/> | VERIFY | MCR sees 7AS3 Div B | TRIPPED |
| <input type="checkbox"/> | VERIFY | Fan 6EF1 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 6EF2 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 6EF3 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 7EF1 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 7EF2 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 7EF3 is | ON |
| <input type="checkbox"/> | VERIFY | Vent 6AV1 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 6AV2 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 6AV3 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 7AV1 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 7AV2 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 7AV3 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 7AV4 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 7AV5 is | OPEN |
| | AFTER | ~ 30 secs | |
| | TURN | Bypass Switch to Bypass | |
| <input type="checkbox"/> | VERIFY | Strobes <input type="checkbox"/>, Sonalerts <input type="checkbox"/> and Fans (after ~90secs) <input type="checkbox"/> | STOP |
| | TURN | Bypass Switch from Bypass | |
| <input type="checkbox"/> | VERIFY | Strobes <input type="checkbox"/>, Sonalerts <input type="checkbox"/> and Fans (after ~30secs) <input type="checkbox"/> | CONTINUE |
| | REMOVE | Jumper between Tp2 and Tp4 on the Div A pcb in 7CB3 | |
| | REMOVE | Jumper between Tp2 and Tp4 on the Div B pcb in 7CB3 | |

REMOVE	Jumper between Tp2 and Tp4 on the Div A pcb in 7CB4	
REMOVE	Jumper between Tp2 and Tp4 on the Div B pcb in 7CB4	
<input type="checkbox"/>	VERIFY Fan 6EF1 is	OFF
<input type="checkbox"/>	VERIFY Fan 6EF2 is	OFF
<input type="checkbox"/>	VERIFY Fan 6EF3 is	OFF
<input type="checkbox"/>	VERIFY Fan 7EF1 is	OFF
<input type="checkbox"/>	VERIFY Fan 7EF2 is	OFF
<input type="checkbox"/>	VERIFY Fan 7EF3 is	OFF
<input type="checkbox"/>	VERIFY Vent 6AV1 is	CLOSED
<input type="checkbox"/>	VERIFY Vent 6AV2 is	CLOSED
<input type="checkbox"/>	VERIFY Vent 6AV3 is	CLOSED
<input type="checkbox"/>	VERIFY Vent 7AV1 is	CLOSED
<input type="checkbox"/>	VERIFY Vent 7AV2 is	CLOSED
<input type="checkbox"/>	VERIFY Vent 7AV3 is	CLOSED
<input type="checkbox"/>	VERIFY Vent 7AV4 is	CLOSED
<input type="checkbox"/>	VERIFY Vent 7AV5 is	CLOSED
	RESET ODH in MCR	
<input type="checkbox"/>	VERIFY MCR sees ODH as	RESET
<input type="checkbox"/>	Check for Test Acceptance of Activation of multiple sensors 7AS2 and 7AS3 in sector 7	

1.12 10-minute Activation test of sensor 8AS1 in sector 8

<input type="checkbox"/>	PLACE Peer 17 in Mode 8	
<input type="checkbox"/>	VERIFY Peer 17 is in Restricted Access	MODE 8
	JUMPER Tp2 and Tp4 on the Div A pcb in 7CB5	
	JUMPER Tp2 and Tp4 on the Div B pcb in 7CB5	
<input type="checkbox"/>	VERIFY MCR sees Peer 17 is in	MODE 2
<input type="checkbox"/>	VERIFY MCR sees 7AS3 Div A	TRIPPED
<input type="checkbox"/>	VERIFY MCR sees 7AS3 Div B	TRIPPED
<input type="checkbox"/>	VERIFY Fan 8EF0 is immediately	ON
<input type="checkbox"/>	VERIFY Vent 8AV0 is immediately	OPEN
<input type="checkbox"/>	VERIFY Vent 8AV1 is immediately	OPEN
	AFTER ~ 30 secs	
	TURN Bypass Switch to Bypass	
<input type="checkbox"/>	VERIFY Strobes <input type="checkbox"/> , Sonalerts <input type="checkbox"/> and Fans (after ~90secs) <input type="checkbox"/>	STOP
	TURN Bypass Switch from Bypass	
<input type="checkbox"/>	VERIFY Strobes <input type="checkbox"/> , Sonalerts <input type="checkbox"/> and Fans (after ~30secs) <input type="checkbox"/>	CONTINUE
	BEGIN 10-minute timer	
	RECORD Volume of air-flow at the inlet of fan 8EF0	_____ LFM
	<i>Target flow value ($\pm 10\%$)</i>	1473 LFM
<input type="checkbox"/>	VERIFY Air flow at tell-tale of vent 8AV0 is	ADEQUATE
<input type="checkbox"/>	VERIFY Air flow at tell-tale of vent 8AV1 is	ADEQUATE
	AFTER ~ 10 minutes	
	RECORD Duration of timer	_____ mins

- | | | | |
|--------------------------|---------------|--|---------------|
| <input type="checkbox"/> | VERIFY | Fan 8EF1 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 9EF1 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 9EF2 is | ON |
| <input type="checkbox"/> | VERIFY | Vent 8AV1 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV2 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV3 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV4 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 9AV2 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 9AV3 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 9AV4 is | OPEN |
| | REMOVE | Jumper between Tp2 and Tp4 on the Div A pcb in 7CB5 | |
| | REMOVE | Jumper between Tp2 and Tp4 on the Div B pcb in 7CB5 | |
| <input type="checkbox"/> | VERIFY | Fan 8EF0 is | OFF |
| <input type="checkbox"/> | VERIFY | Vent 8AV0 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 8AV1 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Fan 8EF1 is | OFF |
| <input type="checkbox"/> | VERIFY | Fan 9EF1 is | OFF |
| <input type="checkbox"/> | VERIFY | Fan 9EF2 is | OFF |
| <input type="checkbox"/> | VERIFY | Vent 8AV1 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 8AV2 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 8AV3 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 8AV4 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 9AV2 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 9AV3 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 9AV4 is | CLOSED |
| | RESET | ODH in MCR | |
| <input type="checkbox"/> | VERIFY | MCR sees ODH as | RESET |
| <input type="checkbox"/> | | Check for Test Acceptance of sensor 8AS1 on for > 10 minutes | |

1.13 Test Activation of multiple sensors, 8AS2 and 8AS4, in sector 8

- | | | | |
|--------------------------|---------------|---|----------------|
| <input type="checkbox"/> | PLACE | Peer 17 in Mode 8 | |
| <input type="checkbox"/> | VERIFY | Peer 17 is in Restricted Access | MODE 8 |
| | JUMPER | Tp2 and Tp4 on the Div A pcb in 8CB2 | |
| | JUMPER | Tp2 and Tp4 on the Div B pcb in 8CB2 | |
| | JUMPER | Tp2 and Tp4 on the Div A pcb in 8CB5 | |
| | JUMPER | Tp2 and Tp4 on the Div B pcb in 8CB5 | |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 17 is in | MODE 2 |
| <input type="checkbox"/> | VERIFY | MCR sees 8AS2 Div A | TRIPPED |
| <input type="checkbox"/> | VERIFY | MCR sees 8AS2 Div B | TRIPPED |
| <input type="checkbox"/> | VERIFY | MCR sees 8AS4 Div A | TRIPPED |
| <input type="checkbox"/> | VERIFY | MCR sees 8AS4 Div B | TRIPPED |
| <input type="checkbox"/> | VERIFY | Fan 8EF0 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 8EF1 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 9EF1 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 9EF2 is | ON |

- VERIFY** Vent **8AV0** is **OPEN**
- VERIFY** Vent **8AV1** is **OPEN**
- VERIFY** Vent **8AV2** is **OPEN**
- VERIFY** Vent **8AV3** is **OPEN**
- VERIFY** Vent **8AV4** is **OPEN**
- VERIFY** Vent **9AV1** is **OPEN**
- VERIFY** Vent **9AV2** is **OPEN**
- VERIFY** Vent **9AV3** is **OPEN**
- VERIFY** Vent **9AV4** is **OPEN**

AFTER ~ 30 secs

- TURN** Bypass Switch **to** Bypass
- VERIFY** **Strobes** , **Sonalerts** and **Fans** (after ~90secs) **STOP**
- TURN** Bypass Switch **from** Bypass
- VERIFY** **Strobes** , **Sonalerts** and **Fans** (after ~30secs) **CONTINUE**

REMOVE **Jumper** between **Tp2** and **Tp4** on the **Div A pcb** in **8CB2**
REMOVE **Jumper** between **Tp2** and **Tp4** on the **Div B pcb** in **8CB2**
REMOVE **Jumper** between **Tp2** and **Tp4** on the **Div A pcb** in **8CB5**
REMOVE **Jumper** between **Tp2** and **Tp4** on the **Div B pcb** in **8CB5**

- VERIFY** Fan **8EF0** is **OFF**
- VERIFY** Fan **8EF1** is **OFF**
- VERIFY** Fan **9EF1** is **OFF**
- VERIFY** Fan **9EF2** is **OFF**
- VERIFY** Vent **8AV0** is **CLOSED**
- VERIFY** Vent **8AV1** is **CLOSED**
- VERIFY** Vent **8AV2** is **CLOSED**
- VERIFY** Vent **8AV3** is **CLOSED**
- VERIFY** Vent **8AV4** is **CLOSED**
- VERIFY** Vent **9AV1** is **CLOSED**
- VERIFY** Vent **9AV2** is **CLOSED**
- VERIFY** Vent **9AV3** is **CLOSED**
- VERIFY** Vent **9AV4** is **CLOSED**

- RESET** **ODH** in **MCR**
- VERIFY** **MCR** sees **ODH** as **RESET**

- Check for Test Acceptance of Activation of multiple sensors 8AS2 and 8AS4 in sector 8**

1.14 Test Manual fan ON/OFF controls in Alcove 7C

- PLACE** **Peer 17** in **Mode 8**
- VERIFY** **Peer 17** is in **Restricted Access** **MODE 8**
- PRESS** Fan **ON** button in **Alcove 7C**
- BEGIN** **90-sec timer**
- VERIFY** Fan **7EF2** is **ON**
- VERIFY** Fan **7EF3** is **ON**
- VERIFY** Vent **7AV1** is **OPEN**
- VERIFY** Vent **7AV2** is **OPEN**
- VERIFY** Vent **7AV3** is **OPEN**

- | | | | |
|--------------------------|---|--|------------------------------------|
| <input type="checkbox"/> | VERIFY | Vent 7AV4 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 7AV5 is | OPEN |
| | RECORD | Volume of air-flow at the inlet of fan 7EF3
<i>Target flow value ($\pm 10\%$)</i> | _____ LFM |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 7AV3 is | 1473 LFM
ADEQUATE |
| | PRESS
AFTER | Fan OFF button in Alcove 7C
90 secs from ON command | |
| <input type="checkbox"/> | VERIFY | Fan 7EF2 is | OFF |
| <input type="checkbox"/> | VERIFY | Fan 7EF3 is | OFF |
| <input type="checkbox"/> | VERIFY | Vent 7AV1 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 7AV2 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 7AV3 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 7AV4 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 7AV5 is | CLOSED |
| <input type="checkbox"/> | Check for Test Acceptance of Manual fan-ON/OFF controls in Alcove 7C | | |

1.15 Test Manual fan-ON/OFF controls in Alcove 9A

- | | | | |
|--------------------------|-------------------------------|--|-----------------|
| <input type="checkbox"/> | PLACE
VERIFY | Peer 17 in Mode 8
Peer 17 is in Restricted Access | MODE 8 |
| | PRESS
BEGIN | Fan ON button in Alcove 9A
90-sec timer | |
| <input type="checkbox"/> | VERIFY | Fan 8EF0 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 8EF1 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 9EF1 is | ON |
| <input type="checkbox"/> | VERIFY | Vent 8AV0 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV1 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV2 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV3 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV4 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 9AV1 is | OPEN |
| | RECORD | Volume of air-flow at the inlet of fan 8EF1
<i>Target flow value ($\pm 10\%$)</i> | _____ LFM |
| | RECORD | Volume of air-flow at the inlet of fan 9EF1
<i>Target flow value ($\pm 10\%$)</i> | _____ LFM |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 8AV2 is | ADEQUATE |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 8AV3 is | ADEQUATE |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 8AV4 is | ADEQUATE |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 9AV1 is | ADEQUATE |
| | PRESS
AFTER | Fan OFF button in Alcove 9A
90 secs from ON command | |
| <input type="checkbox"/> | VERIFY | Fan 8EF0 is | OFF |
| <input type="checkbox"/> | VERIFY | Fan 8EF1 is | OFF |
| <input type="checkbox"/> | VERIFY | Fan 9EF1 is | OFF |
| <input type="checkbox"/> | VERIFY | Vent 8AV0 is | CLOSED |

- VERIFY** Vent **8AV1** is **CLOSED**
- VERIFY** Vent **8AV2** is **CLOSED**
- VERIFY** Vent **8AV3** is **CLOSED**
- VERIFY** Vent **8AV4** is **CLOSED**
- VERIFY** Vent **9AV1** is **CLOSED**

- Check for Test Acceptance of Manual fan-ON/OFF controls in Alcove 9A**

1.16 Test Manual fan-ON/OFF controls in Alcove 9B

- PLACE** **Peer 17 in Mode 8**
- VERIFY** **Peer 17 is in Restricted Access** **MODE 8**

PRESS Fan **ON** button in **Alcove 9B**
BEGIN **90-sec timer**

- VERIFY** Fan **8EF0** is **ON**
- VERIFY** Fan **8EF1** is **ON**
- VERIFY** Fan **9EF1** is **ON**
- VERIFY** Vent **8AV0** is **OPEN**
- VERIFY** Vent **8AV1** is **OPEN**
- VERIFY** Vent **8AV2** is **OPEN**
- VERIFY** Vent **8AV3** is **OPEN**
- VERIFY** Vent **8AV4** is **OPEN**
- VERIFY** Vent **9AV1** is **OPEN**

PRESS Fan **OFF** button in **Alcove 9B**
AFTER **90 secs from ON command**

- VERIFY** Fan **8EF0** is **OFF**
- VERIFY** Fan **8EF1** is **OFF**
- VERIFY** Fan **9EF1** is **OFF**
- VERIFY** Vent **8AV0** is **CLOSED**
- VERIFY** Vent **8AV1** is **CLOSED**
- VERIFY** Vent **8AV2** is **CLOSED**
- VERIFY** Vent **8AV3** is **CLOSED**
- VERIFY** Vent **8AV4** is **CLOSED**
- VERIFY** Vent **9AV1** is **CLOSED**

- Check for Test Acceptance of Manual fan-ON/OFF controls in Alcove 9B**

1.17 Test Manual fan OFF controls in MCR

- PLACE** **Peer 17 in Mode 8**
- VERIFY** **Peer 17 is in Restricted Access** **MODE 8**

PRESS Fan **ON** button in **Alcove 7C**
PRESS Fan **ON** button in **Alcove 9A**

BEGIN **90-sec timer**

- VERIFY** Fan **7EF2** is **ON**
- VERIFY** Fan **7EF3** is **ON**

- VERIFY** Fan **8EF0** is **ON**
- VERIFY** Fan **8EF1** is **ON**
- VERIFY** Fan **9EF1** is **ON**
- VERIFY** Vent **7AV1** is **OPEN**
- VERIFY** Vent **7AV2** is **OPEN**
- VERIFY** Vent **7AV3** is **OPEN**
- VERIFY** Vent **7AV4** is **OPEN**
- VERIFY** Vent **7AV5** is **OPEN**
- VERIFY** Vent **8AV0** is **OPEN**
- VERIFY** Vent **8AV1** is **OPEN**
- VERIFY** Vent **8AV2** is **OPEN**
- VERIFY** Vent **8AV3** is **OPEN**
- VERIFY** Vent **8AV4** is **OPEN**
- VERIFY** Vent **9AV1** is **OPEN**

PRESS Fan **OFF** button in **MCR**
AFTER **90 secs** from **ON** command

- VERIFY** Fan **7EF2** is **OFF**
- VERIFY** Fan **7EF3** is **OFF**
- VERIFY** Fan **8EF0** is **OFF**
- VERIFY** Fan **8EF1** is **OFF**
- VERIFY** Fan **9EF1** is **OFF**
- VERIFY** Vent **7AV1** is **CLOSED**
- VERIFY** Vent **7AV2** is **CLOSED**
- VERIFY** Vent **7AV3** is **CLOSED**
- VERIFY** Vent **7AV4** is **CLOSED**
- VERIFY** Vent **7AV5** is **CLOSED**
- VERIFY** Vent **8AV0** is **CLOSED**
- VERIFY** Vent **8AV1** is **CLOSED**
- VERIFY** Vent **8AV2** is **CLOSED**
- VERIFY** Vent **8AV3** is **CLOSED**
- VERIFY** Vent **8AV4** is **CLOSED**
- VERIFY** Vent **9AV1** is **CLOSED**

- Check for Test Acceptance of Manual fan OFF controls in MCR**

1.18 Test Manual fan-ON/OFF controls at gate 7GE1

- PLACE** Peer **17** in **Mode 8**
- VERIFY** Peer **17** is in **Restricted Access** **MODE 8**

PRESS Fan **ON** button at gate **7GE1**
BEGIN **90-sec timer**

- VERIFY** Fan **7EF2** is **ON**
- VERIFY** Fan **7EF3** is **ON**
- VERIFY** Vent **7AV1** is **OPEN**
- VERIFY** Vent **7AV2** is **OPEN**
- VERIFY** Vent **7AV3** is **OPEN**
- VERIFY** Vent **7AV4** is **OPEN**
- VERIFY** Vent **7AV5** is **OPEN**

PRESS Fan **OFF** button at gate **7GE1**

- AFTER** 90 secs from ON command
- VERIFY** Fan 7EF2 is OFF
- VERIFY** Fan 7EF3 is OFF
- VERIFY** Vent 7AV1 is CLOSED
- VERIFY** Vent 7AV2 is CLOSED
- VERIFY** Vent 7AV3 is CLOSED
- VERIFY** Vent 7AV4 is CLOSED
- VERIFY** Vent 7AV5 is CLOSED

- Check for Test Acceptance of Manual fan ON/OFF controls at gate 7GE1**

1.19 Test MCR reset of Manual fan-ON/OFF controls at gate 7GE1

- PLACE** Peer 17 in Mode 8
- VERIFY** Peer 17 is in Restricted Access MODE 8

PRESS Fan ON button at gate 7GE1
BEGIN 90-sec timer

- VERIFY** Fan 7EF2 is ON
- VERIFY** Fan 7EF3 is ON
- VERIFY** Vent 7AV1 is OPEN
- VERIFY** Vent 7AV2 is OPEN
- VERIFY** Vent 7AV3 is OPEN
- VERIFY** Vent 7AV4 is OPEN
- VERIFY** Vent 7AV5 is OPEN

PRESS Fan OFF button at MCR
AFTER 90 secs from ON command

- VERIFY** Fan 7EF2 is OFF
- VERIFY** Fan 7EF3 is OFF
- VERIFY** Vent 7AV1 is CLOSED
- VERIFY** Vent 7AV2 is CLOSED
- VERIFY** Vent 7AV3 is CLOSED
- VERIFY** Vent 7AV4 is CLOSED
- VERIFY** Vent 7AV5 is CLOSED

- Check for Test Acceptance MCR reset of Manual fan ON/OFF controls at gate 7GE1**

1.20 Test Manual fan-ON/OFF controls at gate 8GE2

- | | | | |
|--------------------------|---|--|---------------|
| <input type="checkbox"/> | PLACE | Peer 17 in Mode 8 | |
| <input type="checkbox"/> | VERIFY | Peer 17 is in Restricted Access | MODE 8 |
| | PRESS | Fan ON button at gate 8GE2 | |
| | BEGIN | 90-sec timer | |
| <input type="checkbox"/> | VERIFY | Fan 8EF0 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 8EF1 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 9EF1 is | ON |
| <input type="checkbox"/> | VERIFY | Vent 8AV0 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV1 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV2 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV3 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV4 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 9AV1 is | OPEN |
| | PRESS | Fan OFF button at gate 8GE2 | |
| | AFTER | 90 secs from ON command | |
| <input type="checkbox"/> | VERIFY | Fan 8EF0 is | OFF |
| <input type="checkbox"/> | VERIFY | Fan 8EF1 is | OFF |
| <input type="checkbox"/> | VERIFY | Fan 9EF1 is | OFF |
| <input type="checkbox"/> | VERIFY | Vent 8AV0 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 8AV1 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 8AV2 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 8AV3 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 8AV4 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 9AV1 is | CLOSED |
| <input type="checkbox"/> | Check for Test Acceptance of Manual fan ON/OFF controls at gate 8GE2 | | |

1.21 Test MCR reset of Manual fan-ON/OFF controls at gate 8GE2

- | | | | |
|--------------------------|---------------|--|---------------|
| <input type="checkbox"/> | PLACE | Peer 17 in Mode 8 | |
| <input type="checkbox"/> | VERIFY | Peer 17 is in Restricted Access | MODE 8 |
| | PRESS | Fan ON button at gate 8GE2 | |
| | BEGIN | 90-sec timer | |
| <input type="checkbox"/> | VERIFY | Fan 8EF0 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 8EF1 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 9EF1 is | ON |
| <input type="checkbox"/> | VERIFY | Vent 8AV0 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV1 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV2 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV3 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 8AV4 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 9AV1 is | OPEN |
| | PRESS | Fan OFF button at MCR | |
| | AFTER | 90 secs from ON command | |

- VERIFY** Fan **8EF0** is **OFF**
- VERIFY** Fan **8EF1** is **OFF**
- VERIFY** Fan **9EF1** is **OFF**
- VERIFY** Vent **8AV0** is **CLOSED**
- VERIFY** Vent **8AV1** is **CLOSED**
- VERIFY** Vent **8AV2** is **CLOSED**
- VERIFY** Vent **8AV3** is **CLOSED**
- VERIFY** Vent **8AV4** is **CLOSED**
- VERIFY** Vent **9AV1** is **CLOSED**
- Check for Test Acceptance MCR reset of Manual fan ON/OFF controls at gate 8GE2**

1.22 Test of ODH sensor 8XAS3 in 8XCB4 at 1008B

- PLACE** Peer 17 in Mode 8
- VERIFY** Peer 17 is in **Restricted Access** **MODE 8**
- FLOW RECORD RECORD** Helium (or Nitrogen) gas across **8XAS3**
- RECORD** Oxygen trip level for Div A _____ %
- RECORD** Oxygen trip level for Div B _____ %
- VERIFY** MCR sees **8XAS3 Div A** **TRIPPED**
- VERIFY** MCR sees **8XAS3 Div B** **TRIPPED**
- VERIFY** Div A & B strobes on **6XCB4** are **FLASHING**
- VERIFY** Div A & B sonalerts on **6XCB4** are **SOUNDING**
- VERIFY** Fans in **1008B** are **ON**
- VERIFY** Vent **1008B** is **OPEN**
- HALT** Flow of gas on **8XAS3**
- WAIT** For **8XAS3** to clear (level ~ trip-level above)
- VERIFY** Div A & B strobes and sonalerts on **7CB3** are **OFF**
- VERIFY** Fan in **1008B** are **OFF**
- VERIFY** Vent **1008B** is **CLOSED**
- JUMPER** Tp2 and Tp4 on the Div A pcb in **6XCB4**
- JUMPER** Tp2 and Tp4 on the Div B pcb in **6XCB4**
- VERIFY** Div A & B strobes on **6XCB4** are **FLASHING**
- VERIFY** Div A & B sonalerts on **6XCB4** are **SOUNDING**
- VERIFY** Fans in **1008B** are **ON**
- VERIFY** Vent **1008B** is **OPEN**
- TURN** Bypass Switch to Bypass
- VERIFY** Strobes and Sonalerts **STOP**
- TURN** Bypass Switch from Bypass
- VERIFY** Strobes and Sonalerts **CONTINUE**
- REMOVE** Jumper between Tp2 and Tp4 on the Div A pcb in **6XCB4**
- REMOVE** Jumper between Tp2 and Tp4 on the Div B pcb in **6XCB4**
- VERIFY** Div A & B strobes and sonalerts on **7CB3** are **OFF**
- VERIFY** Fan in **1008B** are **OFF**
- VERIFY** Vent **1008B** is **CLOSED**
- RESET** ODH in MCR
- VERIFY** MCR sees ODH as **RESET**
- Check for Test Acceptance of sensor 8XAS3**

1.23 Summary of air-flow at fan intakes and vents in sectors 7 and 8

- | | | | |
|--------------------------|--|---|-----------------------|
| | RECORD | Volume of air-flow at the inlet of fan 7EF2
<i>Target flow value ($\pm 10\%$)</i> | _____ LFM
2078 LFM |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 7AV1 is | ADEQUATE |
| | RECORD | Volume of air-flow at the inlet of fan 7EF3
<i>Target flow value ($\pm 10\%$)</i> | _____ LFM
1473 LFM |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 7AV2 is | ADEQUATE |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 7AV3 is | ADEQUATE |
| | RECORD | Volume of air-flow at the inlet of fan 8EF0
<i>Target flow value ($\pm 10\%$)</i> | _____ LFM
1473 LFM |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 8AV0 is | ADEQUATE |
| | RECORD | Volume of air-flow at the inlet of fan 8EF1
<i>Target flow value ($\pm 10\%$)</i> | _____ LFM
1592 LFM |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 8AV1 is | ADEQUATE |
| | RECORD | Volume of air-flow at the inlet of fan 9EF1
<i>Target flow value ($\pm 10\%$)</i> | _____ LFM
1592 LFM |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 8AV2 is | ADEQUATE |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 8AV3 is | ADEQUATE |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 8AV4 is | ADEQUATE |
| <input type="checkbox"/> | VERIFY | Air flow at tell-tale of vent 9AV1 is | ADEQUATE |
| <input type="checkbox"/> | Check for Acceptance of Summary of air-flow at fan intakes and vents in sectors 7 and 8 | | |

END OF TEST PROCEDURE

TTL: Sign for completion of initial testing: _____

Date: ____/____/____

TTL: Sign for completion of final testing: _____

Date: ____/____/____