

TITLE: Shutter Operation Authorization Form Instructions, version 2

CATEGORY: Operations

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REVIEW PERIOD: Annually

Purpose: The purpose of the Shutter Operation Authorization Form is for the User to authorize the Floor Coordinator or Operator to open the shutter and set the Insertion Device Gap following recovery of Stored Beam, during periods when the User is not present. These instructions cover the receipt, exercise, and documentation of Shutter Operation Authorization Forms.

At many beamlines, the PSS Remote Shutter Interface has been implemented, and the shutter will open automatically when all permits have been given. Users at these beamlines may still post a Shutter Operation Authorization Form simply to ensure that the shutter opens and that the Insertion Device Gap returns to the desired value.

Course of Action

Posting a Shutter Operation Authorization Form

1. Go to the beamline that has requested the posting of the Shutter Operation Authorization Form. Receive the form from the user.
2. Check the form to verify that each field has been completed. It may be necessary to ask the user to fill in fields that have not been completed (Figure 1).
 - a) Beamline number
 - b) *Optional:* Insertion Device Gap or Energy, for ID beamlines only. If the request is from an ID beamline and the user has not entered either a gap or energy value, ask if the user would like to enter a value. He/She may choose to decline.
 - c) *Optional:* Insertion Device Taper, for ID beamlines only.
 - d) Submission Date and Time
 - e) *Optional:* Authorization Ending Date and Time. As the form specifies, the
 - 1) maximum (and default) duration is 24 hours. The user may choose an earlier
 - 2) ending time, if desired.
 - f) Contact Person
 - g) Telephone Number: important in case the shutter cannot be opened due to a fault.

h) Requestor's Signature

3. Fill in the date and time that the form was received, and sign (Figure 1).

a) Date and Time received

b) Signature of Floor Coordinator or Operator

4. Post the form in the beamline end cabinet. Key #759 opens this cabinet.

5. For your records, note the beamline, desired gap or energy, start and end time. Enter this information in the appropriate shift log.

SHUTTER OPERATION AUTHORIZATION FORM

Beam line: 15-ID CAT: ChemMat CARS
Insertion Device Gap: 21.734 mm or Energy: 30.157 keV
Submission Date: 2-2-08 Time: 1740

(Authorization starts when this form is received by the Floor Coordinator)

Authorization Ending Date: _____ Time: _____

(Maximum allowed duration is 24 hours. If left blank, the authorization ends 24 hours after submission of this form.)

Contact Person: Beamline User

Telephone Number: (xxx) xxx-xxxx

Requestor's Signature: User's Signature

To be filled in by the Floor Coordinator

Date Received: 2-2-08 Time: 1745

FC signature: FC or Operator Signature

Date Removed: _____ Time: _____

FC signature: _____

Figure 1: Shutter Operation Authorization Form.

2. If the shutter has not opened, go the beamline and open it by pushing the “Open” button on the Station-A PSS panel (Figure 3).

- a) The Station-A shutter “Open” button is designated by a blue arrow.
- b) The “Shutter Open” LEDs (circled in blue) indicate whether the shutter is open or closed. When the shutter has opened successfully, the green LED is lit.
- c) Shutter authorizations generally only cover the Station-A shutter. Downstream shutters often do not close when stored beam is lost.
- d) If the shutter will not open, call the on-call Floor Coordinator for assistance in troubleshooting. Infrequently, it may be necessary to perform a FEEPS or PSS Minor Fault reset.

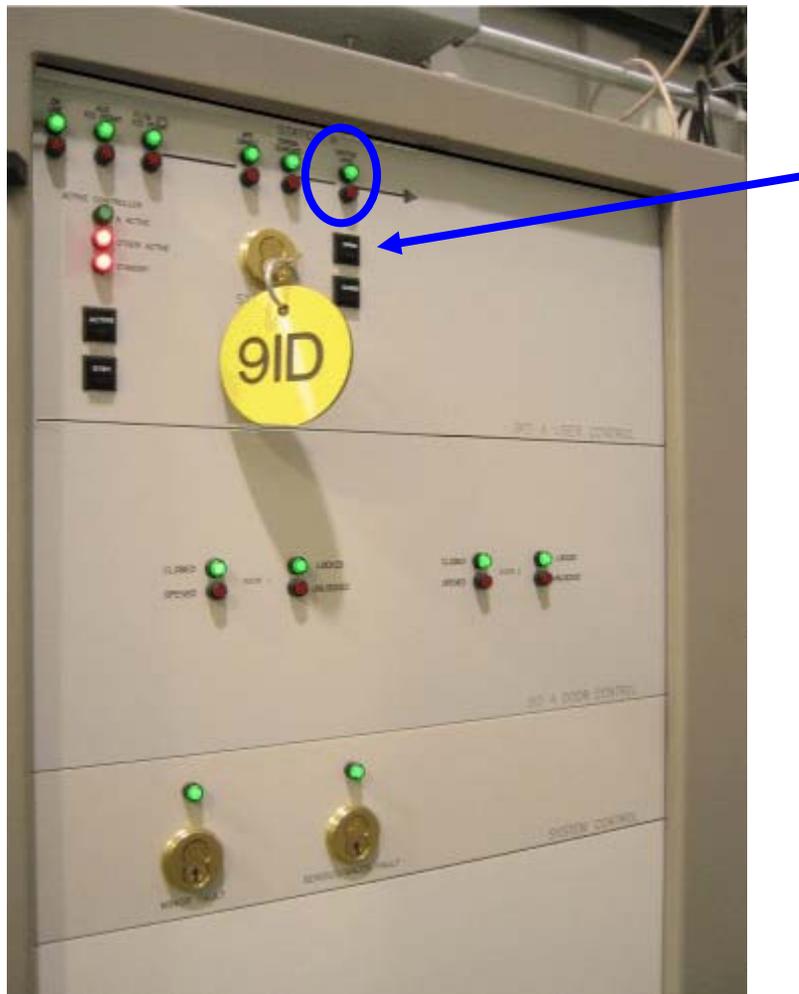


Figure 3: Station-A PSS Panel. Note the location of the Shutter Open LEDs and button.

3. Once the shutter is open, if applicable, check the ID gap or energy (Figure 4). It is important to check the gap even if a script has told all of the gaps to return to their previous value. If the shutter has been closed for more than 2 hours, for example, the gap may not return to the user's desired value. If the gap does not match the value on the Shutter Operation Authorization Form, change it to the value on the form.

- a) Type the desired Average Gap (mm) or Energy (keV) in the appropriate field (circled in red).
- b) While the cursor is still in the field, press "enter" or "return" on the keyboard.
- c) Click the green "Start" button.
- d) The gap should move to the value that was entered.
- e) In some cases, it may also be necessary to change the Taper (circled in yellow). This is done the same way the gap is changed.
- f) If the ID is in System Manager mode (circled in purple), you will not be permitted to move the device. Notify the ID on-call personnel.
- g) Likewise, if the device does not move as directed, notify ID on-call personnel.
- h) The ID call-in list may be accessed from the following location:
http://www.aps.anl.gov/APS_Engineering_Support_Division/User_ESH/CallIns

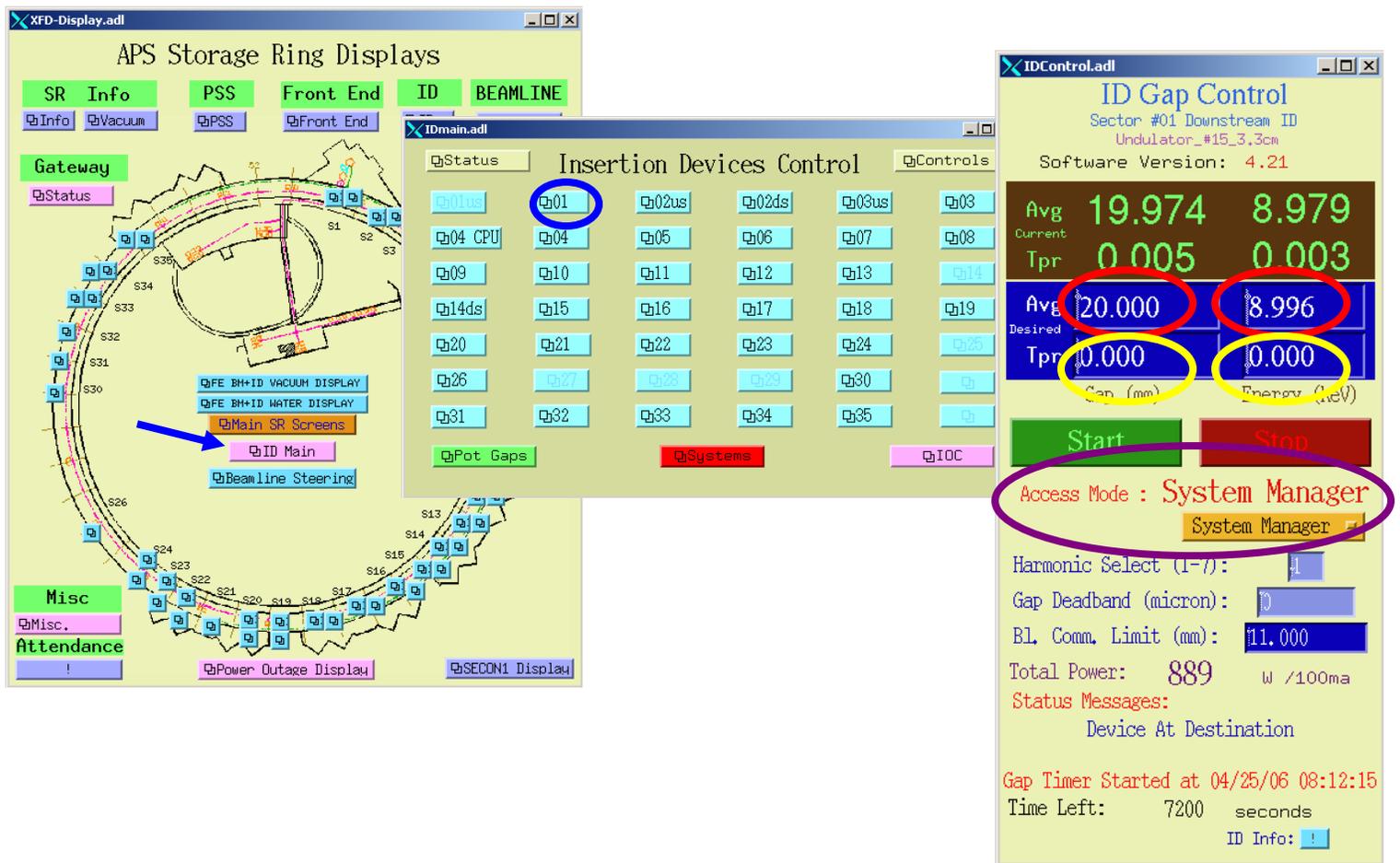


Figure 4: Path to ID Gap Control Screen, used to check and/or reset the ID Gap.

4. Record the activity in the appropriate shift log.

- a) Document that the shutter was checked, and note whether it opened on its own or whether it had to be opened.
- b) Document that the ID Gap was checked, and note whether the gap had returned to the desired value or whether it had to be adjusted.
- c) Document any further action that was required (e.g. calls to ID system personnel or the on-call Floor Coordinator).