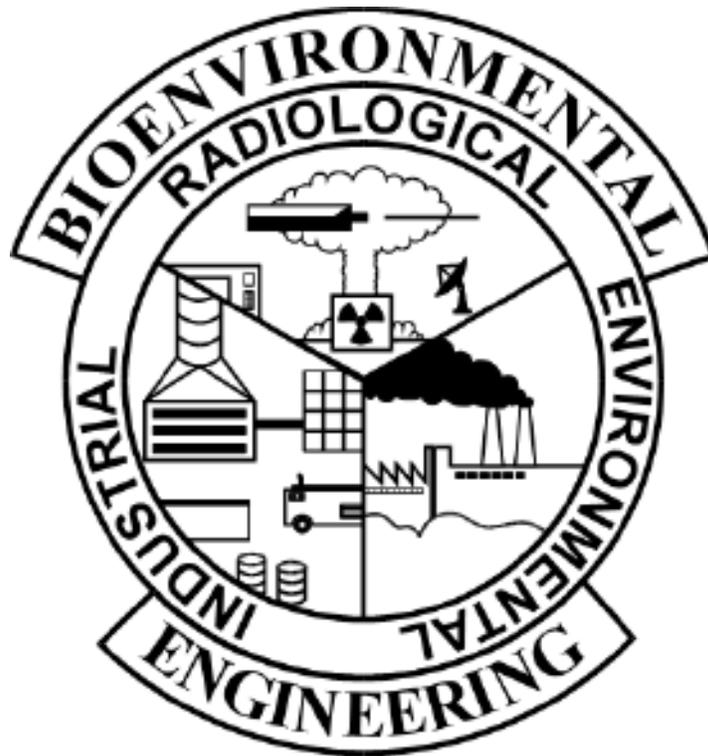


# AIR FORCE SPECIALTY CODE 4B051 BIOENVIRONMENTAL ENGINEERING

## USAF Personnel Dosimetry Program



## QUALIFICATION TRAINING PACKAGE

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## Table of Contents

<b>STS Line Item 4.9.3.3: Enroll / Disenroll Personnel – Dosimetry Program</b> .....	1
TRAINER GUIDANCE .....	1
TASK STEPS .....	2
TRAINEE REVIEW QUESTIONS.....	3
PERFORMANCE CHECKLIST .....	4
ANSWERS .....	5
<b>STS Line Item 4.9.3.4: Exchange/Ship dosimeters</b> .....	6
TRAINER GUIDANCE .....	6
TASK STEPS .....	7
TRAINEE REVIEW QUESTIONS.....	8
PERFORMANCE CHECKLIST .....	9
ANSWERS .....	10

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### STS Line Item 4.9.3.3: Enroll / Disenroll Personnel – Dosimetry Program

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#### TRAINER GUIDANCE

<b>Proficiency Code:</b>	3c
<b>PC Definition:</b>	Can do all parts of the task. Needs only a spot check of completed work. Can identify why and when the task must be done and why each step is needed.
<b>Prerequisites:</b>	None
<b>Training References:</b>	AFMAN 48-125, <i>Personnel Ionizing Radiation Dosimetry</i>
<b>Additional Supporting References:</b>	AFI 48-148, <i>Ionizing Radiation Protection</i> AFMAN 48-125, <i>Personnel Ionizing Radiation Dosimetry</i> 10 CFR 20.2104, <i>Determination of prior occupational dose</i>
<b>CDC Reference:</b>	4B051
<b>Training Support Material:</b>	AFMAN 48-125, <i>Personnel Ionizing Radiation Dosimetry</i>
<b>Specific Techniques:</b>	Conduct hands-on training and evaluation.
<b>Criterion Objective:</b>	Given the materials listed, enroll/disenroll personnel into the Dosimetry Program successfully completing all checklist items with no trainer assistance.
<b>Notes:</b>	

## TASK STEPS

### ENROLLING INTO THE DOSIMETRY PROGRAM:

1. Ask the individual whether he/she has had previous (or is currently receiving) exposure to ionizing radiation prior to registering into the program from working as a radiation worker outside the Air Force.
2. If yes, request any previous exposure reports.<sup>1</sup>
3. Use The Radiation Dosimetry Web secure server to enroll the individual.<sup>2</sup>

### DISENROLLING FROM THE DOSIMETRY PROGRAM:

1. Determine if the dosimeter was worn during the monitoring period.<sup>3</sup>
2. Complete the Personnel Information Change form using The Radiation Dosimetry Web and indicate the individual should be removed.
3. At the end of the monitoring period, submit all dosimeters for the individual(s) removed from the program to USAFSAM/OEA.

### LOCAL REQUIREMENTS:

Ensure that an enrollee meets the following conditions:

- Received training on proper wear and storage of TLD's
- Knows where to find exposure results and get help in understanding his or her individual exposure? (BE)
- Articulates that if he or she exceeds applicable occupational exposure limits while moonlighting that he or she may be removed from their AF radiation specific duties? (signed acknowledgement letter)
- Received ALARA training
- Received training on radiation work while pregnant (applicable to females only)

### NOTES:

1. AF Form 1527-2, Cumulative History of Individual Occupational Exposure to Ionizing Radiation, from the Radiation Dosimetry Laboratory (for exposure from an Air Force installation) or a NRC Form 4, Occupational Radiation Exposure History or equivalent (from the individual's employer)
2. The following information must be gathered prior to logging into the website:
  - a. Area
  - b. Name (last, first, middle initial)
  - c. SSAN
  - d. Gender
  - e. TLD Type
  - f. TLD ID #
  - g. Wear Location
  - h. Occupational Code
  - i. Date of Issue
3. If the dosimeter was not worn during the monitoring period, on the 1523 module indicate that the TLD assigned to the individual was NOT WORN.

**TRAINEE REVIEW QUESTIONS**

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**STS Line Item 4.9.3.3: Enroll / Disenroll Personnel – Dosimetry Program**

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1. Who makes the decision to enroll personnel into the monitoring program?

2. For an Air Force employee, which document should be used to determine the individual's previous exposure to ionizing radiation?

## PERFORMANCE CHECKLIST

### STS Line Item 4.9.3.3: Enroll / Disenroll Personnel – Dosimetry Program

<b>Proficiency Code:</b>	3c
<b>PC Definition:</b>	Can do all parts of the task. Needs only a spot check of completed work. Can identify why and when the task must be done and why each step is needed.

DID THE TRAINEE...	YES	NO
<b>ENROLLING INTO THE DOSIMETRY PROGRAM:</b>		
1. Ask the individual whether he/she has had previous (or is currently receiving) exposure to ionizing radiation prior to registering into the program from working as a radiation worker outside the Air Force.?		
2. If yes, request any previous exposure reports?		
3. Use The Radiation Dosimetry Web to enroll the individual?		
<b>DISENROLLING FROM THE DOSIMETRY PROGRAM:</b>		
1. Determine if the dosimeter was worn during the monitoring period?		
2. Complete the Personnel Information Change form using The Radiation Dosimetry Web and indicate the individual should be removed?		
3. At the end of the monitoring period, submit all dosimeters for the individual(s) removed from the program to USAFSAM/OEA?		
<b>Did the trainee successfully complete the task?</b>		

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 TRAINEE NAME (PRINT)

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 TRAINER NAME (PRINT)

## ANSWERS

1. Who makes the decision to enroll personnel into the monitoring program?

A: The installation RSO

(Source: AFMAN 48-125, *Personnel Ionizing Radiation Dosimetry*, para 1.4.2)

2. For an Air Force employee, which document should be used to determine the individual's previous exposure to ionizing radiation?

A: AF Form 1527-2, Cumulative History of Individual Occupational Exposure to Ionizing Radiation

(Source: AFMAN 48-125, *Personnel Ionizing Radiation Dosimetry*)

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### STS Line Item 4.9.3.4: Exchange/Ship dosimeters

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#### TRAINER GUIDANCE

<b>Proficiency Code:</b>	3c
<b>PC Definition:</b>	Can do all parts of the task. Needs only a spot check of completed work. Can identify why and when the task must be done and why each step is needed.
<b>Prerequisites:</b>	None
<b>Training References:</b>	AFMAN 48-125, <i>Personnel Ionizing Radiation Dosimetry</i>
<b>Additional Supporting References:</b>	AFI 48-148, <i>Ionizing Radiation Protection</i> AFMAN 48-125, <i>Personnel Ionizing Radiation Dosimetry</i>
<b>CDC Reference:</b>	4B051
<b>Training Support Material:</b>	<ul style="list-style-type: none"> <li>• TLD Holder</li> <li>• TLD Hanger</li> <li>• TLD Opener</li> <li>• TLDs</li> <li>• Listing 1523</li> <li>• Shipping Container</li> <li>• Caution Label</li> <li>• Address Label</li> <li>• Tape</li> </ul>
<b>Specific Techniques:</b>	Conduct hands-on training and evaluation.
<b>Criterion Objective:</b>	Given the equipment listed, prepare thermoluminescent dosimeters (TLD) for shipment successfully completing all checklist items with no trainer assistance.
<b>Notes:</b>	

**TASK STEPS**

1. Account for all dosimeters.
2. Exchange previous period dosimeters with new monitoring period dosimeters (1 for 1).
3. Disassemble dosimeters and crosscheck the Listing 1523.
4. Remove the identification labels from the hangers and discard.
5. Place the TLD holders in the original shipping tray.
6. Pack extremity dosimeters in a separate container.
7. Seal all dosimeters and original Listing 1523 in the container.
8. Secure the package and seal all edges.
9. Attach one "Caution" label and address label to the package.
10. Coordinate shipment with the shipping agency – use most expeditious and traceable means to ship back to the USAF Radiation Dosimetry Lab.
11. Utilize DOEHRs (or equivalent), if applicable.

**LOCAL REQUIREMENTS:****NOTES:**

**TRAINEE REVIEW QUESTIONS**

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**STS Line Item 4.9.3.4: Exchange/Ship dosimeters**

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1. List the items placed into the shipping container returning to USAF Radiation Dosimetry Laboratory.

2. By what method/means should the TLD package be shipped?

3. How soon after the end of the monitoring period must the dosimeters be shipped to USAF Radiation Dosimetry Laboratory for analysis?

## PERFORMANCE CHECKLIST

### STS Line Item 4.9.3.4: Exchange/Ship dosimeters

<b>Proficiency Code:</b>	3c
<b>PC Definition:</b>	Can do all parts of the task. Needs only a spot check of completed work. Can identify why and when the task must be done and why each step is needed.

DID THE TRAINEE...	YES	NO
1. Account for all dosimeters?		
2. Exchange previous period dosimeters with new monitoring period dosimeters (1 for 1)?		
3. Disassemble dosimeters and crosscheck the Listing 1523?		
4. Remove the identification labels from the hangers and discard?		
5. Place the TLD holders in the original shipping tray?		
6. Pack extremity dosimeters in a separate container?		
7. Seal all dosimeters and original Listing 1523 in the container?		
8. Secure the package and seal all edges?		
9. Attach one "Caution" label and address label to the package?		
10. Coordinate shipment with the shipping agency – use most expeditious and traceable means to ship back to the USAF Radiation Dosimetry Lab?		
11. Utilize DOEHRS (or equivalent), if applicable?		
<b>Did the trainee successfully complete the task?</b>		

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 TRAINEE NAME (PRINT)

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 TRAINER NAME (PRINT)

**ANSWERS**

1. List the items placed into the shipping container returning to USAF Radiation Dosimetry Laboratory.

A: Place the TLD holders in the original shipping tray. Pack any extremity dosimeters in a separate container. Seal all dosimeters and the original Listing 1523 in the shipping container that was retained at the beginning of the monitoring period. Secure the package with reinforced tape; care must be taken to completely seal all edges. Attach one "CAUTION" label and the address label to the package.

(Source: AFMAN 48-125, *Personnel Ionizing Radiation Dosimetry*, 4 Oct 2011, Table A4.13)

2. By what method/means should the TLD package be shipped?

A: Send the shipment to USAFSAM/OEA by the most expeditious and traceable means (normally FedEx® or certified mail – return receipt requested).

(Source: AFMAN 48-125, *Personnel Ionizing Radiation Dosimetry*, 4 Oct 2011, Table A4.13)

3. How soon after the end of the monitoring period must the dosimeters be shipped to USAF Radiation Dosimetry Laboratory for analysis?

A: Package shipped to USAFSAM/OEA within ten (10) calendar days after the end of the monitoring period?

(Source: AFMAN 48-125, *Personnel Ionizing Radiation Dosimetry*, 4 Oct 2011, Table A4.13)