

SOONER X-RAY & MAG., INC.

X Ray - Gamma - Ray

918-836-7458

FAA Approved

1224 S. Joplin

Tulsa, Oklahoma 74112

September 21, 1978

License No. 35-17259-01

THIS DOCUMENT CONTAINS
POOR QUALITY PAGES

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

Mr. Brown,
Here are the copies, I said I would send in my letter of Sep.
20, 1978. These copies will show the inspection dates of ex-
posure device, Gamma Century 1837, from the day we received
our license in March 1977.

Sincerely

Yours,

Homer McMay
Homer McMay

7810200254

PAGE 1

Is our initial check out sheet, on exposure device 1837. Mr. McCoy went to Gamma Industries, Boston Rouge, Louisiana to pick up this exposure device March 14, 1977, we started our quarterly inspection from this date.

EXPOSURE DEVICE
INITIAL CHECK-OUT SHEET

GAMMA CENTURY S

PROJECTOR SERIAL NO. 1837

SOURCE

R-4332

DATE RECEIVED 14 MAR 64 1971

NO. OF CURIES 104.0

RADIOGRAPHER PERFORMING INITIAL CHECK (signature) Harvey M. Gray

1. Survey the exposure device at 1 meter (approximately 39" from the midline of the device). Rotate the survey meter through 360°. Record the highest reading.
2. Inspect the locking mechanism.
3. Inspect the storage or shipping plug, being sure the clips and springs work properly. Be sure the pig tail is securely fastened to the body of the storage plug and that the entire unit is free of dirt.
4. Inspect the source tube, be sure the snout is secure on the housing, as well as the connector. Check the clips and springs as in Step 3.
5. Check all hardware and control tube fittings.
6. Engage the source tube and check the operation of the projector, crank the source in and out, checking the crank unit as you go. Be sure this is done in a restricted area and that you observe proper operating procedures.
7. Check for proper operation of the crank mechanism.
8. Check for proper operation of the lock mechanism.
9. Check drive cable for wear and rust.
10. Check for damaged or worn source tube.
11. Check drive cable tube and connector.
12. Check for rust, dirt or sludge build-up from the source tube.
13. Check for proper positioning of source inside the shield.
14. Check shifting of the shield inside the projector housing.
15. Check proper connection of all mating components.
16. Check damage to the device which may impair its operation.
17. Check cable drive gear-box damage and wear.
18. Check for proper labeling.

2 m/min

✓

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PAGE 2

Is the first quarterly inspection on this exposure device. June 14, 1977.

PERIODIC INSPECTION
CHECK SHEET

NAME GAMMA CENTURY

PROJECTOR SERIAL NO. 1537

DATE INSPECTED* 6-14-77

NO. OF CURIES 480

RADIOGRAPHER PERFORMING PERIODIC CHECK (Signature) Homey W. [unclear]

1. Survey the exposure device at 1 meter (approximately 39" from the midline of the device). Rotate the survey meter through 360°. Record the highest reading.
2. Inspect the locking plunger.
3. Inspect the source tube and fittings for excessive wear.
4. Check all hardware and control cable fittings.
5. Engage the source tube and control cable and check the operation of the device, crank the source in and out, checking the crank unit as you go. Be sure this is done in a restricted area and that you observe proper operating procedures.
6. Check for proper operation of the crank mechanism.
7. Check for proper operation of the lock mechanism.
8. Check drive cable for wear and rust.
9. Check for damaged or worn source tube.
10. Check drive cable tube and connector.
11. Check for rust, dirt or sludge build-up from the source tube.
12. Check for shifting of the shield inside the housing.
13. Check proper connection of all mating components.
14. Check damage to the device which may impair its operation.
15. Check for proper labeling.

1.52 mR/hr

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

NOTE: *Next Periodic Inspection Will Be Due In Three Months.

Date Due 9-14-77

PAGE 3

Is the date we shipped this exposure device 1837 by air freight,
back to vendor to have a new handle installed. September 8, 1977

Requisition, Receiving, Transfer and Survey Reports for Radioactive Materials

REQUISITION:

Date of Order _____ DIVISION _____
 Type of Isotope _____
 Number of Curies Ordered _____ From _____
 Shipped Via _____ Ordered by _____

RECEIVING:

Date _____ Received By _____ Quantity Received _____ Source Ser. No. _____
☐ In Shipping Container Mod. No. _____ Ser. No. _____
☐ In Camera Mod. No. _____ Ser. No. _____
 Results of Radiation Survey _____ Mr/Hr @ 1 Meter _____
 Results of Wipe test of Container _____

TRANSFERS AND/OR DISPOSALS:

1. Source Ser. No. R4337 ~~XXXXXXXXXX~~ Camera Model GC Ser. No. 1837
 Surface Reading: 4 Mr/Hr Reading at 1 Meter 1 Mr/Hr
2. Source Ser. No. _____ Transferred From Camera Model _____ Ser. No. _____
 To Camera Model _____ Ser.No. _____ Surface Reading _____ Mr. Reading at
 1 Meter _____ Mr.
3. Source Ser. No. _____ Transferred to SN _____ Shipping Container _____
 For Disposal To GAMMA INDUSTRIES BATON ROUGE LA.

SURVEYS:

Survey Meter Model No. VICTOR 152 S.N. 1348 Calibrated 7-15-77 Date 9-8-77
 Was used to make all Surveys shown above
 Transfer and Survey Made By: Homer M. Bay
 Signed _____

NO EXPOSURE DEVICE IS TO BE LOADED IN EXCESS OF LIMITS SPECIFIED
 In 10 CFR Part 34-21

COPY OF THIS REPORT IS TO BE ATTACHED TO ALL DECAY CHARTS FOR
 ALL SOURCES INVOLVED IN THIS TRANSACTION

PAGE 4

Is the date we ordered by air freight the exposure device back
from Gamma Industries, November 14, 1977.

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SOONER X-RAY & MAG, INC.

PROCEDURES FOR PICKING UP, RECEIVING, AND OPENING RADIOACTIVE SHIPMENTS

Date Ordered 14 NOV 77 From GAMMA IND.
Type Isotope 9142 Number of Curies 100 C
Shipped Via FEDERAL EXPRESS
Ordered By HOMER MCGAY
Date Notified of Arrival 11/15/77 Time 11:15 AM PM
Time Delivered or Picked up Delivered 11:15 AM PM.
Picked Up or Received By HOMER MCGAY
Number of Curies Received 100 C
Type of Shipping Container GAMMA CONTAINER S/N of Shipping Container 1837
Radiation Level @ Surface 70 MR/hr @ 1 Meter 2 MR/hr
Time Survey was Made 11:20 AM PM.
Location Survey was Made SOONER X-RAY 1224 S. JOPLIN
Survey Meter Model No. VICT. 452 Serial No. 1523 Void Date 2/9/77
Results of Whipe Test of Container LESS THAN .005 MR/hr

VISUAL SAFETY INSPECTIONS:

Was container damaged in shipment?
Is container properly Labeled?
Are plugs in shipping container properly attached?
Are Locks in good working conditions?
Is source connectors in good condition?
Serial Number of Source D35117

Yes	_____	No	<u>✓</u>
Yes	<u>✓</u>	No	_____
Yes	<u>✓</u>	No	_____
Yes	<u>✓</u>	No	_____
Yes	<u>✓</u>	No	_____

THIS FORM IS TO BE USED IN COMPLIANCE WITH

N.R.C. TITLE 10, PART 20.205 (D)

PAGE 5

Is the date we received exposure device from Gamma Industries,
and our initial check out November 15, 1977 again using this
date to start our quarterly inspection on exposure device.

EXPOSURE DEVICE
INITIAL CHECK-OUT SHEET

GAMMA CENTURY PROJECTOR SERIAL NO. 1837
DATE RECEIVED 15 Nov 77 NO. OF CURIES 100 c
RADIOGRAPHER PERFORMING INITIAL CHECK (signature) Namer McGee

1. Survey the exposure device at 1 meter (approximately 39" from the midline of the device). Rotate the survey meter through 360°. Record the highest reading. 2 mR/hr
2. Inspect the locking mechanism. ✓
3. Inspect the storage or shipping plug, being sure the clips and springs work properly. Be sure the pig tail is securely fastened to the body of the storage plug and that the entire unit is free of dirt. ✓
4. Inspect the source tube, be sure the snout is secure on the housing, as well as the connector. Check the clips and springs as in Step 3. ✓
5. Check all hardware and control tube fittings. ✓
6. Engage the source tube and check the operation of the projector, crank the source in and out, checking the crank unit as you go. Be sure this is done in a restricted area and that you observe proper operating procedures. ✓
7. Check for proper operation of the crank mechanism. ✓
8. Check for proper operation of the lock mechanism. ✓
9. Check drive cable for wear and rust. ✓
10. Check for damaged or worn source tube. ✓
11. Check drive cable tube and connector. ✓
12. Check for rust, dirt or sludge build-up from the source tube. ✓
13. Check for proper positioning of source inside the shield. ✓
14. Check shifting of the shield inside the projector housing. ✓
15. Check proper connection of all mating components. ✓
16. Check damage to the device which may impair its operation. ✓
17. Check cable drive gear-box damage and wear. ✓
18. Check for proper labeling. ✓

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Is our quarterly inspection on exposure device, Febuary 14, 1978.

PERIODIC INSPECTION
CHECK SHEET

1E GAMMA CENTURY PROJECTOR SERIAL NO. 1837
DATE INSPECTED* 2-14-78 NO. OF CURIES 43
RADIOGRAPHER PERFORMING PERIODIC CHECK (Signature) Homer [Signature]

1. Survey the exposure device at 1 meter (approximately 39" from the midline of the device). Rotate the survey meter through 360°. Record the highest reading. 1.5 MR/hr
OK
2. Inspect the locking plunger. OK
3. Inspect the source tube and fittings for excessive wear. OK
4. Check all hardware and control cable fittings. OK
5. Engage the source tube and control cable and check the operation of the device, crank the source in and out, checking the crank unit as you go. Be sure this is done in a restricted area and that you observe proper operating procedures. OK
6. Check for proper operation of the crank mechanism. OK
7. Check for proper operation of the lock mechanism. OK
8. Check drive cable for wear and rust. OK
9. Check for damaged or worn source tube. OK
10. Check drive cable tube and connector. OK
11. Check for rust, dirt or sludge build-up from the source tube. OK
12. Check for shifting of the shield inside the housing. OK
13. Check proper connection of all mating components. OK
14. Check damage to the device which may impair its operation. OK
15. Check for proper labeling. OK

NOTE: *Next Periodic Inspection Will Be Due In Three Months.

Date Due 5-14-78

PAGE 7

Is our quarterly inspection on exposure device, May 12, 1978.

PERIODIC INSPECTION
CHECK SHEET

GE GAMMA CENTURY

PROJECTOR SERIAL NO. 1837

DATE INSPECTED* 5/12/78

NO. OF CURIES 19.5

RADIOGRAPHER PERFORMING PERIODIC CHECK (Signature) Homer M. G.

1. Survey the exposure device at 1 meter (approximately 39" from the midline of the device). Rotate the survey meter through 360°. Record the highest reading.
2. Inspect the locking plunger.
3. Inspect the source tube and fittings for excessive wear.
4. Check all hardware and control cable fittings.
5. Engage the source tube and control cable and check the operation of the device, crank the source in and out, checking the crank unit as you go. Be sure this is done in a restricted area and that you observe proper operating procedures.
6. Check for proper operation of the crank mechanism.
7. Check for proper operation of the lock mechanism.
8. Check drive cable for wear and rust.
9. Check for damaged or worn source tube.
10. Check drive cable tube and connector.
11. Check for rust, dirt or sludge build-up from the source tube.
12. Check for shifting of the shield inside the housing.
13. Check proper connection of all mating components.
14. Check damage to the device which may impair its operation.
15. Check for proper labeling.

25 m/h

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

OK

NOTE: *Next Periodic Inspection Will Be Due In Three Months.

Date Due 8/12/78

PAGE 8

Is our date we changed source in exposure device 1837. August 2, 1978, and received a new source and put it in exposure device 1837 sending old source back to vendor.

Requisition, Receiving, Transfer and Survey Reports for Radioactive Materials

REQUISITION:

Date of Order _____ DIVISION _____
 Type of Isotope _____
 Number of Curies Ordered _____ From _____
 Shipped Via _____ Ordered by _____

RECEIVING:

Date _____ Received By _____ Quantity Received _____ Source Ser. No. _____
☐ In Shipping Container Mod. No. _____ Ser. No. _____
☐ In Camera Mod. No. _____ Ser. No. _____
 Results of Radiation Survey _____ Mr/Hr @ 1 Meter _____
 Results of Whipe test of Container _____

TRANSFERS AND/OR DISPOSALS:

1. Source Ser. No. ~~D-35-117~~ Transferred to Camera Model _____ Ser. No. _____
 Surface Reading: _____ Mr. Reading at 1 Meter _____ Mr. _____
2. Source Ser. No. D-35-117 Transferred From Camera Model G.C. Ser. No. 1877
 To Camera Model _____ Ser. No. _____ Surface Reading 1.0 Mr/Hr Mr. Reading at
 1 Meter 0.01 Mr Mr. _____
3. Source Ser. No. D-35-117 Transferred to SN LA Shipping Container C-10
 For Disposal To GAMMA IND. BATCH PAUGE LA

SURVEYS:

Survey Meter Model No. LCT 492 S.N. 2132 Calibrated 7-31-78 Date 8-2-78
 Was used to make all Surveys shown above
 Transfer and Survey Made By: Honey-mag
 Signed _____

NO EXPOSURE DEVICE IS TO BE LOADED IN EXCESS OF LIMITS SPECIFIED
 In 10 CFR Part 34-21

COPY OF THIS REPORT IS TO BE ATTACHED TO ALL DECAY CHARTS FOR
ALL SOURCES INVOLVED IN THIS TRANSACTION

PAGE 9

Is our check list for ordering a new source and receiving same source.

SOONER X-RAY & MAG, INC.

PROCEDURES FOR PICKING UP, RECEIVING, AND OPENING RADIOACTIVE SHIPMENTS

Date Ordered 7-31-78 From GA-MIA INC.
Type Isotope 99Tc Number of Curies 100.00 Curies
Shipped Via Federal Express
Ordered By Norman McCoy
Date Notified of Arrival 8-2-78 Time 11:00 AM PM
Time Delivered or Picked up 11:00 AM PM
Picked Up or Received By Norman McCoy
Number of Curies Received 100.00
Type of Shipping Container G-10 S/N of Shipping Container 64
Radiation Level @ Surface 20 mR/hr @ 1 Meter 2 mR/hr
Time Survey was Made 11:00 AM PM
Location Survey was Made SOONER RECEIVING AREA
Survey Meter Model No. 492 Serial No. 2132 Void Date 10-31-78
Results of Whipe Test of Container Less than 1005 mR/hr

VISUAL SAFETY INSPECTIONS:

Was container damaged in shipment?
Is container properly Labeled?
Are plugs in shipping container properly attached?
Are Locks in good working conditions?
Is source connectors in good condition ?
Serial Number of Source 7728

Yes	_____	No	<u>NO</u>
Yes	<u>✓</u>	No	_____
Yes	<u>✓</u>	No	_____
Yes	<u>✓</u>	No	_____
Yes	<u>✓</u>	No	_____

THIS FORM IS TO BE USED IN COMPLIANCE WITH

N.R.C. TITLE 10, PART 20.205 (D)

PAGE 1 0

Is our initial check list on receiving source as described on page 9, August 2, 1978 again we used this date to start our quarterly inspection. This brought this exposure device up to date on quarterly inspection our next one would be due October 2, 1978.

EXPOSURE DEVICE
INITIAL CHECK-OUT SHEET

NAME GAMMA CENTURY

PROJECTOR SERIAL NO. 1837

DATE RECEIVED 8-2-78

NO. OF CURIES 100.0

RADIOGRAPHER PERFORMING INITIAL CHECK (signature) Henry McBy

1. Survey the exposure device at 1 meter (approximately 39" from the midline of the device). Rotate the survey meter through 360°, Record the highest reading.
2. Inspect the locking mechanism.
3. Inspect the storage or shipping plug, being sure the clips and springs work properly. Be sure the pig tail is securely fastened to the body of the storage plug and that the entire unit is free of dirt.
4. Inspect the source tube, be sure the snout is secure on the housing, as well as the connector. Check the clips and springs as in Step 3.
5. Check all hardware and control tube fittings.
6. Engage the source tube and check the operation of the projector, crank the source in and out, checking the crank unit as you go. Be sure this is done in a restricted area and that you observe proper operating procedures.
7. Check for proper operation of the crank mechanism.
8. Check for proper operation of the lock mechanism.
9. Check drive cable for wear and rust.
10. Check for damaged or worn source tube.
11. Check drive cable tube and connector.
12. Check for rust, dirt or sludge build-up from the source tube.
13. Check for proper positioning of source inside the shield.
14. Check shifting of the shield inside the projector housing.
15. Check proper connection of all mating components.
16. Check damage to the device which may impair its operation.
17. Check cable drive gear-box damage and wear.
18. Check for proper labeling.

2 MR/hr

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